Title: The VENT Study: Violence in Emergency Nursing and Triage.

Name: Jacqueline Vivienne PICH BN (Hons I), BSc


Submitted: June 2014
Statement of Originality

The thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to the final version of my thesis being made available worldwide when deposited in the University’s Digital Repository**, subject to the provisions of the Copyright Act 1968.

**Unless an Embargo has been approved for a determined period.
Publication List


In addition the systematic review included in the thesis has been accepted for publication by the Joanna Briggs Institute.
Acknowledgements

I would like to acknowledge the help of my supervisors, Associate Professor Ashley Kable and Professor Michael Hazelton whose patience and attention to detail has been invaluable and who always found time in their busy schedules to help me. I would like to thank Christopher Oldmeadow from The Hunter Medical Research Institute for his assistance (and patience) with my statistical analysis. I would also like to thank Deborah Sundin for her help in the early stages of my study. On a personal note I would like to dedicate my thesis to the two mothers in my life – who are now gone but never forgotten: Hilary Dockrill and Elizabeth Pich. Their dignity and courage in living with chronic illness their whole lives was an inspiration and always enabled me to keep things in perspective.

To my husband Dave and children Hollie, Ellie, Meg and Tom: I finished!
Table of contents

Title page .......................................................................................................................................... 1
Statement of Originality .................................................................................................................. 2
Publication List .............................................................................................................................. 3
Acknowledgements ....................................................................................................................... 4
Table of contents .......................................................................................................................... 5
Synopsis .......................................................................................................................................... 16

Chapter 1  Background and identification of the problem .......................................................... 18
1.1 Overview of chapter .................................................................................................................. 18
1.2 Introduction ............................................................................................................................. 18
1.3 Definition of violence .............................................................................................................. 20
1.4 Types of violence .................................................................................................................... 21
1.4.1 Verbal .................................................................................................................................. 21
1.4.2 Non-verbal hostility ........................................................................................................... 21
1.4.3 Physical .............................................................................................................................. 22
1.5 Workplace culture .................................................................................................................... 23
1.6 Perpetrators of violence ......................................................................................................... 24
1.7 Antecedents and precipitants ................................................................................................. 24
1.7.1 History of violence ............................................................................................................ 24
1.7.2 Alcohol and substance abuse ......................................................................................... 25
1.7.3 Clinical diagnoses ............................................................................................................. 25
1.7.4 Waiting times .................................................................................................................... 26
1.7.5 Nurse behaviour .............................................................................................................. 27
1.7.6 ED specific factors ............................................................................................................ 27
1.8 Consequences of violence ..................................................................................................... 30
1.8.1 Physical ............................................................................................................................. 30
1.8.2 Psychological .................................................................................................................... 30
1.8.3 Professional ..................................................................................................................... 31
1.8.4 Organisational ................................................................................................................ 32
1.9 Reporting ............................................................................................................................... 32
1.10 Risk management strategies ............................................................................................... 33
1.10.1 De-escalation techniques ................................................................................................. 34
1.10.2 Security ........................................................................................................................... 35
1.10.3 Environmental measures ................................................................................................. 36
1.10.4 Debriefing ....................................................................................................................... 36
1.11 Zero tolerance ....................................................................................................................... 37
1.12 Legal issues ........................................................................................................................... 38
1.13 Conclusion ............................................................................................................................. 40

Chapter 2  Systematic review ..................................................................................................... 51
2.1 Executive summary ................................................................................................................ 51
2.2 Background ............................................................................................................................ 54
2.3 Definitions .............................................................................................................................. 57
2.4 Objectives ........................................................................................................................................... 58
2.5 Search strategy ....................................................................................................................................... 59
2.6 Method of the review .......................................................................................................................... 60
2.6.1 Data collection .................................................................................................................................. 60
2.6.2 Data synthesis .................................................................................................................................... 61
2.7 Results .................................................................................................................................................. 61
2.7.1 Description of included studies ........................................................................................................ 63
2.8 Results of the reviews ......................................................................................................................... 65
2.8.1 Quantitative studies on violence in the Emergency Department .................................................... 65
2.8.2 Mixed-methods studies about violence in the Emergency Department ........................................... 82
2.8.3 Qualitative papers on violence in the Emergency Department ....................................................... 87
2.9 Synthesis of results .............................................................................................................................. 93
2.10 Discussion ........................................................................................................................................... 113
2.10.1 Limitations of the review ................................................................................................................ 114
2.10.2 Conclusion ...................................................................................................................................... 116
2.10.3 Implications for practice .................................................................................................................. 116
2.10.4 Implications for research ................................................................................................................ 117
2.10.5 Justification of study ...................................................................................................................... 117

Chapter 3 Research Design .................................................................................................................. 119
3.1 Introduction ......................................................................................................................................... 119
3.2 Study aims .......................................................................................................................................... 119
3.3 Study design ........................................................................................................................................ 120
3.4 Part I: National survey of ED nurses .................................................................................................. 123
3.4.1 Study design, sample and setting .................................................................................................... 123
3.4.2 Development of the survey tool ...................................................................................................... 124
3.4.3 Sample size calculation .................................................................................................................. 132
3.4.4 Recruitment .................................................................................................................................... 132
3.4.5 Methods employed to maximise the response rate ....................................................................... 133
3.4.6 Data entry ...................................................................................................................................... 135
3.4.7 Data analysis ................................................................................................................................... 136
3.5 Part II: Interviews with ED nurses ..................................................................................................... 138
3.5.1 Study design .................................................................................................................................... 139
3.5.2 Recruitment of the sample .............................................................................................................. 140
3.5.3 Inclusion criteria ............................................................................................................................. 141
3.5.4 The sample ..................................................................................................................................... 141
3.5.5 Demographic profile ...................................................................................................................... 142
3.5.6 Interview schedule ......................................................................................................................... 142
3.5.7 Data collection ............................................................................................................................... 144
3.5.8 Transcription of recorded information ........................................................................................... 145
3.5.9 Member checking ............................................................................................................................ 146
3.5.10 Data analysis .................................................................................................................................. 146
3.5.11 Rigour and trustworthiness .......................................................................................................... 150
3.6 Ethical considerations ......................................................................................................................... 152
3.6.1 Potential distress for participants .................................................................................................. 152
3.6.2 Information sheets .......................................................................................................................... 152
3.6.3 Consent .......................................................................................................................................... 153
3.6.4 Confidentiality ............................................................................................................................... 153
3.6.5 Data storage .................................................................................................................................... 154
3.7 Conclusion.......................................................................................................................... 155

Chapter 4 Results from survey data: Part I ........................................................................ 156
4.1 Definitions ......................................................................................................................... 157
4.2 Response rate ................................................................................................................... 158
4.3 Characteristics of participants ....................................................................................... 158
4.3.1 Age distribution of sample ......................................................................................... 163
4.3.2 Nursing experience .................................................................................................... 163
4.3.3 Work fraction and hours of patient care .................................................................. 165
4.3.4 Geographic characteristics of sample ....................................................................... 167
4.4 Frequency of exposure to patient-related violence ...................................................... 169
4.4.1 Point prevalence: nurse involvement in episodes of patient-related violence ....... 169
4.4.2 Number of episodes ................................................................................................. 171
4.4.3 Types of episodes ....................................................................................................... 171
4.4.4 Inevitability and frequency of episodes of violence ................................................. 172
4.5 The types of violent behaviours experienced by emergency nurses ....................... 174
4.5.1 Verbal abuse and non-physical behaviours .............................................................. 174
4.5.2 Physical behaviours .................................................................................................. 179
4.5.3 Consequences of patient-related violence ............................................................. 183
4.6 Risk prevention and risk management strategies .......................................................... 191
4.6.1 Reporting of episodes of patient-related violence at work..................................... 191
4.6.2 Management response ............................................................................................. 201
4.6.3 Management of episodes ........................................................................................ 204
4.6.4 Employer response .................................................................................................. 210
4.6.5 Risk prevention strategies ....................................................................................... 216
4.6.6 Policies and procedures .......................................................................................... 223
4.6.7 Aggression minimisation training ............................................................................ 226
4.6.8 Feeling safe at work ................................................................................................. 229
4.7 Precipitants and antecedents ......................................................................................... 233
4.7.1 Nurse characteristics ............................................................................................... 234
4.7.2 Nursing-related factors ............................................................................................ 239
4.7.3 Patient-related factors ............................................................................................... 242
4.7.4 Environmental factors ............................................................................................. 260
4.7.5 Nursing activities ..................................................................................................... 262
4.7.6 Staffing issues .......................................................................................................... 267
4.7.7 ED-specific issues ..................................................................................................... 271
4.7.8 Escalation of episodes .............................................................................................. 278
4.7.9 Logistic regression to identify most significant risk factors ..................................... 279
4.8 Violence from the parents of paediatric patients ....................................................... 280
4.9 Recommendations to minimise/prevent the occurrence of patient-related violence 281

Chapter 5 Results from interview data: Part II ...................................................................... 287
5.1 Introduction ..................................................................................................................... 287
5.2 Background/Literature .................................................................................................. 287
5.3 Methods ......................................................................................................................... 288
5.3.1 Aim .......................................................................................................................... 288
5.3.2 Design ..................................................................................................................... 289
5.3.3 Participants/Sample ................................................................................................. 289
5.3.4 Inclusion criteria ..................................................................................................... 289
5.3.5 Data collection ......................................................................................................... 290
5.3.6 Ethical considerations...................................................................................................................... 290
5.3.7 Data analysis ......................................................................................................................................... 290
5.3.8 Validity/Reliability/Rigour .................................................................................................................. 291
5.4 Results .................................................................................................................................................. 291
5.4.1 Behaviours: “Performing” and attention-seeking behaviours by patients......................................... 292
5.4.2 Episodes of violence: Verbal abuse and physical violence ................................................................. 293
5.4.3 Antecedents: Alcohol and substance abuse ......................................................................................... 294
5.4.4 Parental emotions: fear, anxiety, impatience and lack of understanding/knowledge .................... 295
5.4.5 Feeling unsafe at work ......................................................................................................................... 296
5.5 Discussion ................................................................................................................................................. 297
5.6 Limitations ................................................................................................................................................ 301
5.7 Conclusion ................................................................................................................................................. 302

Chapter 6 Discussion .................................................................................................................................... 304

6.1 Representativeness of the sample .............................................................................................................. 304
6.2 Frequency of exposure to patient-related violence .................................................................................. 307
6.2.1 Point prevalence: nurse involvement in episodes of patient-related violence ................................ 307
6.2.2 Inevitability and frequency of episodes of violence ........................................................................... 309
6.3 The types of violent behaviours experienced by emergency nurses .................................................... 309
6.3.1 Verbal abuse and non-physical behaviours .......................................................................................... 309
6.3.2 Physical behaviours ............................................................................................................................... 313
6.3.3 “Performing” and attention-seeking behaviours .................................................................................. 314
6.3.4 Consequences of patient-related violence ........................................................................................... 317
6.4 Risk prevention and risk management strategies ...................................................................................... 322
6.4.1 Risk Management following episodes of aggression and violence .................................................. 322
6.4.2 Risk prevention strategies .................................................................................................................... 330
6.4.3 Policies and procedures ......................................................................................................................... 332
6.4.4 Aggression minimisation training ......................................................................................................... 333
6.4.5 Safety at work ......................................................................................................................................... 335
6.5 Precipitants and antecedents .................................................................................................................... 337
6.5.1 Nurse characteristics ............................................................................................................................. 337
6.5.2 Nursing-related factors .......................................................................................................................... 339
6.5.3 Patient-related factors ............................................................................................................................ 341
6.5.4 Patient-specific factors .......................................................................................................................... 347
6.5.5 Patient-specific behaviours ................................................................................................................... 348
6.5.6 Environmental factors .......................................................................................................................... 350
6.5.7 Nursing activities .................................................................................................................................... 351
6.5.8 Staffing issues ......................................................................................................................................... 352
6.5.9 ED specific issues .................................................................................................................................... 353
6.6 Violence from the parents of paediatric patients .................................................................................... 357
6.6.1 Parental emotions ................................................................................................................................. 358
6.7 Participants recommendations to minimise/prevent the occurrence of patient-related violence .......... 360
6.8 Similarities and difference between regions ............................................................................................ 361
6.8.1 Similarities ................................................................................................................................................. 361
6.8.2 Differences ................................................................................................................................................. 362
6.9 Similarities between Part I and Part II of the study .................................................................................. 363
6.10 Study limitations ........................................................................................................................................ 363

Conclusion .................................................................................................................................................... 365
Table of Tables

Table 1: Overview of key literature .................................................................................... 41
Table 2: Country of origin of included studies ................................................................. 63
Table 3: Definition of violence provided in included studies ......................................... 99
Table 4: Sample sizes and response rates for included studies .................................... 100
Table 5: Instrument validation and rigour of included studies ................................... 101
Table 6: Summary of factors and outcomes measured by study ................................. 112
Table 7: Study aims addressed in questionnaire ............................................................ 126
Table 8: Triage categories ................................................................................................... 128
Table 9: Expert panel recommendations ......................................................................... 131
Table 10: Final participation responses ............................................................................ 158
Table 11: Characteristics of participants § ....................................................................... 160
Table 12: Characteristics of participants (continuous data) § ....................................... 162
Table 13: Age groups by geographic region § ................................................................. 163
Table 14: Worked hours by region (n = 463) .................................................................. 166
Table 15: Geographic location of study sample ................................................................ 168
Table 16: Episodes of patient-related violence ............................................................... 170
Table 17: Episodes of patient related violence: metropolitan and regional areas ....... 170
Table 18: Number of episodes in the previous 6 months (n = 452) .............................. 171
Table 19: Episodes of patient-related violence in past 6 months (n = 448) ................. 172
Table 20: Perceived inevitability and frequency of violence by region ....................... 173
Table 21: Types of verbal abuse (n = 511) ........................................................................ 175
Table 22: Violent episode experienced and type of verbal abuse ................................ 176
Table 23: Types of verbal abuse (n = 452) § ¥ ................................................................. 178
Table 24: Physical behaviours (n = 468) ......................................................................... 180
Table 25: Chi-squared results for physical behaviours and episodes of violence ....... 181
Table 26: Physical behaviours by region (n = 421) § ¥ ................................................. 182
Table 27: Location of injury (n = 118) .................................................................................................. 184
Table 28: Type of injury (n = 78) ................................................................................................... 185
Table 29: Emotional Reponses (n = 387) ...................................................................................... 186
Table 30: Emotion experienced by participants by region (n = 353) § Ω ¥ ............................ 187
Table 31: Professional effects (n = 361) ..................................................................................... 189
Table 32: Professional effects by region (n = 353) § ¥ .......................................................... 190
Table 33: Reporting of episodes of violence ............................................................................. 193
Table 34: Reasons for reporting episodes of patient-related violence (n = 311) ............. 195
Table 35: Barriers to reporting (n = 297) .................................................................................. 197
Table 36: Barriers to reporting by region (n = 271) ¥ ......................................................... 198
Table 37: Reporting methods (n = 337) .................................................................................... 199
Table 38: Reporting method by region (n = 307) ¥ .............................................................. 200
Table 39: Employer response to reported violence (n = 407) ........................................... 201
Table 40: Employer response to reported violence by region (n = 407) ¥ ..................... 203
Table 41: Actions effective in dealing with consequences of patient-related violence .............................................................................................................................. 205
Table 42: Actions effective in dealing with consequences of patient-related violence by region (n = 421) ¥ ........................................................................................................................................ 206
Table 43: Access to counselling and adequate follow up by region.............................. 208
Table 44: Support following an episode of patient-related violence (n = 277).......... 210
Table 45: Barriers to change (n = 335) ................................................................................... 212
Table 46: Changes implemented following an episode of patient-related violence (n = 89) ........................................................................................................................................................ 214
Table 47: Management support by region ....................................................................... 215
Table 48: Risk prevention/minimisation measures (n = 515)............................................. 217
Table 49: Risk prevention/minimisation measures by region (n = 463) ¥ .................... 219
Table 50: Risk management follow-up strategies (n = 432) .............................................. 220
Table 51: Risk management strategies by region (n = 404) ¥ .......................................... 222
Table 52: Effectiveness of policy according to region (n = 448) § ................................. 224
Table 53: Policies and procedures: factors impacting on their effectiveness (n = 124) Ω........................................................................................................................................ 226
Table 54: Aggression minimisation training ¥ ................................................................ 226
Table 55: Aggression minimisation training by geographic location ......................... 228
Table 56: Years since Aggression Minimisation Training completed (n = 299) ........... 229
Table 57: Feeling safe at work (n = 469) ........................................................................... 230
Table 58: Levels of safety by region (n = 418) §.................................................................. 232
Table 59: Logistic regression for levels of safety ............................................................ 233
Table 60: Number of episodes by age group ................................................................. 235
Table 61: Logistic regression results Age and Years’ experience in the ED ................. 236
Table 62: Number of episodes reported by work-fraction) ........................................... 237
Table 63: Hours of work and number of episodes (n = 442) ......................................... 238
Table 64: Logistic regression: Violent episodes experienced by region (n = 403) ...... 239
Table 65: Nursing approach/manner as a contributing factor by region ..................... 240
Table 66: Nursing practice (n = 236) ................................................................................. 242
Table 67: Groups of patients more likely to exhibit violent behaviour (n = 460) ...... 244
Table 68: Patient Age Groups (n = 507) ......................................................................... 244
Table 69: Age grouping of perpetrators of violence by region .................................... 246
Table 70: Triage category (n = 491) ................................................................................ 247
Table 71: Triage category of perpetrators of violence ................................................... 248
Table 72: Diagnoses or clinical signs/symptoms of patients who displayed violent behaviour (n = 491) ...................................................................................................... 249
Table 73: Chi-squared analysis results clinical diagnoses and episodes of violence 250
Table 74: Diagnoses or clinical signs and symptoms according to geographic location (n = 445) § ¥................................................................................................................... 252
Table 75: Patient-specific factors (n = 512) ....................................................................... 253
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>Chi-squared analysis results for patient-specific factors and episodes of</td>
<td>254</td>
</tr>
<tr>
<td></td>
<td>violence</td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>Patient specific factors according to geographic location (n = 456) § Ω ¥</td>
<td>256</td>
</tr>
<tr>
<td>78</td>
<td>Patient-specific behaviours (n = 512)</td>
<td>257</td>
</tr>
<tr>
<td>79</td>
<td>Chi-squared analysis results for patient-specific behaviours and episodes of</td>
<td>258</td>
</tr>
<tr>
<td></td>
<td>violence</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>Patient specific factors according to geographic location (n = 457) § Ω ¥</td>
<td>259</td>
</tr>
<tr>
<td>81</td>
<td>Time of day (n = 497)</td>
<td>260</td>
</tr>
<tr>
<td>82</td>
<td>Time of year (n = 196)</td>
<td>262</td>
</tr>
<tr>
<td>83</td>
<td>Nursing activities (n = 496)</td>
<td>263</td>
</tr>
<tr>
<td>84</td>
<td>Chi-squared analysis results for nursing activity and episode of violence</td>
<td>264</td>
</tr>
<tr>
<td>85</td>
<td>Nursing activities according to geographic location (n = 446) § ¥</td>
<td>265</td>
</tr>
<tr>
<td>86</td>
<td>High Risk Activities in the Emergency Department</td>
<td>267</td>
</tr>
<tr>
<td>87</td>
<td>Staffing issues (n = 506)</td>
<td>268</td>
</tr>
<tr>
<td>88</td>
<td>Chi-squared analysis results for staffing issues and episodes of violence</td>
<td>269</td>
</tr>
<tr>
<td>89</td>
<td>Staffing issues according to geographic location (n = 457) § Ω ¥</td>
<td>270</td>
</tr>
<tr>
<td>90</td>
<td>Area of Department (n = 499)</td>
<td>271</td>
</tr>
<tr>
<td>91</td>
<td>Chi-squared analysis results for area of the department and violence episodes</td>
<td>272</td>
</tr>
<tr>
<td>92</td>
<td>Area of the department by geographic location (n = 454) § Ω ¥</td>
<td>273</td>
</tr>
<tr>
<td>93</td>
<td>Factors specific to the Emergency Department (n = 508)</td>
<td>275</td>
</tr>
<tr>
<td>94</td>
<td>Chi-squared analysis for ED specific factors and episodes of violence</td>
<td>276</td>
</tr>
<tr>
<td>95</td>
<td>Factors specific to the Emergency Department by geographic location (n = 472)</td>
<td>277</td>
</tr>
<tr>
<td>96</td>
<td>Factors contributing to escalation of episodes (n = 457)</td>
<td>279</td>
</tr>
<tr>
<td>97</td>
<td>Logistic regression for main risk factors and episode of violence</td>
<td>280</td>
</tr>
<tr>
<td>98</td>
<td>Ages of parents of paediatric patients (n = 212)</td>
<td>281</td>
</tr>
<tr>
<td>99</td>
<td>Relationship to the paediatric patient (n = 203)</td>
<td>281</td>
</tr>
</tbody>
</table>
Table 100: Recommendations to prevent/minimise episodes of violence (n = 444) .. 282
Table 101: Measures to more effectively manage violent patients/episodes (n = 433) ........................................................................................................................................ 286
Table of Figures

Figure 1: Study selection flow diagram ................................................................. 62
Figure 2: Flowchart of data analysis of interview data ........................................... 147
Figure 3: Years of nursing experience ................................................................. 164
Figure 4: Years of ED nursing experience ............................................................ 164
Figure 5: Geographic location of study sample (n = 472) ....................................... 168
Figure 6: Work fraction and episodes of violence ............................................... 237
Figure 7: Hours of work and number of episodes of violence .............................. 238
Figure 8: Audit Trail Flowchart ........................................................................... 477
Figure 9: Flowchart of identification of themes .................................................... 478
Synopsis

Violence in healthcare is a significant issue globally and the Emergency Department (ED) is one of the highest risk clinical areas for such violence. Nurses have been identified as the profession most vulnerable to violence, and within this context ED nurses are the speciality at greatest risk of being exposed to violence.

The VENT Study, Violence in Emergency Nursing and Triage, was a national study of Australian ED nurses’ experiences with one type of violence: patient-related violence. This was a mixed methods study comprising of two parts. Part I of the study was quantitative in nature, with data collected using a national survey that was distributed to all members of The College of Emergency Nursing Australasia. Part II of the study was qualitative in nature and involved the use of semi-structured interviews with two sub-groups of interest: young adults (16-25 years of age) and the parents of paediatric patients.

The results of this study were consistent with the extant evidence on the topic and the results from each part of the study complemented each other. The results of Part I of the study included the identification of antecedents and precipitants for violence. Triaging was identified as a significantly high risk nursing activity, with nurses almost three times more likely to experience violence when performing this role. In addition the triage area was identified as high risk location in the ED; with the odds of experiencing an episode of violence almost four times greater for nurses working there. Patients under the influence of alcohol and illicit substances also posed a significantly greater risk to ED nurses. These findings were supported by those in Part II of the study, with young people aged 16-25 years of age identified as a high risk group for violence precipitated by alcohol intoxication.

Geographic similarities and differences between ED nurses working in metropolitan and regional areas were identified. In particular regional nurses reported
significantly less access to risk prevention and management strategies and were more likely to feel “not safe” at work.
Chapter 1  Background and identification of the problem

1.1 Overview of chapter

Patient-related violence has been reported in the literature to be a serious problem in contemporary nursing. An overview of the literature on the topic of patient-related violence was undertaken for several reasons. It was necessary to provide a context for this study in terms of the current research on the topic and to identify any gaps in the literature as a basis for conducting further research. This chapter provides a general literature review on the topic. Table 1 at the end of the chapter provides an overview of the key papers discussed.

1.2 Introduction

Workplace violence is one of the most significant and hazardous issues faced by nurses globally and in response the International Council of Nurses issued a position statement in 2006 condemning “all forms of abuse and violence against nursing personnel” (International Council of Nurses, 2006). It is a potentially life-threatening and life-affecting workplace hazard often downplayed as just “part of the job” for nurses (Jones & Lyneham, 2000). There are four types of workplace violence defined in the literature, criminal intent, customer/client initiated, horizontal and personal (McPhaul & Lipscomb, 2004), however this review will focus exclusively on the second type and specifically patient-related violence.

Workplace violence is reported to be increasing in both frequency and severity and within this context the health industry has been identified as one of the most violent industries to work in (Perrone, 1999). Healthcare workers are more likely to be attacked at work than prison guards and police officers (International Council of

The occurrence of patient-related violence varies substantially between clinical environments, with the specialities of emergency, aged care and mental health reporting the highest rates of violence (Estryn-Behar et al., 2008). The ED has been consistently identified as one the highest risk areas for nurses to work in (Shields & Wilkins, 2009).

Within this context nurses have been identified as the professional group most likely to experience patient-related violence (Ogundipe et al., 2010). The National Crime Victimization Survey (1993-1999) in the US found that the average annual rate for non-fatal violent crime was 21.9 per 1000 workers for nurses, compared with 12.6 per 1000 workers for all other occupations (Emergency Nurses’ Association, 2012). In 2010, 43% (n = 21,530) of non-fatal assaults and violent acts against healthcare practitioners that involved days off work were committed against Registered Nurses (Bureau of Labor Statistics, 2010). Australian statistics reveal that Registered Nurses rate second highest in terms of Workers’ Compensation claims as a result of violence (Kennedy, 2005), with Enrolled Nurses fourth, and both of these rate higher than police and prison officers (Jones & Lyneham, 2000). Enrolled nurses in Australia are equivalent to licenced practical nurses (LPNs) in North America. In the United Kingdom a similar picture has emerged with HealthCare workers ranked as one of the highest risk groups for assault with an estimated 5% of nurses assaulted each year (Ryan & Maguire, 2006).

In addition, violence in the ED is reported to be increasing, for example The Joint Commission reported significant increases in assault, rape and homicide in US hospital settings from 2006 to 2009 (Kelen, Catlett, Kubit, & Hsieh, 2012). Annual rates of physical and non-physical assaults per 100 nurses were reported to be 13.2
and 38.8 respectively in a study of American ED nurses (Nachreiner, Gerberich, Ryan, & McGovern, 2007).

1.3 Definition of violence

There is a lack of consensus in the literature about what constitutes violence and also a lack of a standardised tool to record and measure rates of violence (Taylor & Rew, 2011) that makes comparison between studies difficult.

Violence includes a continuum of behaviours from verbal abuse to overt acts of physical violence. The World Health Organization defines violence as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation (World Health Organization, 2002).

NSW Health (2003) defines violence as any incident in which an individual is abused, threatened or assaulted. This includes verbal, physical or psychological abuse, threats or other intimidating behaviours, intentional physical attacks, aggravated assault, threats with an offensive weapon, sexual harassment and sexual assault (NSW Health, 2003).

Occupational violence is defined as any incident in which employees are abused, threatened or assaulted in circumstances arising out of, or in the course of their employment (NSW Health, 2003). Saines (1999) specifically defined workplace violence against nurses as any incident where a nurse is put at risk, including verbal abuse, threatening behaviours or assault (Saines, 1999).
1.4 Types of violence

1.4.1 Verbal

Verbal abuse has been identified as the most common form of violence experienced by ED nurses with up to 100% of nurses affected in some locations (Gacki-Smith et al., 2009; Lau, Magarey, & Wiechula, 2012a). This refers to the language used as well as the tone and way in which it is delivered, such as yelling or screaming (Gacki-Smith et al., 2009).

Swearing has been identified as the most common form of verbal abuse (Pich, Hazelton, Sundin, & Kable, 2011) and demeaning swearing has been identified as the most offensive form of verbal aggression, particularly for female nurses (Stone, McMillan, Hazelton, & Clayton, 2011). This included gendered and sexualised insults, judgements, threats or suggestions and demeaning statements often made in public spaces in front of others in an attempt to draw negative attention to those nurses’ targeted (Jackson, Hutchinson, Luck, & Wilkes, 2013).

Other types of verbal abuse include questioning professional skills and capabilities; and threats: including threats of complaint or legal action (Jackson et al., 2013), and threats of violence such as shooting, killing, blowing up, punching and stabbing with a needle (Jackson et al., 2013). Such abuse can occur face-to-face and over the phone, (Lyneham, 2000) and is not confined to the ED with nurses reporting that it can occur outside the department and after working hours (Gacki-Smith et al., 2009).

1.4.2 Non-verbal hostility

Non-verbal hostility refers to overt behaviours by patients designed to intimidate or threaten nurses or gain their attention, for example crossing arms, glaring at staff, throwing their arms up in the air, pacing, and rolling eyes and shaking their heads while talking to staff (Jackson et al., 2013). Other examples include acts of symbolic
violence such as punching a wall or throwing furniture (Winstanley & Whittington, 2004), and there have been recent reports of patients photographing or videoing staff on their mobile phones and threatening to “send it to the media” (Jackson et al., 2013).

1.4.3 Physical

Physical violence refers to physical contact that is intended to injure or harm another party (Nachreiner et al., 2007). It includes any intentional physical contact, actual or threatened, and does not have to result in an injury to the victim (Victorian Government, 2005). Examples of physical violence include being hit, slapped, kicked, pushed, choked, grabbed and sexually assaulted (Nachreiner et al., 2007); spat on, shoved, scratched (Gacki-Smith et al., 2009); stalked and being held hostage (Ferns, Cork, & Rew, 2005).

The behaviours typical of physical violence range from mild to severe in terms of the potential for injury to the victim. The majority of physical violence occurs concurrently with verbal abuse, and this correlation may indicate that verbal violence can act as a predictor for potential physical violence (Lau, Magarey, & Wiechula, 2012b; Luck, Jackson, & Usher, 2007; Mayhew & Chappell, 2005).

The use of weapons, both traditional and opportunistic, is reported in the literature, though the prevalence and experiences differ widely internationally (Ferns, 2005b). For example studies from the US report the use of firearms which has resulted in the introduction of metal detectors in some EDs (Kansagra et al., 2008). A study by Kelen et al (2012) analysed hospital-based shootings in the US between 2000 and 2011. The authors reported that while such events were relatively rare compared with other forms of workplace violence; there were 154 hospital shootings in this period. The ED was identified as the most common location and nurses were the victims in 5% of cases (Kelen et al., 2012).
Opportunistic weapons refer to items readily available and used to threaten or harm nurses. Examples reported in the literature include intravenous equipment, poles, syringes (sometimes blood-filled), furniture (Lyneham, 2000), scalpels, oxygen flow metres, ophthalmoscopes, stethoscopes and scissors (Doody, 1995) and a fire extinguisher that was used to spray staff (Arthur & Bain, 2002).

1.5 Workplace culture

A level of management resistance has been reported in acknowledging that health care workers are at risk of patient-related violence despite the fact that nurses consistently report high expectations of assault as a consequence of their job (Nachreiner et al., 2007). At the same time there is a workplace culture perpetuated by a degree of complacency on the part of staff where violence is viewed as just “part of the job” (Jones & Lyneham, 2000; McPhaul & Lipscomb, 2004).

Nurses are also reported to consider the question of intent to classify episodes of violence and respond accordingly. A study by Luck et al (2008) found that that ED nurses make judgements about the meaning of violent events and use these to guide their responses to these events (Luck, Jackson, & Usher, 2008). A distinction was made between intentional and unintentional violence and patients who were judged to be of diminished capacity were not assigned blame for their actions and so these episodes were not reported (Luck et al., 2008). This is a different behavioural construct where the aggression is regarded as being defensive in nature rather than overt and offensive and is referred to as “resistance to care” in the literature (Gibson, 1997; Kable, Guest, & McLeod, 2012a; Mahoney, 1999). This included acts where the patients were not considered responsible for their actions, for example those with a cognitive impairment like dementia, or if the nurse involved in the violent incident thought that they were not the target of the episode of violence (Lau et al., 2012b).
1.6 Perpetrators of violence

Patients are consistently identified as the main perpetrators of violence against nursing staff (Farrell, Bobrowski, & Bobrowski, 2006). This includes paediatric patients (Gillespie, Gates, Miller, & Howard, 2010) and the parents/carers of paediatric patients (Gillespie et al., 2010; Pich et al., 2011).

Relatives and those accompanying patients also were identified as being responsible for episodes of violence (Jackson et al., 2013) and this was particularly evident in research originating from non-western countries (Hasani et al., 2010; Senuzun Ergun & Karadakovan, 2005). This violence was reported to be mostly verbal in nature, for example a study by Gates et al (2006) reported that 100% of nurses had experienced verbal abuse from patients and 98% from visitors (n = 242) (Gates, Ross, & McQueen, 2006).

The idea of the “recreational fighter” is also discussed in the literature. This describes a person who initiates violent acts and who seeks out perceived provocation (Ferns, 2005a). While alcohol and waiting times may act as triggers they do not cause violence, it is the reaction of patients to these triggers that determines whether violence is involved (Ferns, 2005b). Aggressive behaviour by such patients can be viewed as a deliberate tactic to demonstrate power or to experience the rewards of feeling strong, masculine and dominant (Ferns, 2005a).

1.7 Antecedents and precipitants

1.7.1 History of violence

The greatest risk factor in predicting future violent or threatening behaviour from an individual is reported to be a past history of violence (Ferns, 2005b), and the greater the magnitude of violence, the greater the likelihood of future violence (Holleran, 2006). This includes any violence the person has experienced, for example domestic
abuse, assault, and any convictions for violent crime (Holleran, 2006). Other emotional stressors, for example death, grief, divorce, retrenchment as well as being the victim of violence have been identified as increasing the risk of potential violence in patients by adding to a sense of “being out of control” that can be exacerbated by the stressful environment of an ED (Keely, 2002; Rippon, 2000). It has also been proposed that some socioeconomic factors are correlated to increased intolerance to frustration and therefore an increased risk of violence, for example homelessness, financial burdens, criminal activities, anxiety and domestic disputes (Keely, 2002).

1.7.2 Alcohol and substance abuse

Alcohol and illicit drugs, especially sedative or hypnotic drugs, stimulants and hallucinogens, have the potential to disinhibit controls that normally suppress violence, and thus contribute to the potential for violence in patients under their influence (Tyrell, 1999). Alcohol or substance dependence, intoxication and withdrawal have all been identified as increasing the risk of violence from patients (Fernandes et al., 1999; Schnieden & Marren-Bell, 1995).

Substance abuse has been associated with an increased risk of violent behaviour by patients (Catlette, 2005), and has been implicated in 79% of all violent episodes (n = 210) in one Australian study (Lyneham, 2000). Alcohol intoxication is also consistently referred to as a risk factor in the literature with figures of between 25% (Crilly, Chaboyer, & Creedy, 2004) and 98% (Ferns, 2005b) of all violent episodes being attributable in some part to alcohol use.

1.7.3 Clinical diagnoses

Clinical diagnoses that affect cognition are linked to an increased risk for violence. These include temporary organic causes, for example intracranial trauma, delirium, hypoxia, encephalopathy, endocrinopathy, septicaemia, hypoglycaemia, disorientation due to mediation or recovery from surgery, decreased level of
consciousness and depression and (Chapman & Styles, 2006; Keely, 2002; Liu & Wuerker, 2005; McPhaul & Lipscomb, 2004) and those that are permanent in nature, for example dementia (Presley & Robinson, 2002). In addition, the emotional impact and subsequent stress of admission to the ED and of injury or illness can lower an individual’s threshold for aggression (Tyrell, 1999) and pain has also been identified as being a significant factor (Hodge & Marshall, 2007).

Psychiatric diagnoses that may lead to an increased risk of violent behaviour include acute psychoses, schizophrenia, mania, paranoid states and personality disorders (Presley & Robinson, 2002). There is strong evidence that the potential for violence in such patients markedly increases in the presence of drug and/or alcohol abuse (Gillies & O’Brien, 2006). In addition mental health patients who have engaged in self-harm are noted to be at increased risk of violent behaviour (Gillies & O’Brien, 2006). Many ED nurses lack mental health nursing experience and skills which has the potential to exacerbate potentially violent situations (Jones & Lyneham, 2000). In addition the realities of the modern ED are often counter-productive from a mental health standpoint, creating an environment that is not conducive for effectively treating such patients (Jones & Lyneham, 2000).

### 1.7.4 Waiting times

The Garling Report, a Special Commission of Inquiry into Acute Care Services in NSW Public Hospitals, found that the number of people who utilised the health service, and in particular EDs had increased substantially since 2006 (Garling, 2008). There were over 6.5 million presentations reported by Australian public hospital EDs for the year 2011–12, an average increase of 4.3% each year between 2007–08 and 2011–12. ED presentations increased in most states and territories for the period 2010–11 and 2011–12, especially in Western Australia and South Australia (Australian Institute of Health and Welfare, 2012). This trend was also reported in the US, where the number of ED presentations increased by 23%, from 89.8 million to
110.2 million visits annually for the period 1992-2002. At the same time the number of hospital EDs in the US decreased by 15% (Robinson, Jagim, & Ray, 2004).

Dissatisfaction with waiting times is perceived as a crucial trigger for episodes of violence; however patients’ negative responses were not exclusively dependent on the actual duration of waiting (Lau et al., 2012b). Perceptions of waiting times are more likely to influence patient reactions than actual waiting times (Lau et al., 2012b), with researchers reporting in one study that more than half of violent incidents occur within the first hour of a patient’s presentation to the ED (Lavoie, Carter, Danzl, & Berg, 1988).

Issues with waiting times are not restricted to admission to the ED from the waiting room. Delays are also reported with processes such as pathology (being done and reports made available), referrals to specialists, and patient transport from the hospital, and transfers to an inpatient bed (Robinson et al., 2004).

1.7.5 Nurse behaviour

The attitudes, behaviour and skill levels of individual nurses have also been identified as contributing to episodes of violence in some studies (Lyneham, 2000; Pich et al., 2011; Quintal, 2002). The way in which individual nurses react to aggression and tension can serve to escalate or de-escalate the situation (Jones & Lyneham, 2000). This can relate to their body language and attitude, for example aggressiveness on the part of nurses is more likely to incite violence (Quintal, 2002) as can being overly authoritative, being judgemental and confrontational (Lau et al., 2012a).

1.7.6 ED specific factors

Other antecedents reported in the literature include factors specific to waiting in the ED such as boredom, heat, excessive or constant noise, lack of choice and
overcrowding (Hodge & Marshall, 2007). This environment can lead to increased levels of anxiety in certain types of patients, and increase their potential for violent behaviour, for example those with mental health diagnoses and dementia patients (Kable et al., 2012a). Environmental factors such as the presence of a bank-like counter at triage can provoke anger by reinforcing lack of access and disempowerment (Lau, Magarey, & McCutcheon, 2004). Low or poor lighting has also been proposed as a risk factor for patients suffering cognitive impairment (Whittington, Shuttleworth, & Hill, 1996).

Patients' unrealistic expectations and perceptions regarding the care they should receive in the ED (Lau et al., 2004), including a lack of understanding of the triage scale have also been proposed as risk factors, with many patients not accepting that others may require more urgent attention than them (Lyneham, 2000). Researchers have reported that many patients and their visitors hold unrealistically high expectations of nurses, and when these expectations are not met the resultant anger is usually directed towards nurses (Jackson, Clare, & Mannix, 2002; Lyneham, 2000; Pich et al., 2011; Tyrell, 1999).

Environmental aspects of the ED can contribute to the potential for violence from some types of patients. The modern ED is noisy, busy, open and not conducive to privacy and can be challenging for the management of mental health patients who need a quiet, non-stimulating environment with subdued levels of activity and privacy to create an environment where they feel secure (Crowley, 2000). This noisy environment, combined with frustration over waiting times, can often spark aggression (Morphet et al., 2012). In addition this environment can have a negative effect on elderly patients, adding to disorientation and confusion and creating the potential for “resistance to care” behaviours that can include violence (Kable, Guest, & McLeod, 2012b).
Control of access to the ED has been consistently identified as an area of concern for nurses (Catlette, 2005) due to the largely unrestricted movement of the public (Phillips, 2007). Measures to address this including restricted access utilising swipe cards, safety glass at triage, policies restricting the number of visitors, lockdown of departments after hours, the use of quiet areas or seclusion rooms to house patients at risk of violence, security cameras and metal detectors are reported in the literature (Gates, Gillespie, & Succop, 2011b; Kansagra et al., 2008; May & Grubbs, 2002). However some researchers argue that such measures can be counter-productive and instead create a confrontational situation (Phillips, 2007); for example the use of seclusion rooms can be viewed as contentious as they can be used as a form of restraint with few studies into their efficacy in terms of their use as a patient management strategy (van der Zwan, Davies, Andrews, & Brooks, 2011).

A history of violence has been identified as one of the biggest risk factors for future violence, therefore the use of patient management plans that identify or flag “at-risk” patients has been advocated as a preventative strategy (Gates et al., 2011a). A systematic review on the effectiveness of interventions found that a patient management strategy was associated with decreased levels of patient-related violence (Wassall, 2009). However some authors argue that there can be negative consequences for patients labelled as violent, in terms of increased delays and use of restraints and it can also lead to misdiagnosis (Ferns, 2005b).

Research suggests that the certainty of sanction is a greater deterrent of unacceptable behaviour than the severity of punishment. Examples of sanctions against violent patients include the “card system” used in the National Health Service in the UK. This involves a system of sanctions where clients who behave inappropriately are issued with yellow and red warning cards, with the ultimate sanction being refusal of treatment (mental health clients are exempted from the system) (NHS Foundation Trust, 2012). Some Victorian hospitals use a similar system, issuing written warnings,
followed by the imposition of “contracts of acceptable behaviour”. This hierarchy of responses ranges from managed visits to refusal of service (except for treatment of life threatening conditions) for serious repeat offenders (Victorian Government, 2005) and constitutes another form of restricted access.

1.8 Consequences of violence

1.8.1 Physical

Physical violence has been defined as any intentional physical contact, actual or threatened, and may not necessarily result in an injury to the victim (Victorian Government, 2005). The consequences of physical violence on nurses involved in these episodes are physical and psychological in nature. Physical injuries sustained by overt acts of violence, range from minor, for example scratches, cuts, bruising and abrasions to major including fractures and loss of consciousness (McKinnon & Cross, 2008). There are also reports of ED nurses being sexually harassed and abused by patients (Gerberich et al., 2004; Ryan & Maguire, 2006) and extreme cases where nurses have been murdered by patients in the course of their work (Lynch, Appelboam, & McQuillan, 2003).

Witnessing suicide attempts and self-harm by patients are also included in this category (Ryan & Maguire, 2006), as are episodes that involve being urinated or defecated on (Jackson et al., 2002), and being stalked or held hostage by patients (McKinnon & Cross, 2008). These types of episodes have a psychological impact on nurses that can be long-lasting in nature (Gerberich et al., 2004).

1.8.2 Psychological

Even in the absence of physical injury, nurses have been found to experience moderate to severe psychological reactions for up to 12 months (Gerberich et al., 2004). Exposure to violence is linked to long-term psychological effects, including
Post-traumatic Stress Disorder and burnout (Camerino, Estryn-Behar, Conway, van Der Heijden, & Hasselhorn, 2008), and even seemingly minor acts of violence can have a negative emotional impact (Farrell et al., 2006).

Research has consistently reported that nurses are concerned about violence and aggression in the ED and often feel vulnerable (Catlette, 2005) and unsafe at work (Gacki-Smith et al., 2009). Emotional effects reported in the literature include feelings of guilt, self-doubt, feelings of professional incompetence (Arnetz & Arnetz, 2001); anger, powerlessness, unhappiness, degradation, shame, fear, astonishment, antipathy towards the perpetrator (Astrom et al., 2004); and sleeplessness (Jackson et al., 2002). Nurses have reported feeling more cautious and deriving less satisfaction from their patient-related care as well as being afraid to be at work. This fear and caution can result in decreased morale and lead to a situation where patients are avoided (Arnetz & Arnetz, 2001).

1.8.3 Professional

Patient-related violence can have significant implications for the quality of care afforded to patients by nurses (Arnetz & Arnetz, 2001), with diminished work performance being one of the consequences noted in the literature (Jackson et al., 2002). Studies have identified a negative correlation between violence experienced by health care staff and quality of care (Arnetz & Arnetz, 2001) and this may indirectly result in a deterioration in the quality of care, not just for the patient involved but for all patients cared for by the affected nurse (Lau et al., 2004). For example a Swedish study found that exposure to violent incidents led to negative consequences for the perpetrators in terms of increased medication, seclusion and the use of restraints (Astrom et al., 2004).
1.8.4 Organisational

The consequences of patient-related violence on nurses have a flow on effect to the health care system in terms of increased costs. These costs are reflected in loss of experienced staff (Chapman & Styles, 2006); sick leave, decreased productivity, staff turnover and attrition, and workers’ compensation pay outs (Jackson et al., 2002). Quantifying the cost of patient violence is difficult as it includes intangible items such as loss of morale, difficulties with retention and recruitment of staff, impact on patient care and therapeutic relationships and negative public relations which are difficult to assign a dollar value to (Hunter & Carmel, 1992).

1.9 Reporting

Reporting is an integral component of clinical governance and its primary purpose is to increase the safety of patients, visitors and staff, and ultimately to improve the quality of care. However in the case of episodes of violence, the incidence remains difficult to quantify and is grossly underestimated due to a lack of reporting (Jones & Lyneham, 2000). Estimations of under-reporting range from 20% (Lyneham, 2000) to 90% (Mayhew & Chappell, 2005) and this is referred to as the “dark figure” of workplace violence (Farrell et al., 2006), making it difficult for accurate incidence and prevalence of violence to be calculated (Ryan & Maguire, 2006). This is postulated to be related to the high levels of violence endemic in these areas (Holleran, 2006).

Nurses often perceive the response of hospital management and the legal system to reports of violence to be inadequate, yet the evidence shows that the majority of episodes of violence are not reported (Rose, 1997). This has led to a situation where much of the evidence regarding patient-related violence is anecdotal in nature and there is a disparity between the reality faced by nurses and the official records and data about the phenomenon.
Barriers to reporting episodes of patient-related violence include: - the perception that reporting might have a negative effect on customer service scores, or would be seen as a sign of weakness or incompetence, ambiguous ED reporting policies and fear of retaliation (Gacki-Smith et al., 2009). Other barriers reported in the literature include: -confusion as to what events to report, lack of time and lack of feedback from management and administration after the reported event (Gates et al., 2011a).

A study by Gacki-Smith et al (2009) found that nurses who felt there were no barriers to reporting were less likely to have experienced frequent ED physical violence than other nurses (Gacki-Smith et al., 2009). A relationship has also been identified between prior experience of violence and the likelihood of not reporting future episodes, with nurses exposed to violence becoming numb after repeated exposure (Pinar & Ucmak, 2011). This correlation between the number of prior assaults and the likelihood to report future assaults (Erickson & Williams-Evans, 2000), means that the more violence a nurse is exposed to, the less likely they are to report such incidents. In addition studies have found that nurses often make judgements about whether or not to report based on a number of factors the degree of personalisation of the violence, the presence of mitigating factors and the reason for the ED presentation. (Luck et al., 2008).

1.10 Risk management strategies

The best strategy for managing aggression and violence is prevention; however in clinical environments such as the ED this is not always possible. Violence should be dealt with promptly and positively by management, and staff should be supported and followed up with understanding (Winterbottom, 1979). Canadian researchers in one study reported that nurses who reported low supervisor support were more likely to report abuse from patients, compared with those reporting more positive relationships. The researchers hypothesised that this could lead to increased levels of
distress in those nurses and in turn have a negative impact on their patient care (Shields & Wilkins, 2009).

1.10.1 De-escalation techniques

De-escalation has been defined as a set of practice skills, including verbal and non-verbal responses which when used correctly, may reduce the level of a person’s hostility and in turn their predisposition towards violence (Saines, 1999). As the first point of contact in the ED, triage nurses are especially vulnerable to episodes of violence (Pich et al., 2011). Therefore they are ideally placed to identify patients at risk of exhibiting violent behaviour (Keep & Gilbert, 1997; Sands, 2007). Minimisation of violence requires early recognition of signs or cues and timely de-escalation (Presley & Robinson, 2002). Researchers have described a “turning point”, where nurses have the opportunity to act and contain or prevent violence (Lau et al., 2012b).

Researchers have recognised cues displayed by patients who may subsequently display violent behaviours (Chapman & Styles, 2006). These warning signs have been incorporated into training programs and models to help nursing staff identify at-risk patients and manage them appropriately to prevent violence from occurring. For example the ABC approach to assessing risk of violence at triage is a three-step violence risk assessment guide tailored specifically for triage nurses (Sands, 2007). Empathetic communication is crucial and should occur early in the process, for example alerting patients to waiting times (Lau et al., 2012a).

Behaviours identified as warning signs for potential violence include demanding and attention-seeking behaviours (Crilly et al., 2004) and are related to appearance, voice, movements and behaviour (Tyrell, 1999). These behaviours were labelled STAMP by Luck et al (2007). The authors discuss five elements of observable behaviour indicating potential for violence in patients, their friends and family. These passive behaviours: Staring and eye contact, Tone and volume of voice, Anxiety, Mumbling,
and Pacing have the potential to escalate into overt physical violence (Luck et al., 2007). This work was subsequently expanded to include four other precursors to episodes of violence and was re-labelled STAMPEDAR (Chapman, Perry, Styles, & Combs, 2009). The additional components identified were: Emotions, Disease process, Assertive/non-assertive behaviour and Resources. Cues associated with emotions included frustration, fear, unhappiness and dissatisfaction. Confusion, intoxication with alcohol or illicit drugs, organic disorders and patients who presented at the ED on a “regular” basis were identified as risk factors under the disease process label. Long waiting times and staff-related issues such as inexperience, lack of knowledge and skills and inappropriate communication styles were listed as risk factors for violence under the resources heading; while assertive/non-assertive behaviours were related to confrontational, disrespectful and over-assertive patients (Chapman et al., 2009).

According to the literature the amount and type of training provided to staff varies widely and as a result many staff report that they do not feel that they have the necessary skills to effectively manage episodes of violence (Lee, 2001; Pich et al., 2011). Training is consistently identified as important by nurses (Gates et al., 2011a), however it is reported to be largely sporadic and fragmented in nature with a lack of consistency between trainers and programs (Lee, 2001). The incorporation of de-escalation training into undergraduate nursing curricula has been suggested as a means of preparing student nurses for the realities of the workplace (Ross, 2002).

1.10.2 Security

The use of visible on-site security services is frequently cited as a measure to aid in the management of episodes of violence; however their effectiveness is dependent on their ability to respond in a timely fashion (Gates et al., 2006). This is also true of personal duress alarms worn by nurses (Lyneham, 2001). The presence of security is described as both a preventative strategy, by acting as a deterrent, and a reactive
strategy to manage episodes of violence (Gates et al., 2011a). The type of security reported in the literature varied widely and ranged from unarmed security guards based outside the ED to security personnel in the ED armed with firearms and tasers (Gates et al., 2011a). A study of hospital-based shootings in the US found that 23% (n = 10) of ED shootings involved a security guard’s gun being taken and used by the perpetrator (Kelen et al., 2012).

1.10.3 Environmental measures

Environmental controls such as restricted access to the department (Early & Hubbert, 2006) and the use of security screens at triage can reduce the risk of violence from outside the department; however they do not prevent violence once patients have been admitted into the department (Jones & Lyneham, 2000). In fact it is not possible to have impenetrable hospital security and zero risk in the context of an ED because it is designed to be accessible to the public (Kelen et al., 2012).

Isolation or seclusion of violent patients or those identified as being at risk of violence has also been identified as an important strategy in their management (Gates et al., 2011a). The use of metal detectors has been recommended by the American Medical Association and American Psychiatric Association, and adopted, in some US hospitals in response to the potential for gun crime in particular (Anderson, FitzGerald, & Luck, 2009). Some researchers argue that such measures can be counter-productive and instead create a confrontational situation (Phillips, 2007).

1.10.4 Debriefing

The use of debriefing after episodes of violence is supported in the literature; however informal debriefing is reported to be the most common method employed in the workplace (Gates et al., 2011a). Barriers to formal debriefing cited lack of time
and a workplace culture that tolerates violence as part of the job (Farrell et al., 2006; Gates et al., 2011a)

The National Institute for Health and Clinical Excellence guidelines for the prevention and management of violence recommend that a review should take place within 72 hours for all parties involved, however they provide little guidance on how this should take place (Bonner & McLaughlin, 2007). A lack of attention to the emotional effects of violence can contribute to Post Traumatic Stress Disorder (Gates et al., 2011b). This is supported by other studies that show that counselling is most effective at the early stages of post-traumatic stress and should be offered to all those affected (Lange, Lange, & Cabaltica, 2000; Schnieden & Marren-Bell, 1995). Failure to acknowledge this can lead to increased costs in terms of workers compensation claims, job dissatisfaction and decreased morale (Gates et al., 2011b).

1.11 Zero tolerance

The presence of a definitive policy on the management of violent patients may serve to mitigate the risk of violence and aggression (Anderson et al., 2009). One such policy incorporates the concept of Zero Tolerance, which originated in the United States and refers to specific actions that will not be tolerated or accepted (Wand & Coulson, 2006).

This concept has been adopted by a number of health departments, for example New South Wales Health, in an attempt to create a safe working environment as required by the Workplace Health and Safety legislation. NSW Health state that a Zero Tolerance Response means that appropriate action will be taken to protect employees, patients and visitors from the effects of violent behaviour (NSW Health, 2003). The intent of this policy is to maintain effective risk management strategies and to avoid inappropriate action where violent behaviour is the result of an underlying medical condition (Hodge & Marshall, 2007). However it has been
argued that zero tolerance is an ineffective response to violence in health settings, one that impinges on the rights of patients and the ability of clinicians to develop a therapeutic relationship due to its inflexible nature (Holmes, 2006).

However a Zero Tolerance approach to aggression and violence in healthcare is seen to be largely impractical for clinicians in the ED because it has the potential to impinge on their ability to develop therapeutic relationships with patients. Therapeutic engagement and the establishment of rapport are essential components of nursing practice and this is especially important in the stressful environment of the ED (Wand & Coulson, 2006).

### 1.12 Legal issues

The first case of criminal prosecution for an inpatient assault occurred in 1978; however it is only recently that legislation regarding workplace violence has come to prominence (Quanbeck, 2006). California was the first US state to enact legislation: California Hospital and Security Act Assembly Bill 508, which required acute care and psychiatric facilities to implement comprehensive violence prevention programs (Peek-Asa et al., 2007). Twenty-eight states in the US have enacted felony legislation for assault and/or battery against health care providers, including ED nurses, however it is not readily apparent if these penalties are being enforced (Goldstein, 2013). Penalties for assaulting a healthcare worker include a $5000USD fine for assault and possible imprisonment (Emergency Nurses’ Association, 2012).

Staff should be made aware of their legal rights and how these can be enforced against the perpetrators of violence (Dimond, 1994). Employers who do not take reasonable precautions to protect the safety of their staff could be in breach of Work Health and Safety requirements.

Despite evidence that violence against ED nurses is a common occurrence, legal action against perpetrators is rarely taken due to the failure of nurses to assert their
legal rights after they become the victim of a violent episode (Forrester, 2002). The majority of perpetrators of violence and aggression experience no negative consequences following their inappropriate behaviour, with minimal prosecutions reported (Mayhew & Chappell, 2005). For those perpetrators who receive a sanction, it is usually in the form of a verbal warning from a nurse unit manager or security officer (Victorian Government, 2005).

In some countries the reluctance of nurses to instigate legal proceedings against violent offenders has been linked to fear of retaliation by perpetrators, and shame and fear of stigmatisation in the community and workplaces, as well as shortcomings in the legal system (Pinar & Ucmak, 2011). Turkish researchers reported that in instances where charges were laid, cases were often closed if the perpetrator denied the charges and punishments were weak or non-existent in those cases that were successful (Pinar & Ucmak, 2011).

In January 2013 the South Australian Government announced that maximum jail sentences for people convicted of assaulting hospital staff would be increased to 25 years in recognition of the high levels of exposure to violence experienced by health care workers relative to other professionals (ABC News, 2013). It is also critical that nurses have confidence in the justice system and in their own employers to support them to report attempted or actual assaults to police and, where appropriate, to request that charges be laid. In NSW, a written Memorandum of Understanding between NSW Health and NSW Police underpins police response and support for health care workers when reporting violent incidents, including laying charges and pursuing prosecutions where appropriate (NSW Department of Health, 2002). Nurses should be supported by their organisation to report violent assaults or threats to the police whether a prosecution is likely to succeed or not (Victorian Government, 2005).
1.13 Conclusion

Violence initiated by patients is a reality of the modern ED work environment for nurses. The nature of the ED and the patients who present there mean that the threat of violence cannot be totally eliminated. Nurses need to be supported in the aftermath of a violent incident, with medical and psychological services, to prevent long-lasting negative effects and an associated decline in the quality of patient care. Nurses need to be encouraged to report incidents of violence to facilitate a change in the workplace culture where violence is seen as an inevitable part of the job. Thus the realities facing ED nurses in terms of violence in the workplace may be translated into an action plan that management and policy makers understand and must respond to, to provide a safe working environment for ED nurses.
### Table 1: Overview of key literature

<table>
<thead>
<tr>
<th>AUTHORS &amp; YEAR</th>
<th>COUNTRY &amp; type of participant</th>
<th>STUDY TYPE &amp; Data collection tool</th>
<th>SAMPLE SIZE/ Response rate</th>
<th>FINDINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Astrom et al., 2004)</td>
<td>Sweden Aged care</td>
<td>Telephone interviews of staff exposed to violent episodes</td>
<td>n=97</td>
<td>More than half occurred while helping with Activities of Daily Living. Emotional reactions included antipathy, powerlessness, insulted, resignation, indifference, guilt. 87% reported informal discussion with colleagues the most common strategy after violent episode.</td>
</tr>
<tr>
<td>(Atawneh, Zahid, Al-Sahlawi, Shahid, &amp; Al-Farrah, 2003)</td>
<td>Kuwait ED nurses</td>
<td>Quantitative questionnaire</td>
<td>n = 81 RR = 94%</td>
<td>70/81 nurses had experienced verbal abuse; 13/81 had been physically assaulted. Nurses suffer more from the after-effects of violence at work than doctors. Effects of violence included: flashbacks, depression, sleep disturbances, fear and time off work. Males statistically more likely to experience violence &amp; more fearful at work than females. 63/81 worried about violence at work. Training – 15/81 had received aggression minimisation training.</td>
</tr>
<tr>
<td>(Badger &amp; Mullan, 2004)</td>
<td>UK Healthcare</td>
<td>Cross-sectional – questionnaire</td>
<td>n=96/287 RR=34%</td>
<td>36% of staff identified outstanding training or support needs. Some incidents provoked by staff.</td>
</tr>
<tr>
<td>(Benveniste, Hibbert, &amp; Runciman, 2005)</td>
<td>Australia Healthcare</td>
<td>Review of data on incidents involving violence collected using AIMS</td>
<td>ED highest prevalence. 5% of incidents led to injury. Mental health patients. Preventive strategies including de-escalation training, violence management plans, building design and fast-tracking of mental health patients as well as improved waiting times.</td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Country</td>
<td>Study Population</td>
<td>Study Design</td>
<td>Sample Size</td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>------------------</td>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>(Catlette, 2005)</td>
<td>USA</td>
<td>Nurses</td>
<td>Descriptive Interviews</td>
<td>Convenience sample N=8</td>
</tr>
<tr>
<td>(Camerino et al., 2008)</td>
<td>Europe</td>
<td>Nurses</td>
<td>Questionnaire based cross-sectional and longitudinal cohort study</td>
<td>N=34 107 565 healthcare institutions in 8 European countries</td>
</tr>
<tr>
<td>(Chapman &amp; Styles, 2006)</td>
<td>Australia</td>
<td>ED nurses</td>
<td>Commentary</td>
<td></td>
</tr>
<tr>
<td>(Crilly et al., 2004)</td>
<td>Australia</td>
<td>ED Nurses</td>
<td>Descriptive longitudinal cohort design study – questionnaire</td>
<td>N=71/108 RR=66%</td>
</tr>
<tr>
<td>(Dalphon, Gessner, Giblin, Hijazzi, &amp; Love, 2000)</td>
<td>USA</td>
<td>Nurses</td>
<td>Retrospective descriptive study – questionnaire</td>
<td>N=690/1000 RR=69%</td>
</tr>
<tr>
<td>(Donnelly, 2006)</td>
<td>UK</td>
<td>ED Nurses</td>
<td>Opinion</td>
<td></td>
</tr>
<tr>
<td>(Dragon, 2006)</td>
<td>Australia</td>
<td>Nurses</td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>(Duxbury &amp; UK)</td>
<td>2 phase - Questionnaire</td>
<td>Questionnaire</td>
<td></td>
<td>Psychopathology – alcohol – dual diagnosis – young males.</td>
</tr>
<tr>
<td>Study</td>
<td>Country</td>
<td>Participants</td>
<td>Methodology</td>
<td>Findings</td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>--------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>Whittington, 2005</td>
<td>Nurses &amp; patients</td>
<td>n=80 patients, n=82 nurses, Interviews: n=5 patients, n=5 nurses</td>
<td>Environmental factors e.g. provisions for privacy. Negative staff and patient relationship leads to patient aggression.</td>
<td></td>
</tr>
<tr>
<td>Early &amp; Hubbert, (2006)</td>
<td>USA ED Nurses</td>
<td>n = 12</td>
<td>ED environment not supportive to nurses or patients and may contribute to emergence of violent behaviour.</td>
<td></td>
</tr>
<tr>
<td>(Erickson &amp; Williams-Evans, 2000)</td>
<td>USA Nurses</td>
<td>Convenience sample, n=55</td>
<td>Attitudes of ED nurses re. patient assaults. Habituation – more assaults – less likely to report – attitude that assaults are part of the job.</td>
<td></td>
</tr>
<tr>
<td>(Estryn-Behar et al., 2008)</td>
<td>Europe – 10 countries Nurses</td>
<td>Questionnaire and 1 year follow up assessment</td>
<td>Workplace violence – verbal abuse – aggression – harassment – bullying – physical violence. 22% reported exposure to frequent violent episodes. Highest prevalence in mental health, geriatric and ED. Leads to higher levels of burnout.</td>
<td></td>
</tr>
<tr>
<td>(Farrell et al., 2006)</td>
<td>Australia Nurses</td>
<td>Questionnaire</td>
<td>Types of abusive behaviour. Male and females equally culpable for verbal abuse BUT males more likely re physical abuse. ED 3rd area of practice for verbal abuse and 1st for physical. Verbal abuse most frequent type of abuse.</td>
<td></td>
</tr>
<tr>
<td>(Fernandes et al., 1999)</td>
<td>Canada ED</td>
<td>Questionnaire</td>
<td>68% reported increased frequency of violence over time and 60% increased severity. Informal debriefing with colleagues. High risk patients – drug abusers, alcoholics, mentally ill and gang members. ED factors – long wait times, high-stress illness, noisy environment &amp; 24 hour access.</td>
<td></td>
</tr>
<tr>
<td>(Ferns, 2005b)</td>
<td>UK</td>
<td>Literature review</td>
<td>Excessive verbal abuse.</td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Study Type</td>
<td>Setting</td>
<td>Sample Size</td>
</tr>
<tr>
<td>-----------</td>
<td>---------</td>
<td>------------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>(Ferns, Stacey, &amp; Cork, 2006)</td>
<td>UK</td>
<td>Literature review</td>
<td>ED nurses</td>
<td>Importance of nurses in researching phenomena of violence.</td>
</tr>
<tr>
<td>(Fisher &amp; Gunnison, 2001)</td>
<td>USA</td>
<td>Literature review</td>
<td>Workplace violence</td>
<td>Greatest number of non-fatal victimisations occurred between patients and nurses</td>
</tr>
<tr>
<td>(Friedman, 2006)</td>
<td>USA</td>
<td>Literature review</td>
<td>Mental health sector</td>
<td>Presence of schizophrenia, major depression or bipolar disorder significantly associated with increased risk of violence.</td>
</tr>
<tr>
<td>(Gates et al., 2006)</td>
<td>USA</td>
<td>Action Research Questionnaire</td>
<td>ED staff</td>
<td>Violence in the Emergency Department is increasing - 65% non-reporting rate. Thematic analysis results supported the relevance, feasibility, and saliency of the planned intervention strategies. Contributing factors for physical assault. 64% had not had violence prevention training in previous 12 months. Increased police presence sought – did not feel safe.</td>
</tr>
<tr>
<td>(Gerberich et al., 2004)</td>
<td>USA</td>
<td>Questionnaire</td>
<td>Nurses</td>
<td>Definition of violence. Reasons for non-reporting: Accepted as part of the job; Considered it minor or isolated; Unnecessary to report; Non-supportive environment; Too busy. Even in absence of injury some assaulted staff experienced moderate to severe reaction for 6 months to 1 year.</td>
</tr>
<tr>
<td>(Gillies &amp; O'Brien, 2006)</td>
<td>Australia</td>
<td>Literature review</td>
<td>Mental health nurses</td>
<td>Risk factors for violence in psychiatric patients: - Delusions and hallucinations; Drug and alcohol abuse; Personality disorder; Previous violent behaviour; Younger age; Self-harm. Nursing staff are most frequent targets of violent behaviours from psychiatric patients.</td>
</tr>
<tr>
<td>(Greene, 2008)</td>
<td>Canada</td>
<td>Commentary</td>
<td>ED</td>
<td>ED staff accustomed to violent behaviour - US ED doctors taking guns to work for protection (38%). Inconsistent response by management.</td>
</tr>
<tr>
<td>(Hegney, Eley, 2006)</td>
<td>Australia</td>
<td>Questionnaire</td>
<td>Nurses</td>
<td>Nurses 4-times higher risk of assault than general workforce.</td>
</tr>
<tr>
<td>Reference</td>
<td>Participants</td>
<td>Methodology</td>
<td>Sample Size</td>
<td>Summary</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------</td>
<td>-------------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>Plank, Buikstra, &amp; Parker, 2006</td>
<td>Nurses</td>
<td>RR=45%</td>
<td></td>
<td>Experience of nurse and designation. Policies and procedures often uncoordinated and fragmented.</td>
</tr>
<tr>
<td>Hilliar, 2008</td>
<td>Australia Assaults on hospital premises</td>
<td>Review of crime statistics &amp; research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hislop &amp; Melby, 2003</td>
<td>UK Nurses</td>
<td>Phenomenological – interviews</td>
<td>N=26</td>
<td>Hostility of waiting room. Unwillingness of those with minor injuries to wait for treatment. Triage nurse seen as gatekeeper to ED.</td>
</tr>
<tr>
<td>Hunter &amp; Carmel, 1992</td>
<td>USA Healthcare</td>
<td>Retrospective study</td>
<td>N=134</td>
<td>Calculating cost of staff injuries from inpatient violence.</td>
</tr>
<tr>
<td>Jackson et al., 2002</td>
<td>Australia Nurses</td>
<td>Literature review</td>
<td></td>
<td>Types of violent behaviour. Effects of violence.</td>
</tr>
<tr>
<td>Jones &amp; Lyneham, 2000</td>
<td>Australia Nurses</td>
<td>Literature review</td>
<td></td>
<td>Factors contributing to workplace violence: - Increased waiting times; increasing use of weapons; inadequate systems of security; Culture of silence; Inadequate support for emergent mental health needs; Lack of reporting – 75%; Lack of institutional concern &amp; systems of support; Demands of triage nursing.</td>
</tr>
<tr>
<td>Study</td>
<td>Country</td>
<td>Role</td>
<td>Methodology</td>
<td>N</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------</td>
<td>---------------</td>
<td>----------------------</td>
<td>---------</td>
</tr>
<tr>
<td>(Jenkins, Rocke, McNicholl, &amp; Hughes, 1998)</td>
<td>UK</td>
<td>ED - doctors</td>
<td>Questionnaire</td>
<td>233/310</td>
</tr>
<tr>
<td>(Kennedy, 2005)</td>
<td>Australia</td>
<td>ED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Keough, Schlomer, &amp; Bollenberg, 2003)</td>
<td>USA</td>
<td>ED Nurses</td>
<td>Cross-sectional – questionnaire</td>
<td>266/900</td>
</tr>
<tr>
<td>(Kisa, 2008)</td>
<td>Turkey</td>
<td>Nurses</td>
<td>Questionnaire</td>
<td>339/410</td>
</tr>
<tr>
<td>(Kwok et al., 2006)</td>
<td>Hong Kong</td>
<td>Nurses</td>
<td>Questionnaire</td>
<td>420/1650</td>
</tr>
<tr>
<td>(Lanza, 1983)</td>
<td>USA</td>
<td>Nurses</td>
<td>Questionnaire of staff previously identified as being assaulted</td>
<td>40/67</td>
</tr>
<tr>
<td>(Lau et al., 2004)</td>
<td>Australia</td>
<td>Health professionals</td>
<td>Literature review</td>
<td></td>
</tr>
<tr>
<td>(Lavoie et al., 1988)</td>
<td>USA</td>
<td>ED</td>
<td>Survey of hospitals</td>
<td>127/170</td>
</tr>
<tr>
<td>(Levin, Hewitt, &amp; Misner, 1998)</td>
<td>USA</td>
<td>ED Nurses</td>
<td>Qualitative 4 Focus groups</td>
<td>22</td>
</tr>
</tbody>
</table>
Australia Literature review  Violence is a multi-faceted problem; Steeped in a discourse that protects the agents of violence and perpetuates the use of current strategies despite their lack of success; New strategies required and new discourses to discuss the problem.  

(Luck et al., 2007) Australia ED nurses Mixed method case study 13 informal field interviews 16 semi-structured interviews 290 hours of participant observation STAMP behaviours identified as predictors of potential violence in patients Staring, Tone, Anxiety, Mumbling, Pacing  

(Luck et al., 2008) Australia ED nurses Mixed method case study 13 informal field interviews 16 semi-structured interviews 290 hours of participant observation ED nurses made judgements about meanings of violent events according to 3 factors: Perceived personalisation of violence; Presence of mitigating factors; Reason for presentation.  

(Lynch et al., 2003) UK ICU nurses Questionnaire N=176/188 RR=93.6% Types of physical injuries. Illness, distress, alcohol and sociopathic behaviour.  

(Lyneham, 2000) Australia Nurses Descriptive exploratory survey study 2 stages 9 interviews and Questionnaire N=266/650 RR=41% Non-reporting an issue. Drugs, alcohol and ED waiting times.  

(Maguire & Ryan, 2007) Ireland Mental health nurses Questionnaire N=87/280 RR=31% Experience of nurse. Disparity between official and self-reporting.  

(May & Grubbs, USA Survey N=86/125 ED nurses at higher risk.  

(Luck, Jackson, & Usher, 2006)
<table>
<thead>
<tr>
<th>Year</th>
<th>Study Type</th>
<th>Location</th>
<th>Setting</th>
<th>Method</th>
<th>N</th>
<th>RR%</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Nurses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>68.8%</td>
<td>Under-reporting 50%. Cognitive dysfunction, substance abuse, anger related to long wait times and health care system.</td>
</tr>
<tr>
<td></td>
<td>Australia</td>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Definition of violence. Healthcare rated 2nd for verbal abuse and physical assault in survey of workplaces. Under-reporting 90%. Best predictor of violence is past aggression.</td>
</tr>
<tr>
<td>(Mayhew &amp; Chappell, 2005)</td>
<td>Australia</td>
<td>Mental health nurses</td>
<td>Descriptive Survey</td>
<td>N=63/90 RR=70%</td>
<td></td>
<td>Unqualified and junior staff at greater risk. Dual diagnosis. Environmental factors can increase levels of violence. Under-reporting.</td>
<td></td>
</tr>
<tr>
<td>(McKinnon &amp; Cross, 2008)</td>
<td>Australia</td>
<td>Mental health nurses</td>
<td>Questionnaire using POPAS</td>
<td>N=154/395 RR=39%</td>
<td></td>
<td>Use of “Perceptions of Prevalence of Aggression Scale” (POPAS) – rates 15 types of aggressive behaviour. Female staff less likely to be victim of severe physical violence.</td>
<td></td>
</tr>
<tr>
<td>NSW Health (2005)</td>
<td>Australia</td>
<td>Policy directive</td>
<td></td>
<td></td>
<td></td>
<td>Aggression minimisation training mandatory and to be repeated at a minimum of every 2 years. All staff at risk of violence must be provided with appropriate info, instruction &amp; training in how to prevent and manage violence in the workplace.</td>
<td></td>
</tr>
<tr>
<td>(Oster, Bernbaum, &amp; Patten, 2001)</td>
<td>Canada</td>
<td>Psychiatric emergency service</td>
<td>Retrospective review of patients identified as being violent</td>
<td>N=758</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Pawlin, 2008)</td>
<td>UK</td>
<td>ED</td>
<td>Questionnaire</td>
<td>N=33/80</td>
<td></td>
<td>UK figures – staff physically assaulted every 7 minutes. Under-reporting due to: Intent; Accustomed to violence; Excessive and lengthy reporting procedures; Nothing will come of it; Uncertainty about what constitutes a violent act. Use of abuse data recording tool.</td>
<td></td>
</tr>
<tr>
<td>(Phillips, 2007)</td>
<td>USA</td>
<td>Workplace Violence</td>
<td></td>
<td></td>
<td></td>
<td>Under-reporting 80%.</td>
<td></td>
</tr>
</tbody>
</table>
Nurses at risk of violence due to hands-on nature of job. Tolerance for violence in healthcare seems evident.

- **Antecedents and risk factors:** Long waiting times; mental health patients; Alcohol and substance misuse; Age: younger patients; Parents of paediatric patients; Easy access of ED; Lower socioeconomic status; Attitudes of staff; Less experienced staff.
- Patient-related violence perceived to be increased in frequency and intensity.
- Physical abuse: Types: slapped, kicked and hit.
- Verbal abuse: Swearing, threats; shouting, making unreasonable demands; intimidation.
- Impact: Emotional and professional.
- Risk management strategies: Reactive rather than preventative e.g. security, duress alarms and workplace design.
- Training – lacking.
- Reporting: Under-reporting common due to time constraints, “non-user friendly” system and high frequency of episodes.
- Ability to recognise cues and warning signs.
- Coping mechanisms: Informal debriefing.

### Literature Review

<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Study Type</th>
<th>Method</th>
<th>Sample Size</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Pich et al., 2011)</td>
<td>Australia</td>
<td>Qualitative descriptive</td>
<td>Semi structured interviews</td>
<td>N = 6</td>
<td>Antecedents and risk factors: Long waiting times; mental health patients; Alcohol and substance misuse; Age: younger patients; Parents of paediatric patients; Easy access of ED; Lower socioeconomic status; Attitudes of staff; Less experienced staff. Patient-related violence perceived to be increased in frequency and intensity. Physical abuse: Types: slapped, kicked and hit. Verbal abuse: Swearing, threats; shouting, making unreasonable demands; intimidation. Impact: Emotional and professional. Risk management strategies: Reactive rather than preventative e.g. security, duress alarms and workplace design. Training – lacking. Reporting: Under-reporting common due to time constraints, “non-user friendly” system and high frequency of episodes. Ability to recognise cues and warning signs. Coping mechanisms: Informal debriefing.</td>
</tr>
<tr>
<td>(Ross-Adjie, Leslie, &amp; Gillman, 2007)</td>
<td>Australia</td>
<td>Cross-sectional descriptive</td>
<td>study – questionnaire</td>
<td>156/300 RR=52%</td>
<td>Violence top-ranked stressor. 60% reported that workplace debriefing not routinely offered.</td>
</tr>
<tr>
<td>(Ryan &amp; Maguire, 2006)</td>
<td>Ireland</td>
<td>Cross-sectional – questionnaire</td>
<td></td>
<td>N=37/80 RR=46%</td>
<td>Health care workers ranked as one of groups at most risk. Patients were greatest source of aggression and violence.</td>
</tr>
<tr>
<td>Study (Year)</td>
<td>Country</td>
<td>Setting</td>
<td>Methodology</td>
<td>Sample Size</td>
<td>Findings</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
<td>---------</td>
<td>-------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>Secker et al. (2004)</td>
<td>UK</td>
<td>Mental health nurses</td>
<td>Qualitative interviews</td>
<td>N=15</td>
<td>Zero tolerance unlikely to succeed without understanding why aggressive incidents occur. Three steps should follow an aggressive incident: - 1. Emotional support; 2. Critical reflection; 3. Accountability.</td>
</tr>
<tr>
<td>Wand &amp; Coulson (2006)</td>
<td>Australia</td>
<td>ED</td>
<td></td>
<td></td>
<td>Patients more aggressive to nurses than doctors. Aggressive and violent episodes daily occurrence in ED. Concept of Zero Tolerance originated in US and refers to specific actions or behaviours that will not be tolerated. Early recognition and use of de-escalation strategies preferable.</td>
</tr>
<tr>
<td>Wells &amp; Bowers (2002)</td>
<td>UK</td>
<td>Nurses</td>
<td>Literature review</td>
<td></td>
<td>Younger and less experienced nurses at greater risk</td>
</tr>
<tr>
<td>Whittington &amp; Winstanley (2008)</td>
<td>UK</td>
<td>ED Nurses</td>
<td>Commentary</td>
<td></td>
<td>Meaning assigned to acts of violence – psychology of reporting how personalised attack was – mitigating circumstances.</td>
</tr>
<tr>
<td>Winstanley &amp; Whittington (2004)</td>
<td>UK</td>
<td>Healthcare</td>
<td>Questionnaire</td>
<td>375/1141 RR=33%</td>
<td>Particular staff were experiencing repeated victimisation while others were experiencing none. High levels of verbal abuse and threatening behaviour in ED.</td>
</tr>
<tr>
<td>Wright, Dixon, &amp; Tompkins (2003)</td>
<td>UK</td>
<td>Primary care</td>
<td>Review</td>
<td></td>
<td>Risk factors vary according to time, place, situation and support networks. Perpetrators likely to be male, mean age 36, long wait times, alcohol and drug issues, mental health issues.</td>
</tr>
</tbody>
</table>
Chapter 2 Systematic review

In view of the issues identified in this literature review a systematic review of the literature was undertaken to focus in on the issue of patient-related violence against nursing staff working in the ED.

2.1 Executive summary

Background

Objectives The purpose of this review was to identify, appraise and synthesise the best available evidence on the impact of patient-related violence against nurses working in Emergency Departments.

Inclusion criteria

Types of participants

This review included nurses working in Emergency Departments regardless of gender, age, classification or level of experience.

Types of intervention(s)/phenomena of interest

The review considered studies that evaluated Emergency Nurses’ experiences with patient-related violence.

Types of studies

The review included primary quantitative, qualitative studies and mixed method studies.

Types of factors and outcomes

The review included studies that reported factors and outcomes associated with patient-related violence including: -
- Frequency of episodes of violence;
- The types of violence – physical and verbal;
- Organisational reporting of episodes of violence;
- Antecedents and risk factors;
- Impact and sequelae of violence: psychological and physical effects;
- Prevention and control measures to manage episodes of violence.

**Search strategy:** A three-stage comprehensive search strategy was utilised to search across seven electronic databases. English language studies published between January 2001 and December 2011 were considered for inclusion.

**Methodological quality:** Two independent reviewers assessed the methodological quality of each study selected for retrieval using standardised Joanna Briggs Institute critical appraisal tools.

**Data collection:** Data were extracted from studies using the standardised data extraction tools from the Joanna Briggs Institute.

**Data synthesis:** It was not possible to undertake meta-analysis due to a lack of homogeneity between studies. Findings are therefore presented in a narrative form.

**Results:** Eighteen studies were eligible for inclusion in this review. This included 11 quantitative, four qualitative and three mixed methods studies. Violence against ED nurses occurs frequently and includes episodes of both verbal abuse and physical violence, with verbal abuse experienced by the majority of participants across all studies. In addition, many episodes are not reported due to a perceived lack of follow-up by management. Antecedents and risk factors include patient, staff and organisational related issues. The effects of violence on nurses can be long lasting and can affect the quality of patient care provided. It is difficult to define the impact of preventative and control measures; however security and training are typically used.
Conclusions: Due to limitations in the studies the results of this systematic review do not support the development of best practice guidelines on the topic; due to the strength (grading) of the evidence. However the results of this review should be considered as an information source in the development of healthcare organisational policies and practices. These results call into question the effectiveness of policies such as Zero Tolerance and the ability of hospitals to provide as safe working environment as required under Workplace Health and Safety legislation. Employers should ensure that prevention strategies are adequate and given that the impact of patient-related violence on ED nurses can be long-lasting in nature, provide support and follow up for those affected. ED nurses report being fearful and feeling unsafe at work and with patient-related violence perceived to be increasing in frequency and intensity, and ongoing research in this area is essential. The use of prospective studies with large sample sizes will help to provide a more accurate understanding of the phenomenon and provide an impetus for change in attitude from healthcare employers and government.

Keywords: emergency department; violence; nurse, patients.
2.2 Background

The healthcare industry has been identified as one of the most violent workplace sectors (Perrone, 1999), with EDs ranked as one of the highest-risk areas for such violence (Lau et al., 2004). Patient related aggression and violence have been identified as common behaviours in the modern ED (Ryan & Maguire, 2006). Within this context, nurses have been identified as the occupation at most risk of patient-related violence, with between 60 and 90% of nurses reporting exposure to verbal and physical violence (Lau et al., 2004). ED nurses have been identified as having the most stressful workplace setting of all nurses (Donnelly, 2006) and are exposed to a disproportionate amount of violence (Holleran, 2006). High levels of verbal abuse and threatening behaviour are reported (Winstanley & Whittington, 2004) with up to 90% of ED nurses having experienced physical violence at some point in their careers and all have reported experiencing verbal abuse (Kennedy, 2005).

The term violence encompasses a wide range of behaviours (Lyneham, 2000), from physical assault or direct violence to non-physical forms of violence such as verbal abuse and sexual harassment (Gerberich et al., 2004). Studies have reported that up to 20% of nurses have experienced intimidation, harassment or assault of a sexual nature (Ryan & Maguire, 2006). Evidence suggests that the term “violence” is frequently used by nurses as a broad term to describe everything from witnessing verbal abuse through to being a victim of physical assault (Ferns, 2005a).

Patients are consistently identified in the literature as being the most common source of violence against nurses (Lyneham, 2000), responsible for up to 89% of cases (McKinnon & Cross, 2008). Other sources of violence include friends and relatives accompanying patients and horizontal violence from other staff members (Ryan & Maguire, 2006).
Verbal abuse has been identified as the most common form of abuse experienced by nurses (Farrell et al., 2006) and has been labelled a global phenomenon (Ferns, 2005b). It includes rudeness, shouting, sarcasm, swearing, unjustified criticism, ridicule in front of others, threat of personal harm to the person, their family or property, rumour mongering (Farrell et al., 2006) as well as sexual innuendo (Crilly et al., 2004). Of these behaviours, swearing has been identified as the most common form of verbal abuse (Crilly et al., 2004), and includes both face-to-face and telephone abuse (Jackson et al., 2002).

Physical violence is frequently preceded by verbal violence, and it may constitute a warning sign for potential or impending physical violence (Lau et al., 2004). It has been defined as any intentional physical contact, actual or threatened, and may or may not result in an injury to the victim (Jones & Lyneham, 2000). It can also include overt behaviour designed to intimidate or threaten, for example punching a wall or throwing furniture (Winstanley & Whittington, 2004). The ready availability of, and easy access to hospital equipment has resulted in objects such as scissors, syringes, needles and stretcher poles being used as weapons against nurses (Ferns, 2005b).

Violence and assault against nurses is reported to be on the increase (Jackson et al., 2002) however it is widely acknowledged that the true level is unknown due to chronic under-reporting of violent incidents (Pich et al., 2011) in Australia and internationally (Ryan & Maguire, 2006). Estimations of under-reporting range from 20% up to 90% (Lyneham, 2000) (Jones & Lyneham, 2000) (Phillips, 2007) (Mayhew & Chappell, 2005), and are referred to as the “dark figure” of workplace violence (Farrell et al., 2006). A culture of silence is said to exist (Lyneham, 2000), meaning that accurate statistical analysis of the incidence and prevalence of violence has become impossible (Ryan & Maguire, 2006). Reasons cited for failure to report a violent incident include insufficient time; a feeling of resignation that no benefit will come from the process, lack of appropriate support and feedback, the belief that such
violence is part of the job (Lyneham, 2000); fear of reprimand and lack of knowledge about reporting procedures (Crilly et al., 2004). The overall findings indicate that nurses feel unsupported by management in relation to workplace violence (Jackson et al., 2002).

Nurses in EDs in particular have been identified as significantly under-reporting violent incidents, a fact thought to be related to the high levels of violence endemic in these areas (Holleran, 2006). These high levels of violence have resulted in a desensitization on the part of many nurses to the point where violence has become an expected and accepted part of their job (Benveniste et al., 2005). Verbal and physical abuse are regarded as occupational hazards (McKinnon & Cross, 2008) and there is a rationalisation on the part of many nurses that such violence is unavoidable (Ray, 2007).

The types of injuries sustained by nurses as a direct consequence of violent behaviour from patients range from minor, for example scratches, to major including fractures and loss of consciousness (McKinnon & Cross, 2008), up to extreme cases where nurses have been stabbed and even killed (Lynch et al., 2003). Australian figures for the period 2000 to 2002 reported 3,621 incidents involving patients and physical violence or violent verbal exchanges against health care staff, and in 5% of these incidents staff were injured (Benveniste et al., 2005).

Even in the absence of physical injury, nurses have been found to experience moderate to severe psychological reactions for up to 12 months following an episode of violence (Gerberich et al., 2004). Exposure to violence has been linked to long-term psychological effects, including Post-traumatic Stress Disorder and burnout (Camerino et al., 2008). Despite the seriousness of the consequences, informal discussion or debriefing with colleagues was the most common coping mechanism referred to in the literature (Astrom et al., 2004).
Emotional effects reported in the literature include feelings of guilt, self-doubt, feelings of professional incompetence (Arnetz & Arnetz, 2001); anger, powerlessness, unhappiness, degradation, shame, fear, astonishment, antipathy towards the perpetrator (Astrom et al., 2004); and sleeplessness (Jackson et al., 2002). Nurses have reported feeling more cautious and deriving less satisfaction from their patient-related care as well as being fearful at work. This fear and caution can result in low morale and lead to a situation where patients are avoided (Arnetz & Arnetz, 2001). Studies have identified a negative correlation between violence experienced by health care staff and patient-related quality of care (Arnetz & Arnetz, 2001).

The health system is faced with increased costs in terms of sick leave, decreased productivity and staff turnover and attrition, and workers compensation payments due to injuries resulting from patient-related violence (Jackson et al., 2002). Quantifying the cost of patient-related violence is difficult as it includes intangible outcomes such as loss of morale, difficulties with retention and recruitment of staff, impact on patient care and therapeutic relationships and negative public relations which are difficult to measure in monetary terms (Hunter & Carmel, 1992).

2.3 Definitions

For the purpose of this review, the following definitions of terms were used:-

**Violence:** includes a range of behaviours from non-physical behaviours and verbal abuse through to overt acts of physical violence.

**Patient-related:** patients presenting to the ED, including the parents of paediatric patients. Whilst groups other than patients were not the focus of the review, for example relatives, some incidental results have been included.

**Nurses:** all classifications of nurses were considered in this review.
**Emergency Department**: refers to the department in a hospital that is staffed and equipped to provide rapid and varied emergency care, especially for those who are have suffered trauma or sudden and acute illness. For the purposes of this review the term Emergency Department was used, however it can be used interchangeably with Accident and Emergency, and Emergency Service.

### 2.4 Objectives

The objectives of this review were to identify, appraise and synthesise the best available evidence on the impact of patient-related violence against nurses working in EDs.

**Inclusion criteria:-**

**Types of participants**

The quantitative and qualitative components of this review considered studies that included ED nurses of all classifications.

**Types of intervention(s)/phenomena of interest**

The quantitative and qualitative components of this review considered studies that evaluated ED nurses’ experiences with patient-related violence.

**Types of studies**

The qualitative component of the review considered studies that focused on qualitative data including, but not limited to, designs such as phenomenology, grounded theory, ethnography, action research and feminist research.

Only primary research was included for the purpose of this review. In the absence of research studies, other texts such as opinion papers and reports were not considered.
Types of outcomes

The review considered studies that included the following outcome measures:

- Frequency of episodes of violence;
- The types of violence – physical and verbal;
- Organisational reporting of episodes of violence;
- Antecedents and risk factors;
- Impact and sequelae of violence: psychological and physical effects;
- Prevention and control measures to manage episodes of violence.

2.5 Search strategy

The search strategy aims to find both published and unpublished studies. A three-step search strategy will be utilised in this review. An initial limited search of MEDLINE and CINAHL will be undertaken followed by analysis of the text words contained in the title and abstract, and of the index terms used to describe article. A second search using all identified keywords and index terms will then be undertaken across all included databases. Thirdly, the reference list of all identified reports and articles will be searched for additional studies. Studies published in English will be considered for inclusion in this review. Studies published between January 2001 and December 2011 will be considered for inclusion in this review.

The databases to be searched include:

- CINAHL
- MEDLINE
- Mosby’s Index
- Scopus
- Cochrane Central Register of Controlled Trials (CENTRAL).
- Google Scholar
- MedNar.
The following keywords will be used in the search strategy:

- Emergency Department or ED or Emergency Service;
- Accident and Emergency or A & E or Triage;
- Violence or Aggression or Assault or Abuse;
- Patient or Patient-Related or Client;
- Nurs*.

Please see Appendix A for full details of the search strategy.

2.6 Method of the review

Quantitative papers selected for retrieval will be assessed by two independent reviewers for methodological validity prior to inclusion in the review using standardised critical appraisal instruments from the Joanna Briggs Institute MetaAnalysis of Statistics Assessment and Review Instrument (JBI-MAStARI) (Appendix B). Any disagreements that arise between the reviewers will be resolved through discussion, or with a third reviewer.

Qualitative papers selected for retrieval will be assessed by two independent reviewers for methodological validity prior to inclusion in the review using standardised critical appraisal instruments from the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI) (Appendix B). Any disagreements that arise between the reviewers will be resolved through discussion, or with a third reviewer.

2.6.1 Data collection

Quantitative data will be extracted from papers included in the review using the standardised data extraction tool from JBI-MAStARI. The data extracted will include specific details about the interventions, populations, study methods and outcomes of significance to the review question and specific objectives.
Qualitative data will be extracted from papers included in the review using the standardised data extraction tool from JBI-QARI. The data extracted will include specific details about the interventions, populations, study methods and outcomes of significance to the review question and specific objectives.

2.6.2 Data synthesis

Qualitative research findings will, where possible be pooled using JBI-QARI. This will involve the aggregation or synthesis of findings to generate a set of statements that represent that aggregation, through assembling the findings rated according to their quality, and categorising these findings on the basis of similarity in meaning. These categories are then subjected to a meta-synthesis in order to produce a single comprehensive set of synthesised findings that can be used as a basis for evidence-based practice. Where textual pooling is not possible the findings will be presented in narrative form.

2.7 Results

The initial search strategy identified 10,297 papers, of which 55 were deemed potentially relevant to this review, based on the assessment of title and abstracts. After removal of duplicates and detailed examination, full text papers were retrieved for the remaining 33 studies. One paper was identified through hand searching of reference lists of these papers. After analysis of methodological quality 20 papers were included for data extraction and analysis of results. Details of the studies excluded from the review following methodological assessment with reasons for exclusion are provided in Appendix C. The details of the selection process are presented in Figure 1. There were 18 papers remaining that were included in this review.
Figure 1: Study selection flow diagram

Potentially relevant papers identified by literature search
(n= 10,297)

Abstracts retrieved for examination
(n= 55)

Papers retrieved for detailed examination
(n = 33)

Paper assessed for methodological quality
(n= 20)

Papers included in systematic review
(n= 18)

Papers excluded after review of full paper
(n=14)

Papers excluded following methodological assessment
(n = 2)

Papers retrieved from hand searching of reference lists
(n = 1)

Papers excluded after evaluation of abstract
(n= 22)
2.7.1 Description of included studies

Appendices D, E and F provide tables of the included studies that reported the impact of patient-related violence on nurses working in EDs. A total of 18 papers were included in the review, consisting of 11 quantitative, 4 qualitative and 3 mixed method studies as detailed below.

The quantitative papers included in the study were: -

(Atawneh et al., 2003; Ayranci, 2005; Crilly et al., 2004; Esmaeilpour, Salsali, & Ahmadi, 2011; Gacki-Smith et al., 2009; Gates et al., 2011b; Gates et al., 2006; Kansagra et al., 2008; Lee, 2001; Pinar & Ucmak, 2011; Senzuun Ergun & Karadakovan, 2005).

The four qualitative papers included were: -

(Catlette, 2005; Early & Hubbert, 2006; Gates et al., 2011a; Pich et al., 2011)

The three studies that utilised a mixed –methods approach were: -

(Gillespie et al., 2010; Luck et al., 2007, 2008).

The studies were drawn from six countries as detailed in Table 2 below.

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>Number of included studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>8</td>
</tr>
<tr>
<td>Australia</td>
<td>4</td>
</tr>
<tr>
<td>Turkey</td>
<td>3</td>
</tr>
<tr>
<td>Iran</td>
<td>1</td>
</tr>
<tr>
<td>Kuwait</td>
<td>1</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1</td>
</tr>
</tbody>
</table>
2.7.1.2 Methodological quality of included studies

Of the 11 quantitative studies that utilised a questionnaire, five provided details of the validity and reliability of their instruments, such as Cronbach’s alpha or test–re-test scores (Atawneh et al., 2003; Crilly et al., 2004; Esmaeilpour et al., 2011; Kansagra et al., 2008; Pinar & Ucmak, 2011). The remaining papers provided such details on some aspects of their survey tool (Gacki-Smith et al., 2009; Gates et al., 2011b) or did not provide any details (Ayranci, 2005; Gates et al., 2006; Lee, 2001; Senzun Ergun & Karadakovan, 2005).

2.7.1.3 Factors and Outcomes reported

The main measures reported in the quantitative studies included:

- Frequency of episodes of violence;
- The types of violence – physical and verbal;
- Antecedents and risk factors – including perpetrators of violence;
- Impact and sequelae of violence: including personal and professional effects of violence on ED nurses such as flashbacks, sleeplessness, nightmares, depression, fearfulness, time taken off work and severity of violence.

The qualitative papers reported measures such as:

- Impact and sequelae of violence: including injuries and lost workdays due to physical assaults;
- Antecedents and risk factors;
- Prevention and control measures to manage episodes of violence, including coping mechanisms;
- Organisational reporting of episodes of violence.

The mixed-methods studies reported their data using the following measures:
• Antecedents and risk factors – including perpetrators of violence and predictive behaviours;

• The types of violence – physical and verbal;

• Impact and sequelae of violence, including personal and professional effects.

2.8 Results of the reviews

Due to the range of methods employed by the studies and the wide variation in the evaluation of the factors and outcomes of interest the results in this review are organised by study design.

2.8.1 Quantitative studies on violence in the Emergency Department

2.8.1.1 Violence against nurses in hospitals: prevalence and effects (Atawneh et al., 2003).

The authors conducted a cross-sectional study to determine the degree and effects of violence among ED nurses (n = 81) at a Kuwaiti hospital. Factors and outcomes related to violence were evaluated using three questionnaires developed by the researchers. The author’s used a 12-item frequency-weighted questionnaire that they had developed and validated in an earlier study to measure rates, frequency, and severity of violence. The researchers used data from the Income Data Services Study (Income Data Services, 1990) to develop a five-item, duration-weighted questionnaire that was used to measure the effects of violence at work. The items in the instrument measured: reliving the experience (flashbacks), sleeplessness, depression, fearfulness and time taken off work. The last instrument assessed the views of nurses on violence including training, hospital policies regarding reporting and management of offenders following aggressive incidents. The reliability of the questionnaire was tested using Cronbach’s alpha, which yielded reliability coefficients, based on six items, of alpha = 0.8730 and standardised item alpha = 0.8728.
A total of 81 of the targeted 86 ED nurses completed the questionnaire, a response rate of 94%; however the authors do not provide any demographic details of their sample. Of these, 70 (86%) reported having experienced some form of violent episode with 719 incidents noted, with a mean of 3.3 (standard deviation 1.2); of these 679 were classified as mild and 40 as moderate. The authors used a list of 12 responses which were subsequently categorised as mild, moderate or severe violence. It should be noted that this was not a conclusive list and opened up the possibility of types of episodes being missed, for example “threatened to hit” and “threatened with a knife/gun” are included but no mention is made of other types of threats such as threats to career, to harm family, to destroy property, or to rape nurses. All nurses surveyed reported experiencing verbal abuse and 13 (19%) reported moderate acts of violence, defined by the authors as single acts of physical violence unlikely to result in serious injury. None of the nurses reported severe levels of violence, defined by the authors as being attacked with a weapon that was likely to have resulted in a serious or fatal injury.

The majority of the participants (n = 71, 96%) reported that they had suffered from after-effects lasting for up to 4 weeks after experiencing violence, with three nurses experiencing fearfulness for more than 28 days. A statistically significant number of male nurses experienced more incidents of violence than females and reported that they suffered from fearfulness, (p < 0.01 and p <0.05 respectively), however it should be noted that only a small number of males, (n = 16) were included in the sample of 81.

Although only 19% of the nurses had received training to deal with potentially violent patients, 44% believed that training to deal with potentially violent incidents in the ED would have been useful. Of the 40 episodes of moderate violence involving physical attacks only five of the offenders were charged by the police.
2.8.1.2 Violence towards health care workers in emergency departments in west Turkey (Ayranci, 2005)

The author employed a cross sectional design and used a survey to collect data about episodes of workplace violence with ED staff. The authors claim that a random sample was selected however they do not provide any details of how this process took place. A total of 195 staff out of a potential population of 242, from 18 private, university or public health institutions in Turkey responded to the survey, a response rate of 81%. The ED staff included nurses (n = 73) and other health care professionals such as physicians, ward aides and admitting clerks. No details of the survey were provided and no exact numbers of specific professional groups or demographic information were reported.

For the purpose of analysis the researchers defined and divided types of violence into three categories: verbal/emotional abuse, specific threats and physical action which included overt acts such as slapping and kicking. Participants were asked to recall experiences of such violence directed at them during the course of work over the previous year.

Statistical differences were analysed using the Pearson’s chi-squared statistical test where appropriate, with the level of significance set at 5%. Results were reported as means and standard deviations for continuous data.

Of the 195 respondents who completed the survey, 72% (n = 141) had experienced some form of violence in the preceding 12 months. Of these, 70% (n = 98) had experienced verbal/emotional abuse; 53% (n = 75) specific threats and 9% (n = 12) physical action. Participants reported that the perpetrators of violence included patient’s family members or relatives (n = 125, 89%) and patients themselves (n = 73, 52%). Analysis by age groups revealed that participants in the 30–39-year age group experienced the highest proportion of any type of violence (82.1%, p < 0.05). Nurses experienced the highest proportion of the different forms of violence (81%) followed
by physicians (78%), and almost 56% of nurses reported experiencing specific threats. Analysis by profession indicated that a higher proportion of nurses (42.4%) and those suturing/dressing wounds (46%) reported violence from patients \( (p < 0.05) \). Although none of the participants reported major injuries such as lacerations or fractures, half of those who experienced physical violence received support such as attending the emergency service and taking days off. Although a higher proportion of women than men reported experiencing some form of violence, with the exception of specific threats, differences in the gender and status of emergency health staff were not statistically significant \( (p > 0.05) \). This result has cultural significance with the authors postulating that this may be because violence towards women is more prevalent due to male dominance in this society.

2.8.1.3 Violence towards emergency department nurses by patients (Crilly et al., 2004)

The authors used a descriptive, longitudinal cohort study design to determine the incidence of patient-related violence towards nurses in two EDs in Australia. A sample of 71 nurses was recruited from a population of 108: a response rate of 66%. Four instruments were developed to collect data and included a demographic details form, a brief violence record, data extraction form and a violence questionnaire. All instruments were tested in a pilot study to ascertain their reliability and face validity. The demographic details form and Violence Questionnaire were adapted from an earlier study by Murray and Snyder (Murray & Snyder, 1991). Face validity of the Violence Questionnaire was assessed by a pilot study with 10 ED nurses and test-retest reliability was established by determining stability over time and the percentage of agreement between the testers with a result of 91% indicating good consistency. Inter-rater reliability was established for the Data Extraction Form by using Pearson’s correlation \( (r = 0.96) \) which was statistically significant \( p < 0.001 \). For the patient’s triage category inter-rater reliability of nursing triage was established using Kendall’s tau-b \( (0.86) \) which was statistically significant \( (p = 0.01) \).
A brief violence record was completed by participants after each episode of violence and these forms were collected weekly by the researchers. Those nurses who had been subjected to violence were then issued with a detailed violence questionnaire. Hospital records were used to determine the total number of presentations to the ED in the five months of the study.

Fifty nurses (70%) reported 110 episodes of violence in a five-month period, approximately five per week, or two per 1000 presentations. Patients were identified as the perpetrators in all of these episodes. Patient specific factors identified included alcohol intoxication (n = 30, 27%) and substance abuse (n = 27, 25%) and behaviours associated with mental illness (n = 42, 38%). In addition the nurses reported that patients often displayed demanding behaviours and requested attention prior to exhibiting violent behaviour (n = 48, 44%).

Verbal violence was the most common type of violence experienced with a total of 58 (53%) episodes of verbal violence and 29 (26%) of both verbal and physical violence reported. The most common types of verbal violence experienced were swearing (n = 57, 61%) and yelling (n = 40, 36%), while pushing (n = 11, 10%), hitting (n = 3, 3%), and kicking (n = 6, 3%) were the most commonly experienced physical behaviours. Triage was the highest risk area for all types of violence and this violence occurred most often on evening shifts (n = 41, 37%).

2.8.1.4 Workplace violence against Iranian nurses working in emergency departments (Esmaeilpour et al., 2011).

The authors used a cross sectional study to sample 196 nurses from 11 Emergency Departments in teaching hospitals in Tehran, Iran, to determine the frequency and nature of physical and verbal workplace violence against these nurses using a recall period of one year. The authors reported a response rate of 95% (n = 186). They adapted a self-administered questionnaire, previously developed by the International Council of Nurses, World Health Organization and the Public Services
International. This survey was previously validated by the Joint Programme on Workplace Violence in the Health Sector (Joint Programme on Workplace Violence in the Health Sector, 2003). While no definition of violence was mentioned in the article, a review of the original tool does contain a definition from the World Health Organisation; however it is unclear whether the authors adopted this. This survey tool was translated into Persian and content and construct validity assessed by five nursing faculty members before being piloted for clarity, ease of administration and applicability with 20 nurses. The authors decided to omit questions regarding sexual and racial harassment due to the scarcity of their occurrence in Iranian EDs; however no evidence is given to support this decision.

Data were analysed using only descriptive and inferential statistics. The chi-squared test was used to determine the association between nurses’ gender and violent incidents. While the authors report a statistically significant p-value of <0.05, it should be noted that only a small number of male nurses participated in the study with the majority of the sample (89%) identified as female.

Specific demographic details were not provided however the sample was described as being largely young female nurses with less than five years nursing experience. Thus the characteristics of the sample may limit the generalisability of the results. The authors reported the majority of nurses (92%) had experienced verbal abuse in the preceding year while 20% had experienced physical abuse. Patients’ relatives were the most common source of such violence. The under-reporting of episodes of violence was identified, with 85% (n = 152) of participants reporting that no reporting procedures were available.

2.8.1.5 Violence against nurses working in US emergency departments (Gacki-Smith et al., 2009).

The authors conducted a cross-sectional study to investigate ED nurses’ experiences and perceptions of violence from patients and visitors in EDs in the United States. A
convenience sample of 3,465 was recruited from a population of approximately 31,905 members of the US Emergency Nurses’ Association (ENA), which corresponded to a response rate of approximately 11%. The researchers developed a 69-item online survey that collected data about nurses’ personal experiences with physical violence and verbal abuse in the ED in the preceding three years, and the policies and procedures of the respondent’s hospital and Emergency Department for addressing workplace violence. The survey also included items about the respondent’s beliefs about the precipitating factors of violence and barriers to reporting violence in the ED. The online survey was developed using Survey Select Expert (version 5.6) by an ENA work team and the authors’ state that the survey was evaluated by experts for content validity however they do not provide details of this. It was then pilot tested on a sample of 15 Emergency Department nurses.

The chi-squared test of association and Fisher exact test were used to compare independent groups with respect to percentages and the Kruskal-Wallis and Mann-Whitney U tests were used to compare independent groups with respect to non-categorical variables. For all statistical analyses a significance level of 0.05 was used and data presented as a mean with standard deviation.

Results indicated more than 50% of respondents had experienced physical violence which included being spat on, hit, pushed/shoved, scratched and kicked. Verbal abuse such as being yelled/cursed at, intimidated and harassed with sexual language/innuendo was reported by 70% of the respondents. One third of participants reported having considered leaving their Emergency Department or emergency nursing because of violence.

Twenty-three per cent (23%, n = 811) of respondents had experienced a high frequency of physical violence (> 20 times) from patients/visitors in the Emergency Department during the past three years. About 20% (n = 604) of respondents reported experiencing a high frequency of verbal abuse (> 200 times) from patients/visitors during the same period. Nurses who worked night shift and weekends were more
likely to experience frequent physical and verbal violence. Participants identified a number of barriers to reporting violent episodes which included; the perception that reporting episodes might have a negative effect on customer service; ambiguous reporting policies; fear of retaliation from management, hospital administration, nursing staff, or physicians; the perception that reporting episodes of violence was a sign of incompetence or weakness; lack of physical injury to staff; the attitude that violence comes with the job; and a lack of support from administration/management. These barriers were associated with an increased risk of experiencing violence in the ED. Nurses who felt that there were no barriers to reporting ED violent incidents were much less likely to have experienced frequent ED physical violence than were other nurses: 15.4% versus 28.5% (p<0.001).

The main factors reported as precipitants of ED violence included: alcohol intoxication; substance misuse; care of psychiatric patients in the ED; crowding/high patient volume and prolonged wait times.

2.8.1.6 Violence against nurses and its impact on stress and productivity (Gates et al., 2011b).

The authors undertook a cross-sectional study to collect data on workplace violence experienced by ED nurses in the United States. A survey was sent to a randomly selected sample of 3,000 members of the Emergency Nurses’ Association and 230 participants returned the survey: a response rate of only 9%. The survey was composed of four separate sections. The first section asked the participants to describe in narrative a single recent episode of workplace violence that caused them the most stress. The second section consisted of 22 Likert-type items based on the Impact of Events Scale-Revised (Weiss & Marmar, 1997). This set of items evaluated the presence and magnitude of post-traumatic stress symptoms during the seven days after a traumatic event, however it should be noted that in this study no limit was set on when this event initially occurred which creates the potential for recall
bias and inconsistencies between results due to variations in time elapsed since the event occurred. The authors reported that the Impact of Events Scale-Revised has high internal consistency ratings (0.79-0.91) and strong sensitivity (74.5) and specificity (63.1).

The third section consisted of a 29-item Healthcare Productivity Survey. The instrument was developed and validated by the researchers in a previous study (Gillespie et al., 2010) to measure the perceived change in work productivity after exposure to a stressful event. Internal consistency reliability and test-retest reliability of the scale was reported as (0.871 - 0.945) and ($r = 0.801$, $p < 0.001$) respectively with a sample of emergency nurses (Gillespie et al., 2010). The last section included demographic questions regarding their age, gender, race, education, care population, the geographic location of their ED, and whether their employer provides violence prevention training or critical incident stress debriefing.

The results confirmed that workplace violence was a significant problem for those ED nurses who participated in the study and was associated with experiences of distress, decreased work productivity, and reduced quality of nursing practice. Thirty seven per cent (n=82) of the respondents had a negative total productivity score on the Healthcare Productivity Survey demonstrating decreased performance after a violent event. The mean score on the Impact of Event Scale-Revised group was 18.67, (range 0-83) indicating presence of at least one stress symptom after a violent event. There was a correlation reported between the total Healthcare Productivity Survey and Impact of Event Scale- Revised scores, however this was not statistically significant ($p = 0.07$).

The prevalence of study participants with post-traumatic stress symptoms during the seven days was considered clinically significant, with 17% of participants having scores high enough for a probable diagnosis of Post-Traumatic Stress Disorder and 15% with scores associated with suppressed immune system functioning.
2.8.1.7 Violence against emergency department workers (Gates et al., 2006).

The authors used a cross sectional design to measure the violence experienced by ED workers from patients and visitors in five hospitals in the United States. A recall period of six months was used in an attempt to reduce the potential for recall bias. A sample of 242 ED workers was recruited from a target population of approximately 600 workers, which resulted in a response rate of 40%. Nurses comprised the largest professional group with 95 participants (39%) followed by physicians (n = 49, 20%), patient care assistants (n = 27, 11%), and another six from professional and ancillary groups of staff. A survey consisting of a combination of multiple choice, open-ended, and Likert-type items was developed by the authors to collect data from participants; however the survey tool was not validated.

The term “violence” was defined by the authors and for the purposes of the survey, classified as: verbal harassment, sexual harassment, verbal threats or physical assaults. Data about demographics, previous violence prevention education; and frequency of physical and non-physical violent acts in the preceding six months were collected. Other survey items measured injuries and lost workdays due to physical assaults, frequency of reporting assaults, and variables related to the assaults. Likert-type items were used to measure participants’ feelings of safety and levels of satisfaction with their job, the ED, the hospital, and security.

Data were analysed using descriptive statistics. Verbal harassment by patients was reported by 98% of the nurses surveyed (n = 93) which was the highest result for hospital staff. Incidents of verbal threats from patients were highest for physicians (n = 41, 83%) followed by nurses (n = 74, 78%), though nurses experienced the greatest percentage of verbal threats from visitors (67%). Forty Four percent of nurses reported experiencing at least one incident of sexual harassment from patients (n = 42).
During the study period there were 319 episodes of physical violence initiated by patients and at least 10 by visitors. Nurses were the professional group most frequently targeted, experiencing 67% of the 319 episodes of physical violence. Those who worked in the psychiatric ED reported the highest frequency of being assaulted: seven or more times by a patient (11%). Nurses (8%) were also recipients of the most episodes of physical violence by visitors. Thirty-two injuries were reported during the study period including bruises, bites, abrasions, and scratches. Of the 115 participants who reported experiencing at least one assault by a patient, 65% had never reported the incident in their organisation.

Antecedents reported included patient and visitor factors, such as alcohol and drug use, psychiatric diseases, dementia and an inability to deal with a crisis situation. Staff factors included lack of adequate staff, lack of knowledge about a patient’s previous history of violence and lack of violence prevention training. Hospital and environmental factors perceived to be significant included long waiting times for patients, lack of security or police presence and environmental design of the department.

The authors suggested that it was imperative to increase efforts aimed at decreasing the incidence of violence and to ensure that any form of violence is neither accepted nor tolerated in any healthcare setting. The study was based on self-reported data; however the authors surveyed the previous six month period to reduce the risk of recall bias associated with this type of data collection. In addition the anonymous nature of the survey meant that there was no way to compare the characteristics of respondents with those of non-respondents.

2.8.1.8 A survey of workplace violence across 65 U.S. emergency departments (Kansagra et al., 2008).

The authors analysed data from a nationwide survey across 65 sites in the USA. Data were obtained from the National Emergency Department Safety Study (NEDSS)
which examined clinical processes and systemic factors contributing to patient safety in hospital EDs across a five year time period. A sample of 3,518 health professionals was recruited from a population of 5,695: resulting in a response rate of 62%. Of these 1,837 were nurses (52% of respondents), 1,395 medical officers, 88 physician’s assistants and 169 participants were classified as “other” staff. To develop the survey the researchers revised a previously developed instrument. To further refine the survey data were obtained from in-depth personal interviews with key informants and focus groups conducted across three EDs, including cognitive testing. Psychometric testing was then conducted at 10 EDs and data from these sites were used to determine the final set of questions prior to its distribution to participants (Sullivan et al., 2007).

Outcome measures identified included the number of physical attacks against staff; the frequency of guns and knives in the ED and staff perceptions of safety. Multivariate analyses were conducted to determine which respondent and ED characteristics were associated with the perception of safety and which ED characteristics were associated with increased frequency of attacks and weapons. Linear and logistic regression modelling was also employed to assess relationships between outcome measures and independent variables from the survey.

A total of 3,461 physical attacks were reported over the five year period with a mean of 11 attacks per ED. Nurses were five times less likely to feel safe “most of the time” or “always” compared to the other professional groups (odds ratio OR = 0.21; 95%, CI = (0.16) to (0.28), p<0.0001). Nurses who had worked for more than five years felt less safe than those who had worked shorter periods of time. The authors report that the frequency of weapons, number of attacks, presence of metal detectors and violence training were not statistically significant predictors of staff feeling safe most of the time or always.

Less than 15% of the EDs had metal detectors and EDs with metal detectors reported a higher number of physical attacks and were more likely to have weapons brought
to the ED on a daily basis (odds ratio = 26.3, 95%, CI = (2.0) to (339), p=0.001).
However this could be attributed to the fact that more weapons were detectable due
to the presence of the metal detectors rather than the fact that more weapons were
present. Less than half of the EDs had some type of training program for staff and
staff who worked in EDs where such training was available, reported a higher
perception of safety than those without it, however this finding was of borderline
statistical significance (p<0.06).

The authors report that the majority of EDs that participated in the study were in
large, academic hospitals that may have different violence rates than other EDs. In
addition the authors’ state that their sample may not be representative of the United
States, with one-third of EDs withdrawing from the study and EDs in the Northwest
of the country over-represented. The presence of confounding factors was
acknowledged, for example the definition of what constituted an attack against staff
was not standardised and therefore different interpretations may have occurred.
Similarly reporting mechanisms were not standardised and the presence of metal
detectors was not uniform and may have caused the number of weapons found or
recovered to vary. The perceptions of feeling safe at work may have been a reflection
of factors not controlled for in the study, for example staffing levels and
organisational response after episodes of violence.

2.8.1.9 Violence in A&E: the role of training and self-efficacy (Lee, 2001).

Lee (2001) employed a cross sectional design using a questionnaire to survey a
sample of 76 ED nurses from a population of 130 at two study sites: a response rate of
58% about their experiences in the preceding three months. No details were included
about validation of the survey instrument. In addition the study employed The
Difficult Behaviour Self-Efficacy Scale (DBSES) and respondents were asked to rate
their self-efficacy in dealing with aggression (Hastings & Brown, 2002). This scale
was previously validated by the authors and confirmed in testing by the researchers;
Cronbach’s alpha yielded an internal consistency measure of 0.88, indicating good internal consistency of scale items.

Factors and outcomes measured were types of violence; the frequency of violent episodes and the type and amount of aggression management training. No definition of the term “violence” was provided to participants, however verbal and physical violence were differentiated in the results. Self-efficacy was defined as an individual’s belief that they can succeed at a given task or behaviour.

Ninety six percent of the nurses (n = 73) had experienced verbal abuse and 79% (n = 60) physical violence in the preceding three months. The mean level of self-efficacy perceived by the participants was average; however there is no definition of this score provided to explain this. The relationships between categorical and interval demographic variables and self-efficacy in managing violent behaviour were analysed using independent t-tests. Higher levels of self-efficacy were associated with having experienced higher levels of verbal aggression in the study period (t = 2.77, df = 74, p<0.01) and being a manager (t = 3.08, df = 69, p<0.01).

The authors described aggression management training regimes as sporadic and fragmented with a lack of consistency between trainers, and an absence of any type of refresher programs: this was in spite of the mandatory nature of the training. Only two nurses specifically described being taught verbal de-escalation techniques.

2.8.1.10 Verbal and physical violence in emergency departments: a survey of nurses in Istanbul, Turkey (Pinar & Ucmak, 2011).

This cross-sectional Turkish study used a questionnaire to survey ED nurses about their experiences with violence in the previous 12 months. Two hundred and fifty five nurses were recruited out of a population of 262: a response rate of 97%. The survey tool was developed by the researchers and tested on an expert panel of nurses and their suggestions incorporated into the final version to facilitate face validity. In addition to this survey the authors used the Attitudes Towards Patient Physical
Assaults Questionnaire devised by Poster and Ryan (1989), and previously validated by them (Poster & Ryan, 1989).

Outcome measures for the study included the frequency of episodes; the source of violence and days of sick leave taken as a consequence of violence. Descriptive results were reported including percentages and raw values. Ninety one percent of nurses surveyed (n = 233) had experienced verbal abuse and 75 % (n = 191) physical violence with a range of one to five episodes in the preceding year. The perpetrators were most commonly patients’ relatives and friends, responsible for 32% (n = 74) of verbal violence and 62% (n = 119) of physical violence. Patients’ relatives and friends and patients acting together were responsible for 63% (n = 146) of verbal violence and 23% (n = 44) of physical violence. Patients acting alone were identified as the perpetrators in 6% (n = 13) of episodes of verbal violence and 15% (n = 28) of physical violence. Family and friends involved in episodes of violence were typically males, responsible for 77% (n = 57) of verbal abuse and 79% (n = 94) of physical abuse and this was postulated by the authors to be related to the dominant role played by males in Turkish society.

Under-reporting was common with 80% of respondents overall choosing not to report episodes of verbal and physical violence. Reasons cited included dissatisfaction with responses given by administration to episodes of violence, such as no noticeable follow-up conducted; apathy; fear of losing their job; fear of being blamed and fear of legal procedures that would follow such a report. Those nurses who did report were dissatisfied with the handling of the episode and in 36% of cases of verbal abuse and 42% of physical violence no response was given to the nurse.

The authors report that while over half of nurses who had been exposed to violence felt anxiety about being the subject of another violence incident, the rate of those taking sick leave was only 3%. The authors postulate that this could be because of traditional attitudes and cultural values. The authors reported that In Turkey
unequal gender-power relations associated with discrimination mean that women are especially vulnerable to violence. In Turkey nursing is a profession traditionally practiced by women and this was reflected by the participants in this study who were all female. Violence against women, whether nurses or not, is generally treated as a private matter. Thus, violence of all types against women remains largely unreported. The legal system is another obstacle for the victims of violence.

According to Turkish law for legal proceedings to commence a report must be made to hospital police and then to the local police centre. The nurses must then submit to a full body examination and blood sampling to determine if there are any alcohol or drug abuse issues. The brief is then delivered to a public prosecutor who attempts to mediate the dispute prior to going to court. The case is often closed if a perpetrator denies the charges and even where cases are successful punishment is weak or non-existent. Only one case of physical violence resulted in legal proceedings being initiated against the perpetrator.

Support was received from physicians (33%) and colleagues (40%) in the ED rather than through more formal mechanisms such as administration. Only three percent of nurses took sick leave as a result of an episode of violence, this was consistent for verbal (n = 7) and physical abuse (n = 6). Once a nurse takes sick leave legal proceedings are initiated and so the authors report that many nurses do not take sick leave for this reason. The majority of nurses (n = 211, 83%) had not undertaken any training to assist them in prevention and management of episodes of violence. Only 19 nurses (7.5%) felt safe most of the time while working in the ED. Sixty five percent of respondents (n = 166) stated that they never felt safe in the ED while 28% (n = 70) felt safe only some of the time. Ninety percent of nurses expected patients and their relatives to exhibit violence towards staff.
2.8.1.11 Violence towards nursing staff in emergency departments in one Turkish city (Senzun Ergun & Karadakovan, 2005).

The authors used a descriptive cross sectional study to determine the incidence and attitudes towards violence faced by nurses in EDs in four major hospitals in Turkey. Data were collected using a 34-item questionnaire developed by the authors that collected socio-demographic data and information about their experiences of violence from patients. No details on the validity of the survey were provided by the authors. The recall period used was not defined and results were discussed in terms of “violence experienced throughout the career in the ED”, which creates issues in terms of recall bias and the ability to compare individual results. A definition for the term “violence” was not provided, however results were discussed in terms of verbal and physical violence.

A sample of 66 was recruited from a population of 92 ED nurses: a response rate of 72%. Analyses were conducted using ANOVA, Post Hoc Tukey and Student’s t-tests where appropriate. Findings were accepted as statistically significant where the p-value was <0.05. Statistical analysis of the results indicated that nearly all of the respondents had experienced verbal violence (n = 65, 99%). Over half of the participants reported experiencing episodes of verbal violence more than 15 times in their professional careers (n = 35, 54%). Most of these episodes were reported to have occurred in the last three months (n = 52, 80%), and the authors go on to say this “probably meant that this kind of violence occurred frequently in the ED setting” (p156), however they provide no justification for this statement. Physical violence was experienced by 20% of the respondents (n = 13).

Most episodes of violence occurred during the night shift, and patients’ relatives or friends were the most common perpetrators of both verbal (n = 42, 65%) and physical violence (n = 11, 85%) rather than the patients themselves. There was a significant relationship between the age and years of experience of nurses and the frequency of violence. A Post Hoc Tukey test revealed that as age and years of experience
increased the relative number of episodes of verbal and physical violence also increased.

Continuing education concerning the prevention and management of violent behaviour in the ED setting was considered to be necessary by 91% of the nurses. Taking legal action after experiencing episodes of violence was considered to be ethical by 91% of the participants.

2.8.2 Mixed-methods studies about violence in the Emergency Department

2.8.2.1 Violence against healthcare workers in a pediatric Emergency Department (Gillespie et al., 2010)

The authors utilised a multiple case study approach to describe workplace violence perpetrated by patients and visitors against nurses, physicians and allied health workers in a large urban paediatric teaching hospital in the United States. A purposeful sample of 31 ED workers was recruited from a population of nearly 200 healthcare workers, a response rate of approximately 16%. Of these 12 (39%) were nurses, eight (26%) physicians and 11 (35%) other allied health personnel. Data were collected using a combination of semi-structured interviews, non-participant observation, digital photographs and archival records. The latter included policy documents and guidelines as well as educational material provided by the hospital. The interviews focused on participants’ worst experiences with violence in the preceding six months. Forty hours of non-participant observations were conducted on workers, patients and visitors in the ED, in four, 10 hour blocks. Digital photographs were taken of physical artefacts during these observation periods and included the physical environment where episodes of violence occurred; as well as objects identified as important during the observation by researchers and during the interviews by participants. The outcome measures of interest were the perpetrators
of violence; types of violence, precipitants and the personal and professional effects on ED staff.

Transcripts were analysed using a modified version of the constant comparison method as described by Lincoln and Guba, (Lincoln & Guba, 1985). This involved a three stage approach that was conducted independently by two of the authors. Data were categorised and any disagreements between the researchers resolved by discussion. Finally method triangulation of the data was conducted with comparison to the field notes and archival data. In addition debriefing and an audit trail were performed to enhance rigour in the study.

The authors reported that in cases of verbal abuse, family members were the most likely source (82%) whilst episodes of physical violence were more likely to be perpetrated by paediatric patients (76%). A mental health diagnosis was reported in 14 of the 16 episodes of patient-initiated violence reported. Verbal abuse included yelling, cursing and threatening workers with physical harm as well as invading a worker’s personal space and the use of symbolic violence, for example pointing a finger at a worker or blocking their exit.

Precipitants or antecedents included factors specific to workers, patients and the ED itself. Less experienced workers were thought to be at an increased risk of experiencing episodes of violence while patients with a mental health diagnosis were identified as significant, especially scheduled patients not permitted to leave the department. High risk family members were identified as those with a lack of respect for women or persons in positions of authority; those under the influence of alcohol or illicit substances and those who perceived that the needs of the patient were not being sufficiently addressed. Issues of significance specific to the ED included access to the department, the presence of multiple visitors per patient and issues related to volume in the department, for example long waiting times, overcrowding in the waiting room, noise levels and perpetrators being stared at in public. Overall the
belief was expressed that violence in the community was increasing leading to a
greater acceptance of violence as a normal way to express anger.

The effects of this violence on workers included emotions such as fear, anger, and
frustration. Workers reported avoidance of perpetrators and a decrease in
productivity and the ability to focus on work. They were also concerned with a
perceived poor image of the hospital by patients and visitors.

2.8.2.2 Innocent or culpable? Meanings that emergency department nurses ascribe
to individual acts of violence (Luck et al., 2008).

Luck, Jackson, and Usher (2008) explored the meanings that ED nurses ascribe to acts
of violence from patients, their family and friends and what impact these meanings
have on how they respond to such acts. The study was conducted in a regional
Australian ED on a convenience sample of 20 ED nurses which represented a
response rate of 37%. This was a two-phase sequential mixed method study. Phase 1
involved 50 hours of unstructured participant observation, unstructured open-ended
interviews with three nurses and researcher journaling. These data were thematically
analysed and the results used to inform development of Phase II of the study. Phase
II involved 290 hours of participant observation, 16 semi-structured open-ended
interviews, 13 unstructured interviews, organisational documents and a researcher
journal. Quantitative data of violent events were generated using a structured
observational guide. The authors report that textual data were analysed thematically
and numeric data were analysed using frequency counts. Rigour was established by
the use of an audit trail by the researchers and member checking of emergent themes
and ideas was undertaken in the field interviews.

Sixteen episodes of violence were observed in the 290 hours of participant
observation and included in the analysis; however none of these episodes were
reported by the nurses involved. The authors assert that the nurses made judgements
about specific episodes and these informed and guided their verbal and behavioural response; their decision to report and their short and long-term emotional response.

The study findings were that episodes perceived to be “within normal limits” on a continuum of violence were not reported by nurses. ED presentations were perceived by the participants to be appropriate or inappropriate and so-called legitimate presentations were afforded greater empathy and tolerance in terms of their behaviour. These judgements were based on the degree of personalisation of the violence, the presence of mitigating factors and the reason for the ED presentation. Mitigating factors were identified as co-morbid or presenting health problems, including mental health issues, alcohol intoxication, withdrawal, delirium, dementia and head injuries; and psycho-social issues that decreased a perpetrator’s ability to react in a rational and informed manner. These could lead to anxiety, confusion and disorientation and/or a lack of appreciation or understanding regarding resources and the processes of an ED any of which could precipitate acts of violence.

2.8.2.3 STAMP: components of observable behaviour that indicate potential for patient violence in emergency departments (Luck et al., 2007).

In another study Luck et al (2007) utilised the data from their earlier study involving 16 observed violent events to identify components of observable behaviour that could indicate a person’s potential for violence. Five behaviours were grouped together under the acronym STAMP: staring, tone, agitation, mumbling and pacing, and a cumulative relationship was noted between them. The authors noted that where nurses were able to recognise these signs they were able to utilise de-escalation techniques.

Staring was identified as an important early indicator and includes both glaring, staring and looking intently as a means of intimidation or the lack of or absence of eye contact. The avoidance of eye contact was associated with a passive form of resistance that could escalate in to actual physical violence. This was noted in nine of
the 16 encounters. The tone and volume of voice was identified in 13 of the 16 episodes and emerged as an important cue both independently and in conjunction with other cues. It included yelling or raising of the voice, urgency in speech, sarcastic or caustic comments, sharp retorts and dismissing or demeaning the nurse through vocal inflections.

Anxiety was observed in patients and recognised by physical symptoms such as looking flushed, hyperventilating and speaking rapidly. It was attributed by the authors to one or more of three broad factors and as anxiety escalated nurses were seen to intervene. Psycho-social, situational and contextual stressors included a loss of a sense of control of patients and elements specific to the Ed such as noise and over-crowding. Patients’ diagnoses and co-morbidities were identified as exacerbating feelings of anxiety compounding the stressors described previously and included those that led to symptoms of confusion and disorientation, for example head injuries, mental health issues, delirium, dementia, intoxication and withdrawal from alcohol and hyper or hypoglycaemia. Thirteen of the 16 episodes involved disorientated patients who were not able to be nursed in seclusion. Anxiety was also associated with a lack of understanding of the ED process and distribution of ED resources, for example the triage scale.

Mumbling was noted in 11 of the 16 episodes and included comments made just loudly enough to be heard. It also included slurring and incoherent speech however this was difficult to distinguish from alcohol intoxication in some cases. It was perceived by the authors to be a sign of mounting frustration and involved the asking of repetitive questions and negative and aggressive statements about the service being received, especially with regards to waiting times. Agitation was most frequently manifested in pacing, and also included staggering, flailing or swinging of the arms, resisting interventions by pulling away from the nurse or rejecting therapeutic interventions.
2.8.3 Qualitative papers on violence in the Emergency Department

2.8.3.1 A descriptive study of the perceptions of workplace violence and safety strategies of nurses working in level I trauma centers (Catlette, 2005).

Catlette (2005) conducted a descriptive study looking at the phenomenon of workplace violence. A convenience sample of eight nurses who had experienced violence while on duty was recruited from two level one trauma centres in the United States and semi-structured interviews used to collect data. For the purposes of the study violence was defined as “the victimization of an RN practicing in a hospital setting by another person or persons characterized by fear, physiological or psychological hardship, or loss” (Catlette, 2005) (p.520). A demographic profile form and an interview guide designed by the author were used to collect data during the interviews, and had been developed during a pilot project with five nurses; however these tools had not been validated. The approach to analysis was based on four main components namely: bracketing or ethical enquiry, analysing (empirical examination), intuiting (personal insight) and describing (aesthetics). Verbatim transcripts of the interviews were used to identify themes emanating from the collected data. The researcher also kept a journal to minimise bias during the data collection phase. No other methods to enhance rigour were discussed by the author and analysis was not verified by an independent researcher. Member checking was not used and the small sample size means that the results may not be transferable. As with all self-reported data there is a risk of bias and a possibility that some nurses may have been reluctant to share all aspects of their experiences and outside factors may have affected the interview process.

Two major themes emerged from the data: insufficient safety measures and vulnerability. Issues related to safety measures that were raised by the participants included easy access to the ED with weapons, despite the presence of metal detectors, and the lack of training on managing violent situations in the ED. Nurses
reported feeling unsafe and vulnerable to violent episodes at work and the strongest expressions of vulnerability were in relation to psychiatric patients. The participants reported that episodes of verbal aggression were mostly experienced from family members whilst patients with psychiatric disorders or under the influence of alcohol were most likely to display physical violence.

2.8.3.2 Violence in the Emergency Department: A culture care perspective (Early & Hubbert, 2006).

The authors utilised a phenomenological approach to explore nurses’ perceptions regarding workplace violence in the ED. Purposeful sampling was used to recruit a sample of 12 ED nurses, four male and eight female who had experienced some form of workplace violence from a metropolitan trauma centre in Midwest US. Semi-structured interviews were used to gather data and data saturation is reported to have occurred after 12 interviews.

Transcripts were analysed using Leininger’s (1990) four phases of analysis for qualitative data. However there is incongruence between the use of phenomenology and the incorporation of findings into an analysis framework, (culture care) and the methodology appears to be more qualitative and descriptive in nature. There is minimal description of the process of data analysis and a definition of violence was not provided to participants. After the analysis member checking was conducted with key participants for their input and clarification, however no changes were required as a result of this process. The authors do not specify how many participants were involved in this process.

The authors identified four subcultures involved with the phenomenon of workplace violence, namely: ED nurses; administration; clients with violent behaviours, and clients without violent behaviours.

Three themes were identified: hospital policies were not conducive to supporting a safe ED environment; ED staff were not valued as being as important to the hospital
administration as the hospital’s public image; and anxiety, fear, and negative emotions due to violence in their work environment have an impact on the quality of the participants’ nursing practice. A lack of trust of the administration culture was evident, with participants perceiving that there was a lack of follow-up following reported episodes of violence. Under-reporting was acknowledged with most of the episodes of violence described during the interviews not being documented, especially in the case of verbal abuse. Barriers cited included negative attitudes and little or no follow up action from the administration.

The nurses perceived violence to be a daily occurrence. A distinction was made between verbal abuse, for example being sworn at, called names, and threatened; and physical assault, although the terms were not defined. Violent behaviour was perceived to be related to cognitive and physical conditions, for example from patients who were under the influence of drugs and/or alcohol or those with psychiatric conditions. Socio-economic factors such as geographic origin were also perceived to be significant.

Most of the participants perceived that hospital policies were not conducive to supporting a safe ED environment. Factors specific to the ED perceived to contribute to episodes of violence included long waiting times, easy access to the department, slow response times from security and a lack of metal detectors. As a protective response nurses reported becoming increasingly vigilant around patients and visitors, and discussed concerns regarding the quality of nursing practice offered as a result of anxiety, fear, and negative emotions associated with violence. This behaviour may provide evidence of defensive clinical practice.

2.8.3.3 Using action research to plan a violence prevention program for emergency departments (Gates et al., 2011a).

Gates et al (2011a) employed action research to investigate employees and managers perceptions and experiences regarding violence prevention strategies. This was the
first stage in a program designed to plan, implement, and evaluate a violence prevention and management intervention. Twelve focus groups (four per study site), were conducted with a total of 96 participants which corresponded to a response rate of 31%. Two focus groups were made up of ED employees and one each for managers and patients. The ED employees were allocated to the groups by stratified random sampling from nurses, physicians, patient care technicians, paramedics, security personnel, and radiology technicians. Patients were approached at 15-minute intervals in the ED and asked to participate in a focus group the following weekend. In total, 24 management participants, 47 employees and 25 patients took part in the focus groups which were conducted over a three-month period and ranged in duration from 60 to 75 minutes.

The researchers used the Haddon matrix (1980) to develop focus group questions aimed at gathering data about the pre-assault, assault, and post-assault time frames and to compare these findings to planned strategies. This matrix is widely used in public health to understand and identify measures to prevent injury (Haddon, 1980).

The audio recordings from the focus groups were transcribed and then verified by a research team member. Thematic analysis following Wolcott’s method (1994) was undertaken by two researchers independently to identify ideas, patterns, and then used to contextualise these patterns into an existing framework, in this case the Haddon matrix. The results were then compared for congruency and inconsistencies resolved by returning to the original transcript. Finally a third researcher conducted a final review of the transcripts and analysis. The results were presented as before, during and after an assault.

Employees and managers from the different occupational groups agreed that multiple interventions such as examining hospital policies, improving staff education and training, and increasing communication with patients and among ED staff were required to prevent and manage violence against ED workers. All groups supported the need for improved communication as a strategy to prevent violence. Employees
and managers were also of the view that security and/or police presence in the emergency department should be increased and that zero tolerance policies needed to be enforced. All participants supported limiting access to the ED as a way to prevent violence.

Employees indicated that existing policies and education about conflict resolution and aggression management techniques were inadequate. They identified the need for frequent educational opportunities aimed at specific strategies to de-escalate situations with patients and resolve conflicts. Additional workplace violence education and training was perceived to be important and participants stated that this should be conducted in an interdisciplinary manner involving all Emergency Department employees, security personnel, and management. Patients highlighted the need for improved staff communication and comfort measures.

Management and employee participants supported the use of debriefing following episodes of violence however they reported that this was rarely done. Barriers cited included time constraints, a lack of administrative support and a workplace culture that tolerates violence as part of the job. While reporting mechanisms were acknowledged, barriers to reporting were reported including confusion about which episodes to report, time constraints and a lack of feedback from management and administration about the reported event. Employees stated that reporting should be easy to access and quick to complete and requested that a staff liaison role be created to address any ongoing concerns of the victims of violence.

2.8.3.4 Patient-related violence at triage: A qualitative descriptive study (Pich et al., 2011)

The authors used a qualitative descriptive methodology to uncover the experiences of a group of Australian triage nurses with patient-related violence. A recall period of one month was chosen to limit the possibility of recall bias. A convenience sample of six triage nurses was recruited and the small size and the fact that only one study
site was chosen mean that the findings of this study have limited generalisability. Data were collected through semi-structured interviews.

Data were analysed using qualitative content analysis (Sandelowski, 2000b). This involved data re-presentation where a descriptive summary of the main points were organised in a way that best fit the data. Member-checking was used to enhance rigour in the study. The study’s outcome measures included antecedents and risk factors; types of abuse; the impact of patient-related violence on nurses; risk management strategies, reporting and coping mechanisms utilised by nurses in dealing with the consequences of such episodes. A definition of violence was provided to participants that included both verbal and physical behaviours.

The authors identified antecedents including patient-specific risk factors such as those with a mental health diagnosis; those under the influence of alcohol and/or illicit substances; younger adults, aged between 16 and 25 years; the parents of paediatric patients and patients from a lower socio-economic bracket. ED specific factors included those secondary to patient volume in the department, for example long waiting times and time of day: the afternoon shift, especially on the weekend and during winter was identified as a high risk time. Factors specific to nurses included less experienced staff being at high risk and staff attitudes, for example those who employed a condescending attitude were thought to be at greater risk of experiencing an episode of violence. The authors reported that some participants were able to recognise cues and warning signs in potentially violent patients, and use this knowledge to prevent escalation to violence.

Episodes of verbal and physical violence were reported. Swearing was the most common form of verbal abuse reported by five of the six participants; with threats, shouting, making unreasonable demands and intimidation also noted. Physical abuse included nurses being slapped, kicked and hit as well as the use of conventional weapons (knife) and the opportunistic use of hospital equipment as weapons, for example the contents of a sharps bin.
The impact of patient-related violence on nurses was often mitigated by nurses making a judgement regarding the intent of the episode. For example unintentional violence from patients judged not to have control over their actions, such as dementia patients were viewed more favourably than intentional violence.

The impact on nurses included feelings of frustration, powerlessness and degradation. Participants reported a diminished empathy for patients and were fearful for their safety. Overall, a sense of the inevitability of patient-related violence was noted and nurses perceived patient-related violence to be increasing in both frequency and severity. Risk management strategies employed by the hospital were perceived to be reactive in nature rather than preventative and included the use of security and duress alarms and the design of the workplace, for example the use of safety glass at triage. Training in aggression minimisation techniques was incomplete in nature or totally absent. The under-reporting of episodes of violence was common due to time constraints, the non-user friendly nature of the reporting system and high frequency of episodes. The authors reported that informal debriefing with colleagues was the main coping mechanism in dealing with the aftermath of violence and whilst formal debriefing was desired it was not available in this workplace.

2.9 Synthesis of results

This systematic review was undertaken to investigate the best available evidence on the impact of patient-related violence on nurses working in the Emergency department and provides a summary of the included studies. A systematic search of the literature resulted in 18 published studies that met the inclusion criteria of this review. Of these 11 were cross-sectional studies that involved the use of a survey tool, four were qualitative studies that employed semi-structured interviews or used focus groups to collect their data and three were mixed-method studies that used multiple data collection methods.
The lack of homogeneity between the quantitative studies precluded the use of meta-analysis, aspects of which are discussed below.

**Context and perpetrators:** as detailed in the inclusion criteria all studies reported on ED nurses’ experiences with patient-related violence in their workplace. However some studies also included details of violence from relatives or friends of patients and limited reference to horizontal violence was included in one study (Esmaeilpour et al., 2011).

**Study sample and participants:** The sample sizes for the 11 quantitative studies ranged from 66 to 3518, with response rates from 11% to 97%, please refer to Table 3 for clarification. All quantitative studies recruited ED nurses, however three also included other ED employees (Ayranci, 2005; Gates et al., 2006; Kansagra et al., 2008). Two studies undertook a nationwide survey of ED nurses (Gacki-Smith et al., 2009; Gates et al., 2011b). The other studies recruited participants through their place of employment and the number of sites in each study ranged from one (Atawneh et al., 2003) to 65 (Kansagra et al., 2008).

**Study design:** There was homogeneity in study designs. All quantitative studies employed a cross-sectional approach and used a survey tool to collect data.

**Methods/instruments:** The quantitative studies all used a survey tool to collect data; however the detail provided about survey items differed between the studies resulting in a lack of homogeneity. For example some studies did not report the length of their instrument (Ayranci, 2005; Gates et al., 2011b; Lee, 2001); others reported the number of questions in their survey, for example Atawneh et al used a two-part questionnaire which contained 18 questions (Atawneh et al., 2003), and Gacki-Smith et al used a 69-item questionnaire (Gacki-Smith et al., 2009). Other studies listed the number of sections on their survey which ranged from two (Pinar & Ucmak, 2011) to four (Gates et al., 2011b). Some studies reported the types of questions used, for example Likert-type, multiple choice and open-ended (Gates et
al., 2006) however the majority did not provide such information. There was also a
difference between the design of questions, for example some studies favoured the
use of open-ended questions while others provided participants with a list of
responses to choose from.

Five studies reported that their survey instrument had been validated and a further
two studies reported that some sections of their questionnaire had been validated.
Four studies did not provide any details of validation; please see Table 5 for more
detail.

Recall periods: Recall periods in the quantitative studies ranged from three (Lee,
2001) and five months (Crilly et al., 2004) up to five years (Kansagra et al., 2008).
Three studies did not specifically define the recall period used or provided very
broad periods of time, for example “…experienced throughout the career in the
Emergency Department…” (Senuzun Ergun & Karadakovan, 2005). Please see
Appendices IV, V and VI for full details.

Definition: The lack of a standardised definition for the term “violence” has been
acknowledged in the literature as a limitation in comparing studies and only four of
the 11 quantitative studies provided a definition of the term “violence” to their study
participants; however six studies distinguished between verbal abuse and physical
violence in their results. Please see Table 3 for more detail.

Validation: Table 4 provides a summary of the level of rigour and validation
undertaken in the studies which varied widely. Some studies provided minimal
details of steps taken to ensure rigour (Gates et al., 2006) while others reported
significant measures taken to ensure the validity of the survey instrument used
(Kansagra et al., 2008).

Variation in study factors and outcomes measured: There was some variation
between studies in the study factors and outcomes measured. Please see Table 5 for
details.
The lack of homogeneity between the qualitative studies is discussed below.

**Context and sample:** The sample sizes for the qualitative studies included in this review ranged from six to 97 participants, working in the ED environment. Please see Table 4 for clarification.

**Study sites and participants:** All qualitative studies recruited ED nurses, however one study also included other ED employees (Gates et al., 2011a). The number of study sites varied between the qualitative studies, from one (Early & Hubbert, 2006; Pich et al., 2011) to three (Gates et al., 2011a).

**Study design:** There was some variation between the qualitative studies. Three study designs were employed including Descriptive (Catlette, 2005; Pich et al., 2011), Phenomenological (Early & Hubbert, 2006) and Action Research (Gates et al., 2011a).

**Methods and instruments:** Data collection varied across the qualitative studies: three qualitative studies used semi-structured interviews to collect data, and one conducted focus groups (Gates et al., 2011a).

**Recall periods:** A recall period was defined for one qualitative study as one month (Pich et al., 2011). The other three studies did not provide a definition of the recall period used.

**Definition:** Two studies provided a definition of the term violence as shown in Table 3.

**Validation:** There was a lack of detail provided regarding the trustworthiness of the data analysis, in terms of dependability, confirmability, credibility and transferability. One study did not provide any detail aside from a comment about “journaling” by the author (Catlette, 2005). The other three qualitative studies provided some detail of the process used to ensure trustworthiness including member checking of thematic analysis and use of an audit trail (Pich et al., 2011); and
the use of three independent researchers to analyse data (Gates et al., 2011a). Please see Table 5 for more detail.

**Variation in study factors and outcomes measured:** There was some variation between studies in the study factors and outcomes measured. Please refer to Table 5 for details.

The lack of homogeneity between the mixed method studies is discussed below.

**Context and sample:** The mixed-method studies had sample sizes ranging from 20 to 31 participants. Please see Table 4 for clarification.

**Study sites and participants:** All mixed method studies recruited ED nurses from one study site, with one study also including other ED employees (Gillespie et al., 2010).

**Study design and method:** All mixed method studies utilised interviews to collect data, in addition to observation, and used digital photographs and archival records as sources of data.

**Instruments:** The mixed method studies all used interview schedules and all reported that these had been piloted to establish rigour (Gillespie et al., 2010; Luck et al., 2007, 2008).

**Recall periods:** a recall period of six months was provided by one mixed-method study, (Gillespie et al., 2010), the other two studies did not specify a recall period.

**Definition:** none of the mixed methods studies included in this review provided a definition of the term “violence”, however one made the distinction between physical and verbal aggression in their results section (Gillespie et al., 2010).

**Validation:** all the mixed method studies provided details of processes used to ensure rigour as show in Table 5.
Variation in study factors and outcomes measured: there was some variation between studies in the study factors and outcomes measured. Please refer to Table 5 for details.

In view of this lack of homogeneity between these studies this synthesis of the literature is presented in narrative form.
Table 3: Definition of violence provided in included studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Provided</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantitative studies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Ayranci, 2005)</td>
<td>Yes</td>
<td>3 forms of violence defined: verbal/emotional abuse; attempts at physical violence and threats; actual physical violence</td>
</tr>
<tr>
<td>(Atawneh et al., 2003)</td>
<td>Yes</td>
<td>A list of 12 examples provided for participants to choose from under three categories: mild, moderate and severe Mild involved insults or gestures implying imminent acts of violence; moderate involved single acts of physical violence unlikely to result in serious injury; severe entailed multiple acts of violence or the use of a knife or gun and likely to result in a serious or fatal injury.</td>
</tr>
<tr>
<td>(Crilly et al., 2004)</td>
<td>No</td>
<td>Distinction made between verbal and physical in results</td>
</tr>
<tr>
<td>(Esmaeilpour et al., 2011)</td>
<td>No</td>
<td>Distinction made between verbal abuse and physical violence in results</td>
</tr>
<tr>
<td>(Gacki-Smith et al., 2009)</td>
<td>No</td>
<td>Distinction made between verbal abuse and physical violence</td>
</tr>
<tr>
<td>(Gates et al., 2006)</td>
<td>Yes</td>
<td>Verbal harassment, sexual harassment verbal threats and physical threats each defined (p332)</td>
</tr>
<tr>
<td>(Gates et al., 2011b)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>(Kansagra et al., 2008)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>(Lee, 2001)</td>
<td>No</td>
<td>Distinction made between verbal &amp; physical aggression.</td>
</tr>
<tr>
<td>(Pinar &amp; Ucmak, 2011)</td>
<td>Yes</td>
<td>Physical violence: “being hit. Slapped, kicked, pushed, choked, grabbed, bitten, sexually assaulted or otherwise subjected to physical contact intending to injure or harm” (Gerberich et al., 2004) Verbal violence defined as “any use of language that aims at intimidating, frightening, or harming or persons yelling or swearing, engaging in name calling or using other words intended to control or hurt” (Uzun, 2003).</td>
</tr>
<tr>
<td>(Senuzun Ergun &amp; Karadakovan, 2005)</td>
<td>No</td>
<td>Distinction made between verbal &amp; physical in results</td>
</tr>
<tr>
<td><strong>Qualitative studies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Catlette, 2005)</td>
<td>Yes</td>
<td>“…the victimization of an RN practicing in a hospital setting by another person or persons characterized by fear, physiological or psychological hardship, or loss” (p326)</td>
</tr>
<tr>
<td>(Early &amp; Hubbert, 2006)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>(Gates et al., 2011a)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>(Pich et al., 2011)</td>
<td>Yes</td>
<td>“...any incidents where staff are abused, threatened or assaulted in circumstances relating to their work...involving an explicit or implicit challenge to their safety, well-being or health…” adapted from (Mayhew &amp; Chappell, 2005) (p346).</td>
</tr>
<tr>
<td><strong>Mixed method studies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Gillespie et al., 2010)</td>
<td>No</td>
<td>Distinction made between verbal, physical and non-verbal violence</td>
</tr>
<tr>
<td>(Luck et al., 2007)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>(Luck et al., 2008)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
Table 4: Sample sizes and response rates for included studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample size</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Atawneh et al., 2003)</td>
<td>81</td>
<td>94%</td>
</tr>
<tr>
<td>(Ayranci, 2005)</td>
<td>195</td>
<td>81%</td>
</tr>
<tr>
<td>(Crilly et al., 2004)</td>
<td>71</td>
<td>66%</td>
</tr>
<tr>
<td>(Esmaeilpour et al., 2011)</td>
<td>186</td>
<td>95%</td>
</tr>
<tr>
<td>(Gacki-Smith et al., 2009)</td>
<td>3465</td>
<td>11%</td>
</tr>
<tr>
<td>(Gates et al., 2006)</td>
<td>242</td>
<td>NB: not specifically stated: &quot;approximately 600 ED workers&quot; RR estimated at 40%</td>
</tr>
<tr>
<td>(Gates et al., 2011b)</td>
<td>264</td>
<td>9%</td>
</tr>
<tr>
<td>(Kansagra et al., 2008)</td>
<td>3518</td>
<td>66%</td>
</tr>
<tr>
<td>(Lee, 2001)</td>
<td>76</td>
<td>58%</td>
</tr>
<tr>
<td>(Pinar &amp; Ucmak, 2011)</td>
<td>255</td>
<td>97%</td>
</tr>
<tr>
<td>(Senuzun Ergun &amp; Karadakovan, 2005)</td>
<td>66</td>
<td>72%</td>
</tr>
<tr>
<td>Qualitative studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Catlette, 2005)</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>(Early &amp; Hubbert, 2006)</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>(Gates et al., 2011a)</td>
<td>97</td>
<td>31%</td>
</tr>
<tr>
<td>(Pich et al., 2011)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Mixed Methods studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Gillespie et al., 2010)</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>(Luck et al., 2007)</td>
<td>20</td>
<td>37%</td>
</tr>
<tr>
<td>(Luck et al., 2008)</td>
<td>20</td>
<td>37%</td>
</tr>
</tbody>
</table>

Table 5 provides a summary of the measures employed to ensure validity and trustworthiness of the data.
<table>
<thead>
<tr>
<th>Study</th>
<th>Data collection method</th>
<th>Validation/rigour reported</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantitative studies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Atawneh et al., 2003)</td>
<td>Questionnaire</td>
<td>Yes</td>
<td>Reliability tested using Cronbach’s alpha which yielded reliability co-efficient based on 6 items of alpha = 0.8730 and standardised alpha = 0.8728 (12-item questionnaire) And alpha = 0.7547 and standardised alpha = 0.7731 (six-item)</td>
</tr>
<tr>
<td>(Ayranci, 2005)</td>
<td>Questionnaire</td>
<td>No</td>
<td>No details of survey validation provided.</td>
</tr>
<tr>
<td>(Crilly et al., 2004)</td>
<td>Questionnaire</td>
<td>Yes</td>
<td>Pilot study</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Test-re-test reliability = 91% (sample of 10 nurses)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inter-rater reliability for Data Extraction Form using Pearson’s correlation (r = 0.96);</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inter-rater reliability of nursing triage using Kendall’s tau-b (0.86) p = 0.01.</td>
</tr>
<tr>
<td>(Esmaeilpour et al., 2011)</td>
<td>Questionnaire</td>
<td>Yes</td>
<td>Expert panel;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Initial pilot of survey;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Test-re-test method.</td>
</tr>
<tr>
<td>(Gacki-Smith et al., 2009)</td>
<td>Questionnaire</td>
<td>Partial</td>
<td>Evaluated by experts for content validity – details not provided.</td>
</tr>
<tr>
<td>(Gates et al., 2006)</td>
<td>Questionnaire</td>
<td>No</td>
<td>Details not provided.</td>
</tr>
<tr>
<td>(Gates et al., 2011b)</td>
<td>Questionnaire</td>
<td>Partial</td>
<td>Four-part survey with details of rigour provided for two parts.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Internal consistency of Impact of Events Scale-Revised reported (0.79 – 0.91) and strong sensitivity (74.5) &amp; specificity (63.1).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Internal consistency reliability and test-retest reliability of Healthcare Productivity Survey (0.871 – 0.945); r = 0.801, p&lt;0.001.</td>
</tr>
<tr>
<td>(Kansagra et al., 2008)</td>
<td>Questionnaire</td>
<td>Yes</td>
<td>Interviews and focus groups conducted across three EDs including cognitive testing used to design and refine the survey tool. Psychometric testing was then conducted at 10 EDs.</td>
</tr>
<tr>
<td>(Lee, 2001)</td>
<td>Questionnaire</td>
<td>No</td>
<td>Survey not validated.</td>
</tr>
<tr>
<td>(Pinar &amp; Ucmak, 2011)</td>
<td>Questionnaire</td>
<td>Yes</td>
<td>Expert panel;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Methodology</td>
<td>Data Collection</td>
<td>Data Validation</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------------</td>
<td>-----------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>(Senzun Ergun &amp; Karadakovan, 2005)</td>
<td>Questionnaire</td>
<td>No</td>
<td>No details of survey validation provided.</td>
</tr>
<tr>
<td>Qualitative studies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Catlette, 2005)</td>
<td>Interviews</td>
<td>No</td>
<td>Journaling.</td>
</tr>
<tr>
<td>(Early &amp; Hubbert, 2006)</td>
<td>Interviews</td>
<td>Partial</td>
<td>Member checking identified patterns were shared with key informants after analysis of interview transcripts in written report (no details of how many informants).</td>
</tr>
<tr>
<td>(Gates et al., 2011a)</td>
<td>Focus groups</td>
<td>Partial</td>
<td>Two researchers – independent analysis and third did final review.</td>
</tr>
<tr>
<td>(Pich et al., 2011)</td>
<td>Interviews</td>
<td>Partial</td>
<td>Member checking of thematic analyses. Audit trail.</td>
</tr>
<tr>
<td>Mixed Method studies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Gillespie et al., 2010)</td>
<td>Interviews, Non-participant observation, Digital photographs, Archival records</td>
<td>Yes</td>
<td>Data triangulation: interview data, field notes and archival data. Thematic analysis by two independent reviewers. Audit trail.</td>
</tr>
<tr>
<td>(Luck et al., 2007)</td>
<td>Unstructured participant observation, Interviews, Documents</td>
<td>Yes</td>
<td>Interview tool piloted. Member checking of emergent themes and ideas was undertaken as part of field interviews. Researcher journal.</td>
</tr>
<tr>
<td>(Luck et al., 2008)</td>
<td>Unstructured participant observation, Interviews, Documents</td>
<td>Yes</td>
<td>Interview tool piloted. Member checking of emergent themes and ideas was undertaken as part of field interviews. Researcher journal.</td>
</tr>
</tbody>
</table>
Frequency of episodes of violence

Ten studies reported on the frequency of episodes of violence. Two of these were qualitative studies and the detail provided was minimal, for example that violence against nurses in the ED was a common experience, described as a daily occurrence (Early & Hubbert, 2006). Gacki-Smith et al reported that approximately 25% of their 3,465 participants had experienced physical violence more than 20 times in the past three years, and almost 20% (n = 604) reported experiencing verbal abuse more than 200 times in the three year study period (Gacki-Smith et al., 2009). Fifty nurses (70%) reported 110 episodes of violence in a five-month period, approximately five per week, or two per 1000 presentations (Crilly et al., 2004). These episodes are perceived to be increasing in both frequency and intensity (Gates et al., 2011a; Pich et al., 2011).

Eight studies did not report on the frequency of episodes of violence.

In studies where nurses were only one of the professional groups studied, they emerged as the professional group at most risk of violence (Ayranci, 2005; Gates et al., 2006). For example, researchers in one study reported that nurses were the professional group most frequently targeted, experiencing 67% of the 319 episodes of physical violence in their study (Gates et al., 2006).

The types of violence: physical and verbal

Three studies did not report on the different types of violence experienced by ED nurses (Ayranci, 2005; Gates et al., 2011a; Gates et al., 2011b).

Fifteen studies reported on types of violence with verbal abuse the most common type of violence experienced, reported by between 53% (Crilly et al., 2004) and 99% (Senuzun Ergun & Karadakovan, 2005) of those studied. Swearing was identified as the most common form of verbal abuse (Crilly et al., 2004; Pich et al., 2011). Other types reported included yelling or using a raised voice, threatening the personal
safety of staff and invading personal space (Gillespie et al., 2010); being intimidated and harassed with sexual language/innuendo (Gacki-Smith et al., 2009).

Physical violence was reported by between 9% (Ayranci, 2005) and 79% (Lee, 2001) of those sampled. This included overt acts such as biting, hitting, pushing, kicking and slapping (Crilly et al., 2004); being spat on, hit, pushed/shoved, scratched and kicked. (Gacki-Smith et al., 2009). Episodes of sexual harassment were also reported by some nurses, for example 44% (n = 42) of nurses in one study reported experiencing at least one incident of sexual harassment from patients (Gates et al., 2006).

The presence of weapons was reported and this included, both conventional weapons, for example knives and guns (Kansagra et al., 2008) and opportunistic weapons, for example a cane (Early & Hubbert, 2006) or syringes (Pich et al., 2011). Two studies reported specifically that there were no episodes of physical violence with a weapon (Atawneh et al., 2003; Esmaeilpour et al., 2011).

**Organisational reporting of episodes of violence**

Eleven studies discussed the issue of reporting of episodes of violence with all identifying under-reporting as a common occurrence, with up to 80% of incidents of verbal and physical violence not reported (Pinar & Ucmak, 2011). While reporting mechanisms were acknowledged, barriers to reporting were identified including confusion about which episodes to report, time constraints and a lack of administrative support, feedback and follow-up (Early & Hubbert, 2006; Gates et al., 2011b; Pich et al., 2011). Reporting systems that were not user-friendly were also cited as a reason for under-reporting (Pich et al., 2011) and in one study 85% of those surveyed were unaware of the process involved in reporting an episode of violence (Esmaeilpour et al., 2011).

Luck et al reported that nurses often made judgments about specific episodes of violence which guided their decisions about whether or not to report (Luck et al., 2008). The authors describe a continuum where those episodes perceived to be
“within normal limits” were not reported. Mitigating patient-related factors such as anxiety, confusion, and disorientation and/or a lack of appreciation or understanding of the resources and processes of the ED were described. Presentations perceived to be “appropriate” were afforded greater empathy than those deemed to be inappropriate.

Nurses who did not perceive barriers to reporting episodes of violence were much less likely to have experienced frequent ED verbal abuse than other nurses (9.78% versus 21.5% p<0.001) (Gacki-Smith et al., 2009). Establishing a positive culture with regards to reporting of episodes of violence is an important step in creating a safe work environment (Gacki-Smith et al., 2009). Only 25% of participants were encouraged to report episodes of violence in a study by (Esmaeilpour et al., 2011) and the majority of these were encouraged by colleagues, not management. Employees stated that reporting should be easy to access and quick to complete (Gates et al., 2011a).

Seven studies did not report on organisational reporting of episodes of violence, as shown in Table 5.

**Antecedents and risk factors**

Eleven studies reported antecedents and precipitating factors of episodes of patient-related violence and for the purpose of this discussion these have been grouped into three main areas: patient presentation, environmental and patient behaviours.

Patient-related antecedents and precipitants reported in the studies included lifestyle factors such as alcohol intoxication (Catlette, 2005; Crilly et al., 2004; Pich et al., 2011) and substance abuse (Crilly et al., 2004; Gillespie et al., 2010; Pich et al., 2011). Patient diagnoses and co-morbidities such as cognitive impairment, for example dementia (Gacki-Smith et al., 2009; Pich et al., 2011) and mental health issues were also reported to be significant in a number of studies (Catlette, 2005; Crilly et al., 2004; Gacki-Smith et al., 2009; Pich et al., 2011).
Factors specific to the ED were also reported with the ED environment described as unsupportive (Early & Hubbert, 2006) and potentially contributing to the emergence of violent behaviour through over-crowding, long waiting times and staff shortages (Gacki-Smith et al., 2009; Pich et al., 2011). The design of the ED was reported to be contributory factor (Early & Hubbert, 2006; Pinar & Ucmak, 2011), with triage identified as one the highest risk areas for potential violence (Crilly et al., 2004).

Some studies reported that patients often exhibited demanding behaviours and cues and requested attention prior to exhibiting violence (Crilly et al., 2004) and these could be recognised by some staff and used to defuse potentially violent situations. Thus less experienced staff were identified as being at greater risk of potential violence from patients (Gillespie et al., 2010). These behaviours were described in detail by Luck et al (2007) using the mnemonic STAMP: staring, tone, anxiety, mumbling and pacing (Luck et al., 2007).

Seven studies did not report on antecedents and risk factors as detailed in Table 5.

**Perpetrators of violence**

Fifteen studies identified the perpetrators of violence against ED nurses and patients were identified as the most common source of violence in ten of these studies. For example in one study 319 episodes of physical violence initiated by patients were reported compared to 10 by visitors (Gates et al., 2006) while patients were identified as the perpetrators in 78% of episodes (n =86) in another study (Crilly et al., 2004).

Family members were reported to be the most likely source of verbal abuse in paediatric EDs (82%) while episodes of physical violence were more likely to perpetrated by patients, especially those with mental health diagnoses (Gillespie et al., 2010). High risk family members were identified as those with a lack of respect for women or persons in positions of authority, those under the influence of alcohol or illicit drugs and those who perceived the needs of their children were not being addressed (Gillespie et al., 2010).
Patients’ families and/or friends were more likely to be involved in episodes of violence in non-Western studies (Ayranci, 2005; Esmaeilpour et al., 2011; Pinar & Ucmak, 2011; Senuzun Ergun & Karadakovan, 2005). Typically this involved males and the actions were against female nursing staff. This was thought to be related to the roles played by males in these cultures and the fact that violence towards women is more prevalent in countries such as Turkey and Iran due to male dominance in these cultures (Ayranci, 2005).

A distinction was made in some studies between the intent of perpetrators or the meanings behind their acts of violence (Luck et al., 2008) (Pich et al., 2011). Some behaviours were classified as problem behaviours by nurses rather than acts of violence, for example episodes involving patients with dementia were not reported or viewed as seriously as other episodes of violence (Gates et al., 2006).

Three studies did not report on the source of ED violence as detailed in Table 5.

**Impact and sequelae of violence: psychological and physical effects**

Twelve studies reported on the consequences of patient-related violence including physical injuries and psychological side-effects which impacted on clinical practice. These were reported to be long-lasting, for example the majority of participants in one study (n = 71, 96%) reported that they suffered from after-effects lasting for up to four weeks after experiencing violence and 93% (n = 65) suffered from multiple effects (Atawneh et al., 2003). Emotions reported included fear, anger and frustration (Gillespie et al., 2010). Catlette (2005) and Pinar and Ucmak (2011) reported that nurses felt unsafe and vulnerable at work (Catlette, 2005; Pinar & Ucmak, 2011) reported that nurses felt unsafe and vulnerable at work. Kansagra et al (2008) reported that nurses were five times less likely to feel safe “most of the time” or “always” compared with other professional groups (Kansagra et al., 2008).

Researchers in one study reported that four participants had received medical care
and one psychiatric care as a result of an episode of violence and that there were three lost workdays due to injuries. (Gates et al., 2006).

An impact on practice was noted with nurses reporting that they avoided the perpetrators of violence and were unable to focus at work (Gillespie et al., 2010). In another study, 37% (n=82) of the respondents had a negative total productivity score on the Healthcare Productivity Survey demonstrating decreased performance after a violent event. (Gates et al., 2011b) One third of ED nurses surveyed by (Gacki-Smith et al., 2009) reported having considered leaving their ED or emergency nursing because of violence.

Six studies did not report on the psychological and physical effects and sequelae of violence as shown in Table 5.

**Prevention and control measures to manage episodes of violence**

Twelve studies reported on prevention and control measures to manage episodes of violence and approaches perceived to be effective included education and training, provision of security and reporting. Nurses who reported that violence was an unavoidable part of their job were more likely to have experienced frequent physical violence (Gacki-Smith et al., 2009). Hospital policies were not perceived to support a safe ED environment (Early & Hubbert, 2006) and existing policies about conflict resolution and aggression management techniques were reported to be inadequate (Gates & Gillespie, 2011). A workplace culture that tolerates violence as part of the job was also noted by Gates et al (Gates et al., 2011b) and (Gacki-Smith et al., 2009) reported that there was an acceptance of such violence as “part of the job”.

It is important to note that the effectiveness of strategies such as security, environmental controls and violence prevention training and education are difficult to extrapolate from cross-sectional data because such strategies are often initiated in EDs after violence has become an issue. This can have a confounding effect on the
results and create the appearance that such strategies increase ED violence (Gacki-Smith et al., 2009).

Six studies did not report on prevention and control measures to manage episodes of violence as shown in Table 5.

**Education and training**

One study recommended the integration of knowledge of the STAMP behaviours into training programs to equip ED nurses with the skills to recognise and then defuse potentially violent situations (Luck et al., 2007). This was reiterated by Gates et al. (2011b) who discussed the need for frequent educational opportunities aimed at specific strategies to de-escalate violent situations with patients and to resolve conflicts (Gates et al., 2011b). The consensus was that whilst specific training was desired by nurses and perceived to be important (Gates et al., 2011a) it was often sporadic and fragmented in nature with a lack of consistency between trainers and programs (Lee, 2001). A lack of training was identified as a concern in some studies (Catlette, 2005) and less than half of the EDs surveyed by (Kansagra et al., 2008) had some type of training program for staff. Eighty-four percent of participants in the study by (Pinar & Ucmak, 2011) had not received any training at all. Similarly there was a lack of refresher programs reported (Lee, 2001) with 64% of those surveyed by (Gates et al., 2006) receiving no training in the year prior to completing the survey.

Employees indicated that existing policies and education about conflict resolution and aggression management techniques were inadequate. They identified the need for frequent educational opportunities aimed at specific strategies to de-escalate situations with patients and resolve conflicts. Additional workplace violence education and training was perceived to be important and participants stated that this should be conducted in an interdisciplinary manner (Gates et al., 2011a).

The use of patient management plans to identify and flag previously violent patients was identified as preventative tool to alert staff in one study (Pich et al., 2011).
Researchers in another study reported the value of patient management plans but noted that there were no systems in place to facilitate this (Gates et al., 2011b).

**Security**

There was a perception among participants that a lack of security (Gates et al., 2006) or a slow response time from security (Early & Hubbert, 2006) increased the risk of violence in the department. Employees and managers were also of the view that security and/or police presence in the emergency department should be increased and that guards should be armed and that zero tolerance policies needed to be enforced. (Gates et al., 2011a). Other increased security measures discussed included the use of metal detectors to screen patients and visitors for weapons (Early & Hubbert, 2006; Gates et al., 2006; Kansagra et al., 2008); the use of Tasers by security guards (Gates et al., 2011a); the use of duress alarms (Pich et al., 2011) and one study discussed the introduction of a policy to restrict the number of visitors per patient (Gates et al., 2011b). Environmental measures such as restricted access and the use of quiet areas or safe rooms to house patients at risk of violence were also reported (Gates et al., 2011b).

**Post episode follow up**

Six studies reported on coping strategies and follow up after episodes of violence with all discussing deficits in this regard. Management and employee participants supported the use of debriefing following episodes of violence however they reported that this was rarely done and that support systems provided were inadequate. Barriers cited included time constraints, a lack of administrative support and a workplace culture that tolerates violence as part of the job. (Gates et al., 2011a). Gates et al reported that critical incident debriefing was rarely done (Gates et al., 2011a), and whilst formal debriefing was desired it was not offered in the ED (Esmaeilpour et al., 2011; Pich et al., 2011). Support was received from colleagues (40%) in the ED rather than through more formal mechanisms such as administration.
(Pinar & Ucmak, 2011), and informal debriefing with colleagues was identified as the main coping mechanism in dealing with the aftermath of violence. Participants in one study requested that a staff liaison role be created to address any ongoing concerns of the victims of violence and to ensure that their physical, emotional, and psychological injuries have been addressed prior to them returning to work (Gates et al., 2011a).

Twelve studies did not report on coping strategies and follow up after episodes of violence.
<table>
<thead>
<tr>
<th>Study Details</th>
<th>Frequency</th>
<th>Types</th>
<th>Antecedents</th>
<th>Reporting</th>
<th>Perpetrators</th>
<th>Impact</th>
<th>Prevention</th>
<th>Coping/Follow up</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Atawneh et al., 2003)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(Ayranci, 2005)</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Crilly et al., 2004)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>MINIMAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Esmaeilpour et al., 2011)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(Gacki-Smith et al., 2009)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>MINIMAL</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(Gates et al., 2006)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(Gates et al., 2011b)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(Kansagra et al., 2008)</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Lee, 2001)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(Pinar &amp; Ucmak, 2011)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(Senuzun Ergun &amp; Karadakovan, 2005)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(Catlette, 2005)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Early &amp; Hubbert, 2006)</td>
<td>MINIMAL</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(Gates et al., 2011a)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Pich et al., 2011)</td>
<td>MINIMAL</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(Gillespie et al., 2010)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Luck et al., 2007)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(Luck et al., 2008)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
2.10 Discussion

Summary of synthesis and significant issues

Analysis of the included papers identified violence in the ED against nurses as occurring on a regular basis, in the form of verbal and physical aggression. The majority of episodes were perpetrated by patients in the department; however relatives were also identified as a risk group, particularly with regards to verbal abuse and this was more frequent in non-western ED settings (Atawneh et al., 2003; Ayranci, 2005; Esmaeilpour et al., 2011). The parents of paediatric patients were also identified as a group that poses a high risk (Gillespie et al., 2010; Pich et al., 2011).

Antecedents and risk factors for violence included factors related to patient presentation, for example alcohol intoxication, substance abuse and cognitive impairment; environmental, for example long waiting times and overcrowding; and patient behaviours, for example STAMP behaviours (Luck et al., 2007). Some participants in these studies considered that a patient’s presentation was a mitigating factor for their actions, for example patients with dementia. Behaviours reported to be associated with these presentations are consistent with those described in the literature as “resistance to care” behaviours (Gibson, 1997), and represent defensive responses rather than offensive aggression and violence (Kable et al., 2012b).

Exposure to violence led to physical and psychological consequences for nurses and these were often long-lasting in nature and affected the quality of care provided to patients. Despite the frequency and severity of episodes of violence, reporting of these events was not the norm and their subsequent management was perceived to be largely inadequate (Gacki-Smith et al., 2009; Gates et al., 2006). Risk management centred on training in de-escalation techniques and security measures such as restricted access to the department and the presence of security guards (Gates et al., 2011b; Lee, 2001). Violence against ED nurses was identified as an area of increasing...
concern and one in need of more action in terms of management of the issue and further research into the phenomenon.

2.10.1 Limitations of the review

All of the studies considered for this review contained methodological shortcomings. Eleven of the included studies used a cross-sectional survey to collect data and of these the majority used non-validated instruments. Four of these studies reported sample sizes of less than 100 (Atawneh et al., 2003; Crilly et al., 2004; Lee, 2001; Senuzun Ergun & Karadakovan, 2005) and some studies reported response rates of as low as 9% which may compromise the external validity of the study, or the degree to which the findings can be generalised to other populations or environments (Gates et al, 2011).

All studies collected self-reported data, which is subject to recall bias. Such data is subjective in nature and influenced by the participants’ perceptions of events and the time period involved. There is the potential for inaccuracy in the data collected; however self-reported data is necessary in this area of study due to the under-reporting of episodes of violence (Buckley, 2013). While some studies attempted to minimise this by limiting the period of recall, to between one and 12 months, others included no such limitations. The difference in data collection periods between the studies was a limitation making cross comparison difficult. In addition the anonymous nature of the surveys in the quantitative studies meant that there was no way to identify whether participants were similar to non-participants in relation to their experiences with violence. Gordis reports that generally people who do not participate in a research project differ from those who do in regard to many characteristics (Gordis, 2004). This means that the results of these studies may have been influenced by self-selection bias. The use of convenience sampling and the use of only one study site in some studies may weaken the transferability of findings in qualitative studies and generalisability of results in quantitative studies. There is also
the potential for bias because those interested in the topic or who had experienced patient-related violence, may be more likely to participate in studies on the topic which could result in a biased view of the topic (Gordis, 2004).

The lack of a consistent definition of the term “violence” by each study makes direct comparison between the studies more difficult. Only five of the 18 included studies defined “violence” while a further six studies distinguished between verbal abuse and physical violence in their results; however they did not provide a definition of either term. Many of the quantitative studies employed basic descriptive statistics and results were only reported as raw numbers and percentages and did not report statistically significant results.

Aspects of trustworthiness and rigour were addressed by some studies as shown in Table 4; however other studies did not provide any details or provided minimal information. Member checking was conducted by two of the four qualitative studies, however in the case of Early and Hubbert it was unclear how many participants were involved in this process (Early & Hubbert, 2006). Both mixed-methods studies by Luck et al (Luck et al., 2007, 2008) also employed member checking which demonstrates credibility and dependability. In addition they pilot tested the interview schedule. Audit trails, which help to demonstrate confirmability, through the documentation of the research process followed, and enable future researchers to replicate the study, were used in one qualitative and one mixed method study.

Methods employed in the quantitative studies to ensure rigour ranged from the use of expert panels and testing groups to statistical testing using the test-re-test method to determine reliability and Cronbach’s Alpha for measurement of item constructs. Four studies employed statistical methods on all or some aspects of their survey tools, and three employed experts to either pilot test or review their survey tool. Four studies did not provide any details of the survey development process. The lack of consistency in the methods employed made comparison of the results more difficult.
2.10.2 Conclusion

Violence from patients and/or their friends and family has emerged as a significant threat to the safety of ED nurses in their daily working lives. Nurses are exposed to levels of physical and verbal violence that are so high they have become an expected part of the job for many and are tolerated on a daily basis. However such episodes of patient-related violence can have long-term physical and psychological consequences for nurses and have resulted in the death of a number of nurses on the job. There is also a flow on effect to their professional lives which can impact negatively on the level of care afforded to future patients and potentially compromise patient safety. Nurses feel unsupported by management in terms of the support and follow-up offered to them following episodes of violence. This has led to chronic under-reporting of episodes and a discrepancy between the actual incidence of violence experienced by nurses in the ED and official figures. Healthcare employers are obligated to provide a safe working environment for all who enter their facilities under Work Health and Safety Legislation; however the current reality is that nurses frequently feel unsafe at work and this has the potential to impact negatively on patient safety. Whilst it is not possible to eliminate the threat of violence from high risk environments like the ED, employers must act to provide a safer environment where this threat is minimised and should support their staff in the event of an episode occurring.

2.10.3 Implications for practice

Research should continue into violence against Emergency Department nurses to provide the evidence needed to inform management and government and guide policy development. Multi-site studies with large sample sizes could be conducted to add support to the body of the evidence on the topic. Existing studies all have limitations due to recall bias; however the use of archival records to measure episodes of violence is likely to fail given the chronic under-reporting identified in
this review. There is a need for prospective studies to be conducted to collect data on episodes of patient-related violence as they occur in real-time.

**Conflict of interest**

The authors declare no conflict of interest.

**2.10.4 Implications for research**

Research should continue into violence against Emergency Department nurses to provide the evidence.

There is minimal evidence about the extent and frequency of episodes and resultant injury of patient-related violence in the ED and of the experiences and perceptions of ED nurses in Australia (Crilly et al., 2004; Lau et al., 2012a, 2012b; Luck et al., 2007, 2008; Pich et al., 2011). Urgent preventative measures and responses to patient-related violence are required to address the phenomenon to ensure that ED nurses are working in a safe environment.

**2.10.5 Justification of study**

The purpose of this chapter was to provide background and contextualise the phenomena of patient-related violence against ED nurses. In addition we sought to identify aspects of this phenomenon in the literature that had potential for further study.

The frequency and severity of patient-related violence and associated under-reporting is recognised as an endemic problem. Much of the work to date has been completed by medical researchers, including studies on nurses; or focussed on ED staff in general but few studies have focussed specifically on ED nurses. In addition much of the research on the topic originates outside of Australia, especially from The United States and United Kingdom and a large epidemiological study had not previously been conducted in Australia.
The Australian research consists of a limited number of studies with small sample sizes that are largely qualitative in nature, thus the extent and frequency of violence against nurses has not been extensively studied in Australia. There is a lack of knowledge surrounding frequency, associated injury and effects on nurses or organisational strategies to prevent or follow up episodes of violence involving nurses in the ED. Furthermore, there has not been a national survey of ED nurses about this phenomenon in this high risk clinical area in Australia.

This mixed methods study will provide more comprehensive data about the topic using a detailed survey form with questions developed from the literature on the topic. Many previous surveys have been limited in nature or focussed on a specific aspect of the phenomenon. There is a need for national studies that can report on the issues of violence not routinely reported in acute hospitals and a large sample size and response rate will increase the generalisability of the results.

The aims were developed to address these knowledge deficits and the study instruments used were designed to measure the following outcome measures: frequency; types of violence; ED nurses’ perceptions of risk prevention and management strategies; and antecedents and precipitants. Ultimately the aim is to develop recommendations for employers about patient-related workplace violence and safety in the workplace for ED nurses.
Chapter 3    Research Design

3.1 Introduction

This chapter describes the research design used in the study, including the study aims, study design and data collection and analysis methods. Design components related to the study setting, study sample, participants and recruitment are described. The development of the data collection instruments: the survey and interview schedules are also detailed. The ethical implications of the study are also outlined. The study was conducted in two sequential phases and the chapter has been structured to describe this clearly.

NB: Abbreviations used in this chapter refer to the researchers: Jacqueline Pich (JP), Michael Hazelton (MH), Ashley Kable (AK) and Deborah Sundin (DS).

3.2 Study aims

The study used a mixed methods approach to investigate ED nurses’ experiences with patient-related violence in their workplace and to address the aims of the study listed below: -

The six aims of the study were: -

1. To measure the frequency of individual emergency nurses’ reported exposure to patient-related workplace violence and associated outcomes in the preceding six months;
2. To identify the types of violent behaviours experienced by emergency nurses;
3. To identify emergency nurses’ perceptions of risk prevention measures and risk management strategies adopted by their employers;
4. To identify factors associated with patient-related workplace violence that precipitate, escalate or de-escalate episodes of violence;
5. To investigate the issue of violence with respect to **young adults** (16-25 years of age) and the **parents of paediatric patients**;

6. To develop **recommendations** for employers about patient-related workplace violence and safety in the workplace for emergency nurses.

The study was conducted in two distinct phases. Part I used a cross-sectional study design to survey the members of the College of Emergency Nursing Australasia (CENA). This was a national survey including all states and territories in Australia. This part of the study addressed the first four aims of the study and resultant data were used to address the sixth study aim. Part II of the study involved the use of a qualitative descriptive approach and semi-structured interviews of ED nurses to achieve the fifth aim of the study. Resultant data also were used to address the sixth study aim.

### 3.3 Study design

A mixed methods approach, combining both quantitative and qualitative strategies was employed. The mixed method design is based on the tenet that a researcher should use the approach or mixture of approaches that is best suited to answering their research question (Evans, Coon, & Ume, 2011; Johnson & Onwuegbuzie, 2004). Mixed methods research is defined as research where a combination of quantitative and qualitative methods, approaches, concepts or language are utilised and incorporated into a single study (Johnson & Onwuegbuzie, 2004). It juxtaposes different method types to facilitate a deeper understanding of the phenomenon of interest and to gain greater confidence in the conclusions generated by the study (Johnson, Onwuegbuzie, & Turner, 2007). Despite its name, mixed method research is not so much a mixing together of research types but rather a collaboration of them (Alaf & Sheppard, 2007). As Sandelowski argues, we cannot blend different methods together in a single study, as they are distinct entities, but we can link or combine
them into our results (Sandelowski, 2003), and Bryman proposes that the term multi-
metho...s may be a more accurate descriptor (Bryman, 2004).

Mixed methods research is referred to in the literature as one of the three major
research paradigms, along with qualitative and quantitative research (Alaf &
Sheppard, 2007; Johnson et al., 2007) and is a research method of choice in the health
professions, including nursing (Alaf & Sheppard, 2007). It is utilised where there are
multiple facets of a research question that need exploring, and one method will not
be sufficient to address all the issues (Alaf & Sheppard, 2007). The strengths of this
method are threefold: it can answer questions that the other methods cannot, by
broadening the scope of the research; it provides stronger inferences and allows
deeper insight; and it provides the opportunity for presenting a greater diversity of
views (Sandelowski, 2000a; Tashakkori & Teddlie, 1998).

The integration of quantitative and qualitative methods is “consonant with a
worldview of pragmatism” (Evans et al., 2011), p.277). Pragmatism, has been
proposed as the best paradigm for justifying the use of mixed methods research
(Tashakkori & Teddlie, 2003) and seeks to focus on “what works” as the truth
regarding the research question(s) under investigation and supports the use of both
quantitative and qualitative research methods in the same study (Tashakkori &
Teddlie, 1998). Pragmatism presents a very practical and applied research
philosophy and has been referred to as the best philosophical foundation for mixed
methods research (Creswell & Plano-Clark, 2007).

Research can often be better informed by the use of multiple methods, and the use of
more than one study method represents an expansive and creative form of research
that is inclusive, pluralistic and complementary in nature. It does not seek to limit or
constrain researchers by restricting them to one study method (Johnson &
Onwuegbuzie, 2004) and offers deeper insight and facilitates a broader
understanding of complex research topics than would be possible by using one
method in isolation (Halcomb & Andrew, 2009). The use of both qualitative and quantitative data in a study can produce more complete knowledge needed to inform clinical practice (Creswell & Plano-Clark, 2007).

Understanding the strengths and weaknesses of qualitative and quantitative research allows researchers to mix or combine strategies using what is called the fundamental principle of mixed research (Johnson & Turner, 2003). The principle asserts that researchers should collect multiple data using complementary strategies and approaches that overcome the weaknesses and draw on the strengths inherent in each single method (Connelly, 2009; Johnson & Onwuegbuzie, 2004). It allows researchers to answer a broader, more complete range of research questions as they are not constrained by one approach (Johnson & Onwuegbuzie, 2004). In addition, examining areas of convergence and divergence between the methods, can provide insights that may otherwise have gone unrecognised (Halcomb & Andrew, 2009).

The research design for this study involved assigning priority to the quantitative phase of the study, where a cross-sectional survey tool was the principal means of data collection and the qualitative phase, where semi-structured interviews were used to collect data, as the complementary method. This is recognised as an important strategy in the literature surrounding mixed methods research (Morgan, 1998). The second design decision involved the sequencing of the two phases, with the complementary qualitative phase conducted as a follow-up to the principal method. This approach is described as the Priority-Sequence model and this design is said to be increasingly common among survey researchers (Morgan, 1998). In this case the qualitative follow-up interviews were used to expand on data from the questionnaires, and allowed the researcher to focus on one particular area of interest. A qualitative descriptive approach was used in this part of the study and is a suitable method for use in mixed method studies (Neergaard, Olesen, Andersen, & Sondergaard, 2009).
There are two basic models for incorporating the results of a mixed methods study into a thesis: the segregated or integrated approach (Halcomb & Andrew, 2009). In this study the segregated model was used and the qualitative and quantitative components of the study are presented separately, and the findings integrated into the discussion and conclusion chapters. The results of the quantitative and qualitative analyses are combined at the interpretive level of research but each data set remains analytically separate from each other (Sandelowski, 2000a).

3.3.1.1 Ethical approval

Ethical approval for the project was obtained from the University of Newcastle Human Research Ethics Committee, approval number H – 2010 – 1013 (Appendix G).

3.4 Part I: National survey of ED nurses

3.4.1 Study design, sample and setting

This part of the study used a cross-sectional design to survey the membership of the College of Emergency Nursing Australasia (CENA). It is the peak professional body representing ED nurses in Australia and has a membership of approximately 1200 nurses. One of its aims is to initiate and support relevant nursing research. For these reasons, the researcher made the decision to approach CENA to seek a provisional letter of support for the study. This was made in September 2009 and was followed up with a formal research proposal in March 2010 which was accepted later that month.

This part of the study addressed study aims 1-4 and 6, as detailed in Table 7: Study aims addressed in questionnaire.
3.4.2 Development of the survey tool

Data related to the experiences of ED nurses with patient-related violence were collected using a 75-item questionnaire (Appendix H), divided into seven sections as detailed below.

Section 1: Study eligibility;

Section 2: General information;

Section 3: Patient-related violence experienced by you;

Section 4: Factors associated with patient-related workplace violence;

Section 5: Types of violent behaviour;

Section 6: Management and prevention of episodes of patient-related violence;

Section 7: Expression of interest to participate in follow up interviews.

The development of the questionnaire was conducted in three stages and designed using “survey monkey™” software. The survey was also printed in an A4 brochure style with 24 double-sided pages (Appendix H).

3.4.2.1 Stage 1

In stage 1 survey items were designed to collect data to achieve study aims 1 to 4. The aims of the study were the primary reference point for the development of the questionnaire and the first stage involved development of questions for the purpose of achieving the aims of the study. The key term violence was defined on the survey form as a continuum of behaviours from verbal abuse and threats, sexual harassment and physical assaults. It included both explicit and implicit challenges to the well-being, safety and health of nurses at their place of work (Mayhew & Chappell, 2005). The term “patients” was expanded to include parents or carers accompanying paediatric patients.
Recall bias represents a major threat to the internal validity of studies that rely on self-reported data (Hassan, 2006). Recall of information depends entirely on memory that can often be imperfect and thereby unreliable (Hassan, 2006). Participants may experience interference: that is as an individual experiences an increasing number of events, the probability of recalling any one of those events specifically declines. If information required by a question is not available, the respondent may use other less relevant information to answer the question (Coughlin, 1990). Therefore an optimal recall period is essential to reduce measurement errors and facilitate accurate responses, and short recall periods are preferred (Norquist, Girman, Fehnel, DeMuro-Mercon, & Santanello, 2012). After reviewing similar studies a decision was made to use a six month recall period in an attempt to minimise recall bias in this study, and to also include a question about episodes during the last week (Gates et al., 2006; Gillespie et al., 2010).
<table>
<thead>
<tr>
<th>Study aim</th>
<th>Questions</th>
<th>Content of questions</th>
<th>References used</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong>. To measure the frequency of individual emergency nurses' reported exposure to patient-related workplace violence and associated outcomes in the preceding six months.</td>
<td>9-12 20-26</td>
<td>Involved in an episode of violence in the previous week and preceding six months; Estimate how many episodes; Outcomes and impact on participants.</td>
<td>(Arnetz &amp; Arnetz, 2001; Astrom et al., 2004; Jackson et al., 2002).</td>
</tr>
<tr>
<td><strong>2</strong>. To identify the types of violent behaviours experienced by emergency nurses.</td>
<td>12 Section 5 of the survey: 61-62</td>
<td>Types of verbal abuse and physical behaviours.</td>
<td>(Crilly et al., 2004; Farrell et al., 2006; Ferns, 2005b).</td>
</tr>
<tr>
<td><strong>3</strong>. To identify emergency nurses’ perceptions of risk prevention measures and risk management strategies adopted by their employers.</td>
<td>13-19 Section 6 of the survey: 63-75</td>
<td>Measured the organisational reporting of episodes and subsequent response from management; Focused of management response to and prevention of episodes of patient-related violence.</td>
<td>(Crilly et al., 2004; Jackson et al., 2002; Lyneham, 2000; Mayhew &amp; Chappell, 2005).</td>
</tr>
<tr>
<td><strong>4</strong>. To identify factors associated with patient-related workplace violence that precipitate, escalate or de-escalate episodes of violence.</td>
<td>Section 4: 27:60</td>
<td>Diagnoses or clinical signs and symptoms; Nursing activities; Patient specific factors and behaviours; Staffing issues; Factors specific to the ED.</td>
<td>(Akerstrom, 1997; Badger &amp; Mullan, 2004; Catlette, 2005; Ferns, 2005a, 2005b; Holleran, 2006; Levin et al., 1998; Luck et al., 2007; Lyneham, 2000; May &amp; Grubbs, 2002; Nijman et al., 2005; Quintal, 2002).</td>
</tr>
<tr>
<td><strong>5</strong>. To investigate the issue of violence with respect to young adults (16-25 years of age) and the parents of paediatric patients.</td>
<td>29-31</td>
<td>Age group of parents; Relationship to child.</td>
<td>(Gillespie et al., 2010; Pich et al., 2011)</td>
</tr>
<tr>
<td><strong>6</strong>. To develop recommendations for employers about patient-related workplace violence and safety in the workplace for emergency nurses.</td>
<td>All questions 74</td>
<td>All questions were used to contribute to achieving this aim. Q74 also asked for nurses opinions about the most effective way to prevent/minimise the occurrence of patient-related violence in the ED,</td>
<td></td>
</tr>
</tbody>
</table>
3.4.2.2 Stage 2

Stage 2 assessed previous studies relevant to this survey. The second stage in the development of the questionnaire included a search of the literature and identification of previous studies relevant to the study. Relevant items were identified and adopted or modified and then incorporated into the survey, please see Table 7.

The literature was used to construct lists of emotional and professional responses following episodes of patient-related violence. Effects reported in the literature include feelings of guilt, self-doubt, feelings of professional incompetence (Arnetz & Arnetz, 2001); anger, powerlessness, unhappiness, degradation, shame, fear, astonishment, antipathy towards the perpetrator (Astrom et al., 2004) and sleeplessness (Jackson et al., 2002). In addition nurses have reported feeling more cautious as well as being afraid to be at work, leading to a situation where patients are avoided (Arnetz & Arnetz, 2001).

In Section 4 of the questionnaire lists were provided of diagnoses or clinical signs/symptoms of patients who displayed violent behaviour. The literature reports that certain diagnoses or medical conditions may be a risk factor for episodes of patient-initiated violence, particularly those associated with cognitive dysfunction (May & Grubbs, 2002), for example hypoxia, confusion and disorientation (Ferns, 2005b); traumatic brain injury (Holleran, 2006); organic brain disorders and developmental delay (Quintal, 2002) and dementia (Badger & Mullan, 2004). People with mental health diagnoses have also been identified as a risk group for potential violence, (Catlette, 2005), especially involuntary psychiatric patients (Nijman et al., 2005).

A list was also constructed of nursing activities that were reported to be occurring at the time of violent episodes and the location in the department where such episodes
occurred. Questions 45 to 48 measured contributing and precipitating factors for patient-related violence and the literature was sourced to compile lists for patient specific factors and behaviours; staffing issues and factors specific to the ED. For example waiting times; (Akerstrom, 1997; Levin et al., 1998); unrealistic expectations of the public (Lyneham, 2000); the busy and overcrowded nature of the ED (Lyneham, 2000); alcohol and substance abuse (Ferns, 2005a) and the STAMP behaviours in patients (Luck et al., 2008). The STAMP behaviours refer to five distinct behaviours identified by the authors as predictors of potential violence: Staring and eye contact, Tone and volume of voice, Anxiety, Menacing and Pacing (Luck et al., 2007).

A question was added about triage categories of patients perceived to be at risk of violence and these categories were adapted from those used in NSW Health. Please see Table 8.

<table>
<thead>
<tr>
<th>Triage category</th>
<th>Description</th>
<th>Recommended wait time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Critically ill or injured patients with a life threatening condition</td>
<td>Immediately or within 2 minutes</td>
</tr>
<tr>
<td>2</td>
<td>Critically ill or in severe pain with an imminently life threatening condition</td>
<td>10 minutes</td>
</tr>
<tr>
<td>3</td>
<td>Potentially life threatening conditions e.g. major fracture or severe blood loss</td>
<td>30 minutes</td>
</tr>
<tr>
<td>4</td>
<td>Potentially serious conditions e.g. sprained ankle &amp; migraine</td>
<td>1 hour</td>
</tr>
<tr>
<td>5</td>
<td>Less urgent conditions e.g. minor aches &amp; pains</td>
<td>2 hours</td>
</tr>
</tbody>
</table>

Adapted from (NSW Health, 2013).

Section 5 measured types of violent behaviour and lists of the types of verbal abuse and physical behaviours were constructed from the literature. Verbal behaviours identified in the literature include rudeness, shouting, sarcasm, swearing, unjustified criticism, ridicule in front of others, threat of personal harm to the person, their family or property, rumour mongering (Farrell et al., 2006) as well as sexual
innuendo (Crilly et al., 2004). Physical behaviours identified include a range of behaviours, for example being pushed (Crilly et al., 2004); punched, kicked, scratched, slapped, head butted, restrained, choked, bitten and strangled (Farrell et al., 2006; Ferns, 2005b).

Section 6 of the questionnaire focussed on the management and prevention of episodes of patient-related violence and lists of risk prevention/minimisation measures and follow up strategies were compiled.

Young adults (16-25 years of age) and the parents of paediatric patients have previously been identified as significant in the issue of violence against triage nurses (Pich et al., 2011). These groups have not previously been discussed in the literature; however The Garling Report (2008) reported that these age groups were over-represented in terms of ED presentations in NSW (Garling, 2008). In addition, a shortcoming in the provision of mandatory aggression minimisation training was also revealed, which has implications for the safety of nurses (Garling, 2008). These issues also were incorporated into the questionnaire.

The term “younger people”, was identified as being between the ages of 16 and 25 years of age, a grouping commonly used by government departments such as Centrelink.

3.4.2.3  Stage 3

This stage involved testing and validation of the questionnaire and involved the use of an expert panel. The panel was made up of eight ED nurse clinicians and academics and was convened on March 18, 2010 at the University of Newcastle. The questionnaire was circulated to all members of the expert panel for testing and to provide advice about the draft questionnaire. The time taken to complete the survey was recorded for each panel member by the researcher, and ranged from 24 to 37 minutes with an average of 31 minutes. Following this a discussion about the
questionnaire was facilitated by the researcher and the comments subsequently used to make some minor changes to the form, see Table 9. This stage confirmed both the face and content validity of the questionnaire.
<table>
<thead>
<tr>
<th>Expert panel recommendation</th>
<th>Action taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of electronic format for questionnaire due to time constraints &amp; ease of completion</td>
<td>Survey offered in paper and electronic format through “survey monkey™”</td>
</tr>
<tr>
<td>Summary to be included at the front of each section</td>
<td>Summary included as recommended</td>
</tr>
<tr>
<td>“Professional blunting” to be added to list of emotional responses</td>
<td>Added as recommended</td>
</tr>
<tr>
<td>Postcode ADD in “of where you work”</td>
<td>Added as recommended</td>
</tr>
<tr>
<td>The addition of “educational level” recommended to add insight into attitudes correlating to education level</td>
<td>Not incorporated</td>
</tr>
<tr>
<td>Q10: If NO – please go to question 27 (not 22)</td>
<td>Corrected as suggested</td>
</tr>
<tr>
<td>Signposting Q10 – add statement that questions following refer to the last 6 months</td>
<td>Wording amended as recommended</td>
</tr>
<tr>
<td>Question on why did you decide not to report: add in option “patient not responsible – due to diminished responsibility” from and add examples</td>
<td>Question amended as recommended</td>
</tr>
<tr>
<td>Add a question “I can manage episodes effectively” yes/no/n/a</td>
<td>This option was added to the question why did you decide not to report</td>
</tr>
<tr>
<td>Add “weight gain” to options for emotional responses</td>
<td>Weight gain/loss was added</td>
</tr>
<tr>
<td>Add “agitation” to patient behaviours</td>
<td>Added as recommended</td>
</tr>
<tr>
<td>New question – “in your experience do socio-economic indicators/factors play a significant role in patient-related violence?”</td>
<td>Question added as recommended</td>
</tr>
<tr>
<td>Change wording in question: personality traits/nursing style…which make them more likely to be susceptible to patient-related violence</td>
<td>Question changed to read “nursing approach/manner” which makes them more likely to experience such behaviour</td>
</tr>
<tr>
<td>Question on organisational changes change wording to “immediately” introduce any changes</td>
<td>The word immediate added as recommended</td>
</tr>
<tr>
<td>Add “formal complaints without cause” as an option for verbal abuse question</td>
<td>The term “unjustified criticism” was added</td>
</tr>
</tbody>
</table>
3.4.3 Sample size calculation

Surveys were distributed to all members of CENA which in 2009 at the time of the study totalled 1150. It was estimated that a 30% response rate, was necessary and would result in a sample size of approximately 350 nurse participants. This would allow the estimation of the point prevalence of ED nurses who had experienced patient-related violence in their workplace with 95% confidence intervals within +/- 5.4%, assuming a prevalence of 50%.

3.4.4 Recruitment

A study package was mailed out to all members of CENA. The study packages were assembled by the researcher and sealed.

3.4.4.1 Study package

The study package consisted of:

- An invitation to participate in the form of an Information Statement for the study (Appendix I);
- A paper copy of the questionnaire, which included the link to the electronic version of the survey (Appendix H);
- A pre-addressed reply paid envelope to return the survey (Appendix J);
- A pen bearing the title and logo of the study (Appendix K).

These were forwarded to the head office of CENA, at their request, where address labels were affixed and the packages mailed via Australia Post.

Participation was voluntary and anonymous and return of the questionnaire was regarded as consent.
Recipients were given the option of returning the postal questionnaire or completing the survey electronically through a unique link to the questionnaire on the “survey monkey™” website included on the front page of the postal questionnaire. There was a possibility that participants could complete both an electronic and paper version of the survey form. A check was conducted on the free text results on the excel spread sheet for any duplicate answers and none were located. Consequently the researcher concluded that no duplicate surveys were returned.

3.4.4.2 Participant inclusion criteria

The target population for this study was ED nurses who met the following inclusion criteria: -

1. Currently working clinically in an ED setting;
2. Interacting directly with patients and family/friends;
3. Willing and able to discuss their experiences with patient-related workplace violence;

3.4.5 Methods employed to maximise the response rate

Postal questionnaires are an effective way to reach large and geographically dispersed populations, however non-response reduces the effective sample size and has the potential to introduce bias (Roberts, Wilson, Roalfe, & Bridge, 2004). In an attempt to overcome this, and improve the response rate, the research team adopted some measures identified as effective in the literature. A systematic review by Roberts et al identified the use of financial, and to a lesser extent, non-monetary incentives for completion of a survey (Roberts et al., 2004). This was also the case in a systematic review of surveys of physicians (Vangeest, Johnson, & Welch, 2007). While the use of monetary incentives was precluded in this study by ethical and
financial constraints, the researcher included an incentive in the form of a four-colour pen bearing the name and logo of the study in each study package (Appendix K). The choice of this type of pen was made as it was low cost and of practical use to nurses in the course of their work.

The review also reported that the odds of participants responding were almost 50 percent higher when follow-up contact was used (Roberts et al., 2004). Therefore the decision was made to send out a reminder postcard to all potential participants two weeks after the initial distribution of the questionnaires (Appendix L). The postcards were delivered to CENA headquarters where address labels were affixed and distribution organised via Australia Post.

A study by Hure, Smith and Collins (2008) identified the following factors in recruitment materials as having a negative impact on response rates: -

- Poor visual appeal;
- Extensive length of the information statement;
- Poor readability of the text;
- Appeal of the study name (Hure, Smith, & Collins, 2008).

The researcher contacted the authors for further information and their advice was used in the design of the recruitment material. The use of images including a study logo, colour and using a pamphlet format were recommended for the Information Statement (Hure et al., 2008), therefore the research team made the decision to condense the title of the study into a mnemonic that would readily identify the study. The study title still included all the relevant information, “Violence in Emergency Nursing and Triage”, and was abbreviated as The VENT Study. The use of the word vent was also favoured due to its meaning as a verb: “to express a negative emotion in a forceful and often unfair way” ("Concise Oxford English Dictionary.,” 2012). A logo was designed by an external person and the use of the
colour red chosen as this is often a colour associated with strong emotions (Appendix M). This “branding” was included on all recruitment material including the pen sent in the study package as an incentive to potential participants. It was hoped that the pen would be used by nurses in their place of work and increase awareness about the study.

The Information Statement was produced as a glossy colour pamphlet with all information condensed into a double-sided A4 pamphlet to enhance readability (Hure et al., 2008). Other methods to improve the readability included the use of shorter sentences and paragraphs, simpler language (Hure et al., 2008) and the use of a question and answer format with questions clearly laid out in larger red font to attract the eye of the reader (Appendix I).

The nature of the questionnaire had some inherent advantages. For example, the odds of response are increased when questionnaires originate from a university rather than an alternative source, such as a government department and when the topic is directly relevant to the potential participants (Roberts et al., 2004). The topic of violence in the ED is one that is directly relevant to the membership of CENA.

In terms of design strategies the literature reports that postal and phone surveys are typically more successful than fax or web based approaches, however a mixed-model is also recommended (Vangeest et al., 2007). The decision to offer the questionnaire in both a traditional postal and electronic web format was an attempt to improve the response rate as some evidence suggests that the electronic method is favoured over the traditional paper version (Bushnell, Martin, & Parasuraman, 2003; McFall & Milke, 2007).

### 3.4.6 Data entry

All questionnaires returned by post were manually entered in to the “survey monkey”™ site by the researcher. This was to ensure that all questionnaires were
stored in the same format for data analysis. The majority of surveys, \( n = 471, 89\% \), were returned by post, with 66 submitted online using the “surveymonkey”™ link.

### 3.4.7 Data analysis

The survey data were entered onto an excel spread sheet, checked for accuracy and completeness and preliminary analysis conducted using excel and descriptive statistics. Analysis enabled the characteristics of the study population to be summarised through measures of central tendency, including means, median and mode.

A Statistical Analysis Plan was created and used to guide statistical analysis (Appendix N). The statistical analysis program using Stata™ V11 (STATA Corp., TX, USA) was used for the analysis of the survey data.

Categorical data were compared using Pearson’s chi-square analysis with p-values of <0.05 considered significant. Fishers exact test was used for comparisons involving cell counts that were less than five. In particular we considered the associations between any “violence experienced in the preceding six months” with “nursing activities”; “location in the department”; “patient behaviours”; “clinical diagnoses”; “work fraction”; “age”, and “years of ED nursing experience”. Uni- and multivariable Logistic regression analysis was performed to estimate odds ratios for these associations (both crude and adjusted). To estimate the odds ratios over a greater period of time, the corresponding logit coefficient was multiplied by the relevant number (for example by five to estimate the results over a five year period. Data for postcodes were categorised according to geographic location: metropolitan, regional and other, which included remote areas, using Australian Bureau of Statistics classification (Pink, 2011). Chi-squared analysis was then used to compare results of individual questions to geographic location where applicable. The “other” group contained a small number of participants (\( n = 21 \)), therefore sub-set analyses
were conducted where necessary to remove the effect of this group on the results for metropolitan and regional locations.

The first aim of the study was to measure the **frequency** of individual emergency nurses’ reported exposure to patient-related workplace violence and associated outcomes in the preceding six months. Basic statistical analysis was performed including mean, median, interquartile range, standard deviation and range. Data were compared by geographical regions using Pearson’s chi-squared analysis and Fisher’s exact test.

The second study aim addressed was to identify the **types** of violent behaviours experienced by emergency nurses. Descriptive statistics were performed on the data and Pearson’s chi-squared analysis and Fisher’s exact test were used to compare these variables with “episode of violence experienced in the previous six months”. Data also were compared by region using Pearson’s chi-squared analysis and Fisher’s exact test.

The third aim of the study was to identify emergency nurses’ perceptions of **risk prevention measures** and **risk management strategies** adopted by their **employers**. Descriptive statistics were used to analyse the data and Pearson’s chi-squared analysis and Fisher’s exact test were performed to compare these variables with “episode of violence experienced in the previous six months”. Data also were analysed by region using Pearson’s chi-squared analysis and Fisher’s exact test.

The fourth study aim was to identify factors associated with patient-related workplace violence that **precipitate**, **escalate** or **de-escalate** episodes of violence. Descriptive statistics were performed on the data and Pearson’s chi-squared analysis and Fisher’s exact test were performed to compare these variables with “episode of violence experienced in the previous six months”. Data also were analysed by region using Pearson’s chi-squared analysis and Fisher’s exact test. In addition uni- and
multivariable Logistic regression analysis was performed to estimate odds ratios for these associations (both crude and adjusted).

The final study aim addressed in this part of the study was to investigate the issue of violence with respect to the parents of paediatric patients. Descriptive statistical analysis was performed and the data compared by geographic region using Pearson’s chi-squared analysis and Fisher’s exact test.

Free-text questions that required comments from respondents in the survey were read independently and used to construct codes for the content of responses to each item. Coding was done by the researcher and independently by two researchers experienced with qualitative research. All coding was compared and any discrepancies identified were discussed and codes agreed and allocated to the response. These were reported as descriptive data only, in content categories. Some of the data were coded to discrete categories and others were coded to other categories dependent on the nature of the data.

3.5 Part II: Interviews with ED nurses

A qualitative descriptive methodology based on the work of Sandelowski was chosen for Part II of the study (Sandelowski, 2000b). The first part of the study was a national cross sectional survey that sought to report on ED nurses’ experiences with patient-related violence. The aim of Part II was to describe the experiences of Australian ED nurses with episodes of patient-related violence from young adults (16-25 years of age) and episodes of parent-related violence from those accompanying paediatric patients. The collection of more in-depth data on these two sub-groups of interest was to achieve the fifth study aim of the study: To investigate the issue of violence with respect to young adults (16-25 years of age) and the parents of paediatric patients.
3.5.1 Study design

A qualitative descriptive approach was used. Qualitative descriptive studies have been described as the least theoretical of all qualitative approaches and have been criticised for being too simple and lacking rigour (Neergaard et al., 2009). They are most closely aligned with naturalistic inquiry, which involves studying something in as close to its natural state as possible (Sandelowski, 2000b), and seeks to investigate phenomenon in their natural setting, free of manipulation (Streubert & Carpenter, 1995). This approach acknowledges that human behaviour is influenced by the setting in which it occurs and therefore must be studied in that setting in order for a true representation of the phenomenon to be uncovered (Polit, Beck, & Hungler, 2001).

Qualitative content analysis is the analytical style of choice in qualitative descriptive studies (Sandelowski, 2000b), and was employed to analyse data from Part II of the study and the free-text responses from Part I. Other authors refer to this as thematic analysis, arguing that content analysis relies on pre-determined categories assigned by the researcher (Braun & Clarke, 2006). However, Sandelowski (2000b) argues that content analysis in qualitative research is distinct from its quantitative counterpart in that it is data-driven and not subject to pre-existing codes or predetermined categories (Sandelowski, 2000b).

A theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set (Braun & Clarke, 2006) and the identification of themes is central to all qualitative research (Sandelowski & Leeman, 2012). Qualitative content analysis or thematic analysis is a flexible method for identifying, analysing, and reporting patterns or themes identified in data (Boyatzis, 1998) which can potentially provide a rich and detailed, yet complex account of data (Braun & Clarke, 2006).
The researcher plays an active role in analysis by identifying patterns or themes, and selecting which are of interest, to report on (Braun & Clarke, 2006). Themes do not merely “emerge” from the data and “if themes ‘reside’ anywhere, they reside in our heads from our thinking about our data and creating links as we understand them” (Ely, Vinz, Downing, & Anzul, 2004) (p. 205-6). Such analysis should however be low-inference in nature and thus more likely to result in consensus among researchers and participants alike (Neergaard et al., 2009; Sandelowski, 2000b). The researcher should also be mindful not to impose their own views or ideas about the subject into the analysis and so potentially create a bias in the results (Sandelowski, 2000b). The presentation of qualitative findings as thematic sentences can enhance their accessibility to readers and facilitate their transference into interventions able to be implemented in practice (Sandelowski & Leeman, 2012).

3.5.2 Recruitment of the sample

An Expression of Interest for participating in Part II of the study was included at the end of the questionnaire (Appendix O). This invited interested nurses to participate in semi-structured interviews to discuss their experiences with patient-related violence, specifically involving young adults (16-25 years of age) and/or the parents or carers of paediatric patients. Interested parties were invited to e-mail the researcher with their contact details and not to include any identifying information when returning the questionnaire to maintain anonymity in the survey.

Participants were recruited to the study using purposeful sampling. Purposeful is defined as “directed towards a purpose” (“Concise Oxford English Dictionary.,” 2012), and its logic and power lies in selecting information-rich cases for study in depth (Coyne, 1997). This is a form of non-probability sampling in which participants are chosen by the researcher based on a variety of criteria, including specialist knowledge of the of the research topic, or capacity and willingness to participate in the research (Oliver, 2006). The advantage of purposive sampling is that the
researcher can identify participants who are likely to provide data that are detailed and relevant to the research question and study aims. The disadvantage lies in the subjectivity of the researcher’s decision making in choosing participants (Oliver, 2006). The use of an Expression of Interest meant that participants were in effect “self-selecting”, and this can have implications for the transferability of the results, as the characteristics of non-participants are not able to be compared to participants (Haber, 1994).

In this study purposive sampling was employed, however all participants were chosen from the same population: members of CENA, which strengthens the transferability of the sample. In addition participants were chosen from three Australian states and were all working in the same position and job setting in the ED, adding to the transferability of the findings.

3.5.3 Inclusion criteria

Participants were recruited if they met the following inclusion criteria:

- Registered Nurses;
- Had worked clinically in an Australian ED in the preceding six months;
- Members of CENA in 2010;
- Returned an Expression of Interest for participating in interviews.

3.5.4 The sample

Eleven Registered Nurses responded and accepted the invitation to participate in an interview and were recruited as a result of this purposive recruitment strategy. This is the recruitment strategy of choice in qualitative descriptive methodology, and the goal was to obtain information to fulfil the fifth aim of the study (Sandelowski, 2000b). The participants included seven female and four male participants, with a
median age of 44 and an average of fifteen years clinical experience working in the ED environment. The sample was drawn from metropolitan and regional locations across the states of New South Wales, Queensland and Victoria, and the Australian Capital Territory, in Australia.

### 3.5.5 Demographic profile

A demographic profile sheet was developed by the researcher to collect basic data about the participants including gender, age and years of experience (See Appendix P). Participants were asked to complete this prior to the interviews.

### 3.5.6 Interview schedule

Interviews are reported to be the most commonly used qualitative data collection technique used in health care settings (Pope & Mays, 2006). Data collection in qualitative descriptive studies usually involves minimally to moderately-structured open-ended questions (Sandelowski, 2000b), to understand the participants’ experiences of the phenomenon of interest, therefore this part of the study utilised semi-structured interviews. The interview aimed to discover the “who”, “what” and “where” of events or experiences (Sandelowski, 2000b). Two interview schedules were developed and designed to explore ED nurses’ individual experiences of patient-related workplace violence with the two sub-groups of interest, young adults and the parents of paediatric patients (Appendices Q and R). Participants were asked to describe a typical encounter and the feelings such an encounter caused. They also were asked about their ability to resolve a difficult situation and the level of support received from their colleagues and management at their place of work.

A series of open-ended questions were developed based on a review of the current literature pertaining to the topic (Estryn-Behar et al., 2008; Farrell et al., 2006; Ferns, 2005b; Lau et al., 2004; Pich et al., 2011). The literature states that effective questions should be open-ended, neutral, sensitive and clear to the interviewee (Patton, 1987).
The researcher should ensure that the questions reflect the aims of the study and progress in a logical sequence and should not be leading in nature. The researcher should remain flexible and be able to diverge from the interview schedule to pursue an interesting idea or response in more detail if required (Pope & Mays, 2006). The interview process should be interactive and sensitive to the language and concepts used by the participants (Pope & Mays, 2006).

Qualitative research findings are considered reliable when the descriptions are so authentic that the participants recognise their experiences from the researcher’s descriptions or others recognise the experience after having only read it in a study (Norwood, 2000).

Qualitative descriptive research recognises the importance of the researcher in the research process and in particular the importance of remaining objective (Norwood, 2000). Subjectivity and the researcher leading the participant are viewed as significant threats to the internal validity of a study (Norwood, 2000). The researcher must avoid imposing their assumptions on the interviewee’s account and remain open to the possibility that the themes that emerge from the interview may be very different from those that might have been predicted at the onset (Pope & Mays, 2006). A major threat to internal validity can occur when the researcher becomes so involved with the participants ‘experiences that they lose objectivity (Norwood, 2000). Researchers can overcome this by monitoring their responses through techniques including journaling or debriefing with a colleague (Norwood, 2000). To this end the researcher took field notes during interviews and these were discussed in regular meetings with the senior researchers on the study. A summary of these is provided as Appendix T.

A definition was adapted from Mayhew and Chappell (2005) for the term violence and provided to participants prior to interviews commencing to ensure consistency of understanding among the participants (Mayhew & Chappell, 2005). The definition
referred to verbal abuse and threats, sexual harassment as well as physical assaults. It also covered episodes that involved both an explicit and implicit challenge to the wellbeing, safety or health of participants at work (Mayhew & Chappell, 2005). The term “patients” included the parents/guardians or carers accompanying paediatric patients.

To establish the validity of the interview schedules they were peer reviewed by a senior researcher with clinical experience in the ED environment (DS). Slight modifications were then incorporated into the final version of the interview schedules.

3.5.7 Data collection

Interviews were conducted in-person or over the phone depending on the location of the participant and recorded using a digital recorder. Face-to-face interviews were conducted at the workplace of the participant at a time convenient to them.

At the beginning of the interview, any questions arising from the Information Sheet, or Consent Form were addressed and the Demographic Profile Sheet was completed. The definition of violence was provided to all participants on the Information Sheet and also reiterated by the researcher prior to the interview commencing. The importance of participants feeling relaxed and at ease in the interview is stressed in the descriptive qualitative research process (Schneider, Elliott, Lo-Biondi-Wood, & Haber, 2004). It can take time for participants to feel comfortable enough to speak freely in front of a machine (Pope & Mays, 2006). To this end participants were made to feel comfortable and relaxed through a brief informal discussion where the researcher shared details of her experience and background. Thus by the time the digital recorder was started and the interview began, the participants were more at ease and comfortable with being recorded.
Data collection continued until no new categories were extracted from the data and thus it was considered that saturation had been achieved. (Pope & Mays, 2006). Saturation is defined as data adequacy and refers to the point of diminishing return in qualitative studies where collecting more data does not necessarily lead to more information being uncovered (Mason, 2010). In qualitative research there are no published guidelines for determining saturation equivalent to those in quantitative research, however failure to achieve saturation impedes the quality of the research (Morse, 1995). Therefore it is important for the researcher to be able to estimate when data saturation has been achieved in their study. One of the principles for achieving saturation is to select a cohesive sample; the greater the cohesiveness of a sample the faster saturation will be obtained (Morse, 1995). All participants in this study were recruited using purposive sampling and were similar in that all satisfied the inclusion criteria: they were all Australian ED nurses who had experienced episodes of patient-related violence in the preceding six month period.

3.5.8 Transcription of recorded information

Digital recordings of the interviews were transcribed verbatim by an independent transcriber, hired by the researcher through the university, who agreed to maintain confidentiality of the data. Transcripts were checked for errors against recorded versions by the researcher to ensure the accurate and authentic reproduction of accounts. The aim of transcription is to overcome the limitations of language and to reflect as closely as possible the experience of the conversation (Schneider et al., 2004). Field notes taken at the time of the interviews were used to augment the transcripts and detail the researcher’s experience and reflection on the interview (Appendix T).
3.5.9 Member checking

Participants were provided with an opportunity to read transcripts of their interviews and comment on their accuracy. When transcription had been completed, copies of transcripts were returned to participants by mail with a reply paid envelope and space provided to either confirm or reject the accuracy of the data as presented.

3.5.10 Data analysis

Data from demographic profiles was used to provide basic data about the sample, including age, gender and years of experience using summary statistics.

Transcripts of digital recordings were analysed using qualitative content analysis (Sandelowski, 2000b) or thematic analysis (Braun & Clarke, 2006), and the aim was to let the data speak for itself and limit the influence of the researcher on the results (Sandelowski, 2000b). Thematic analysis was conducted on these data using a structured approach described by Sandelowski and Neergard et al (Neergaard et al., 2009; Sandelowski, 2000b) and based on the approach discussed by Miles and Huberman (Miles & Huberman, 1994).

Participants were de-identified and coded using numbers from p1 to p11 to maintain their confidentiality. After the initial categorisation of data using categories obtained from the interview schedule, additional categories were identified. Independent coding of data using descriptive labels was conducted to identify important features/similar phrases and patterns in the data by the researchers that described the experiences of the participants. Subsequently the results of independent coding were discussed and compared by two researchers (JP and MH) to determine commonalities and differences across the data, and themes and relationships between them were agreed on. A summary of the process used is detailed in Figure 2.
Figure 2: Flowchart of data analysis of interview data

Transcription of digital recordings.

Validation of transcripts with participants: Participants were provided with a copy of their transcript and asked to comment on its validity and the extent to which it represents an accurate record of their responses.

Initial categorisation: using categories based on semi-structured interview schedules.

Coding using descriptive labels related back to the qualitative aim of the study.

Results of coding discussed and compared to determine commonalities and differences with qualitative expert (MH).

Themes and relationships between descriptive labels were agreed upon with qualitative expert (MH).
Qualitative description is recommended as the method of choice where a description of a phenomenon is sought and is especially relevant where the aim is to gain first-hand knowledge of health professionals’ experience with a particular topic (Neergaard et al., 2009).

The research team utilised qualitative content analysis or thematic analysis to analyse the data obtained from semi-structured interviews of participants, and this is the most common method used in health care (Pope & Mays, 2006). To facilitate a stronger analysis the researchers sought to establish relationships between the themes uncovered. In this way thematic analysis can be used to develop classifications or models/diagrams to represent such connections (Pope & Mays, 2006).

The researchers employed inductive analysis to code the data, which is a data-driven process that seeks to work from the data to identify themes, rather than trying to fit them into a preconceived framework (Braun & Clarke, 2006). The process is described as fluid and non-linear, with the researcher moving backwards and forwards between the original data and emerging themes (Pope & Mays, 2006). Peer review of emergent themes was conducted using an experienced qualitative researcher and member of the research team (MH).

To illustrate the process used, an example of the identification of the over-arching theme of “feeling unsafe at work” is detailed below. Four main themes emerged from the data: “performing and attention seeking behaviours” by patients seeking to gain entry to the ED; “parental emotions”; patients presenting with “alcohol and substance abuse” and “issues and experiences around the types of verbal and physical violence experienced or witnessed”.

Upon further examination of the transcripts, it became apparent that many comments in all four categories described a workplace that was at times unsafe. Comments included: “I’m scared not just for myself but I’m scared for the other
people around me” (p1), while discussing violence from a parent; “…three little old ladies in tears terrified that they were going to be hurt…” (p3), while discussing a patient exhibiting attention seeking behaviour; “…you don’t know if they are nuts enough they could find you…”; while discussing types of verbal abuse encountered and “…nurses are going to be killed in the future…” (p3), while discussing violence from a patient under the influence of alcohol. After consideration of the four main themes overall, a decision was made in consultation with an experienced qualitative researcher (MH) to create a final category: “feeling unsafe at work”. To illustrate the inter-connectedness between all of the themes, it was labelled an over-arching theme.
3.5.11 Rigour and trustworthiness

In qualitative research, rigour is considered in terms of trustworthiness. The concept of rigour speaks to the overall truth and validity of a study and how the methods employed stand up to the scrutiny of other researchers (Milne & Oberle, 2005). Guba proposed four criteria to establish the trustworthiness of qualitative research: credibility, transferability, dependability and confirmability (Guba, 1981). Credibility refers to the internal validity of a study or confidence in the truth of the findings, that is that the study measures or tests what was actually intended (Shenton, 2004). It has been argued that establishing credibility is one of the most important factors in establishing trustworthiness of a study (Lincoln & Guba, 1985). This was addressed in this study in a number of ways. Firstly through the use of member-checking, which Lincoln and Guba regard as the single most important method of ensuring credibility in a study (Lincoln & Guba, 1985).

Peer review of emergent themes was provided by an experienced qualitative researcher (MH) to confirm consistency with the data and to reduce subjective interpretation (Milne & Oberle, 2005). Frequent debriefing sessions between the researcher and her supervisors also were conducted throughout the data analysis process to enable the researcher to identify any biases or preferences in analysis and to widen and strengthen the discussion (Shenton, 2004).

Transferability or fittingness refers to the probability that the findings of the study have meaning to others in similar situations (Schneider et al., 2004). This relates to the external validity of the study and the extent to which the findings of one study can be applied to other situations (Shenton, 2004). In this study this was demonstrated by comparison of the results to the body of evidence-based literature on the topic (Streubert & Carpenter, 1995). While a small sample size has implications for the rigour of a study, the fact that the participants in this study were
drawn from four Australian states and territories improves the transferability of the findings.

Dependability refers to the ability to duplicate the findings of the study. That is if the study were repeated with the same methods and participants in the same context, similar results should be obtained (Shenton, 2004). It is closely aligned with the concept of credibility and involves providing a detailed description of the processes within the study to enable a future researcher to repeat the work (Shenton, 2004). This level of detail has been provided in this chapter: by making the processes used visible and acknowledging the strengths and limitations of the study (Milne & Oberle, 2005).

Finally confirmability refers to the objectivity or neutrality of a study, or the degree to which the findings are shaped by the participants and not researcher bias, motivation or interest (Shenton, 2004). This was achieved through the use of an audit trail (Schneider et al., 2004), where decisions made during analysis were documented and reviewed by the peer reviewer (MH). Please see Appendix U.

Other concepts discussed in the literature include authenticity, or the ability to remain true to the phenomenon under study and integrity, which refers to the attention paid to research-related decisions (Milne & Oberle, 2005). The authenticity of a qualitative descriptive study depends not only the ability to capture participants’ experiences but to accurately analyse and represent them (Milne & Oberle, 2005). However the ultimate test of a study’s integrity is the usefulness of the findings and how they resonate with the target population (Milne & Oberle, 2005).
3.6 Ethical considerations

3.6.1 Potential distress for participants

Ethical safeguards are important in research, especially where there is a risk to participants. In this study there was a slight risk to participants that recalling an event during completion of the survey form or participation in an interview could result in distress. To minimise this risk, information was included in the Information Statement advising participants where to seek help if this occurred.

Prior to the interviews taking place, participants were reminded of this information and advised that they could stop the interview at any time if they became distressed or were unable to continue for any reason. In addition, the researcher monitored participants for signs of distress during interviews. The researcher was prepared to discontinue interviews in the event that this occurred and to direct participants to seek support as detailed above.

3.6.2 Information sheets

An Information Sheet about the study (Appendix I) for potential participants was approved for inclusion in the study package and also provided to participants prior to interviews being conducted. It included information to fully inform them of the study including:

- The voluntary nature of their participation;
- Their right to withdraw from the study at any time;
- Their right to confidentiality, anonymity and security with regards to all information collected;
- The potential benefits and risks of the study;
• That some participants might find that recalling events during the completion of the questionnaire distressing. Participants were asked to contact their Employees’ Assistance Program or the Nurses’ Association in their state or territory if this occurred. In addition contact details for Lifeline were included. Lifeline is a national charity that provides telephone access to 24-hour crisis support and suicide prevention services.

3.6.3 Consent

Consent was deemed to be given through the completion and return of a questionnaire to the researchers, or through submission of an electronic questionnaire through the “survey monkey™” link. A statement to this effect was included in the Information Sheet: “completion of the survey form will be taken as your informed consent” (Appendix I). Anonymity of participants was ensured with no individually identifiable data collected in the survey. The Expression of Interest to participate in Part II of the study was returned separately and could not be linked back to the survey submission (Appendix O).

Prior to commencement of interviews, and after reading the Information Sheet, participants were asked to read and sign a consent form (See Appendix S). Thus they consented to being interviewed, having the interview digitally recorded and to completing the Demographic Profile Sheet (Appendix P). This was to ensure that participation in the study was voluntary. Participants were assured of confidentiality and advised that they could withdraw from the study at any time. In addition, participants were given the option to request a summary of the results at the conclusion of the project: however no participants made this request.

3.6.4 Confidentiality

The researchers did not have access to the CENA database containing the names and addresses of the study population. All recruitment material was couriered to the
head office of CENA in Sydney, NSW where staff of that organisation affixed address labels. The study packages were then posted directly to the study population via Australia Post. All returned surveys and those completed electronically were non-identifiable and this was outlined in the Information Sheet: “the survey form is anonymous and it will not be possible to identify you from your answers” (Appendix I).

No identifying information was included on digital recordings or transcripts and participants were cautioned not to name any third parties during the interview or to provide information that might reveal their identity. Individual participants were not identifiable in data files or digital recordings, and no identifying information was included in any publications, presentations or this thesis.

3.6.5 Data storage

The completed consent forms and demographic profiles were stored in a separate location and interviewees were identified by a code rather than a name in the transcripts and electronic files. All hard copies of questionnaires were stored in locked filing cabinets in secure offices of the researcher and all electronic data were stored on password protected computers and only accessible by the research team. Material on the “survey monkey™” website was also password protected.

Data files and digital recordings were only accessible by the research team and were password protected. Transcription was undertaken by an independent third party and no identifying information was provided to that person.

All data and digital recordings were stored in a secure location in a locked filing cabinet in a locked office of the researcher. On completion of the project all digital recordings and transcripts have been stored at a secure location. They will be disposed of 5 years after the conclusion of the project in accordance with the State Records Act 1998 (NSW) and the Australian Code for the Responsible Conduct of
3.7 Conclusion

This chapter has discussed the research design used in the study. It began with elements used in the design, including the use of a mixed methods approach with both quantitative and qualitative components used to expand the scope of the study. The development of the data collection tools: questionnaire and interview schedules were discussed and the process of recruitment and data collection reported. The methods used to analyse the data collected in both the survey data and interview transcripts were detailed as were the ethical requirements of the research. Finally the components ensuring trustworthiness and rigour of the study were described.
Chapter 4  Results from survey data: Part I

This chapter reports the results from a survey of CENA members in 2010 about their experiences with patient-related violence in the ED. This chapter has been structured to address the study aims: -

1. To measure the frequency of individual emergency nurses’ reported exposure to patient-related workplace violence and associated outcomes in the preceding six months;
2. To identify the types of violent behaviours experienced by emergency nurses;
3. To identify emergency nurses’ perceptions of risk prevention measures and risk management strategies adopted by their employers;
4. To identify factors associated with patient-related workplace violence that precipitate, escalate or de-escalate episodes of violence;
5. To investigate the issue of violence with respect to young adults (16-25 years of age) and the parents of paediatric patients;
6. To develop recommendations for employers about patient-related workplace violence and safety in the workplace for emergency nurses.

NB: The abbreviation “p” refers to participant in this chapter.

Analyses of Survey Data

Categorical data were compared using Pearson’s chi-square analysis with p-values of <0.05 considered significant. Fisher’s exact test was used for comparisons where cell counts were less than five. In particular we considered the associations between any “violence experienced in the preceding six months” with “nursing activities”, “location in the department”, “patient behaviours”, “clinical diagnoses”, “work fraction”, “age”, and “years of ED nursing experience”. Uni- and multivariable Logistic regression analysis was performed to estimate odds ratios for these associations (both crude and adjusted). Data for postcodes were categorised
Cells in graphs that contain statistically significant results have been shaded to facilitate their identification by the reader. Some questions in the survey provided space for participants to provide comments. These are reported with the numeric data for these questions. Other questions only required free-text comments and these data have been analysed using descriptive statistics only.

NOTE: for data that were normally distributed, means and standard deviations are reported and for data with a skewed distribution medians and inter-quartile ranges are reported.

The results from Part I of the study, the survey data, are presented in this chapter. The data from Part II of the study, published in the *International Emergency Nursing Journal* are reported separately (see Chapter 5).

### 4.1 Definitions

The term “violence” was defined in the survey to include verbal abuse and threats, sexual harassment as well as physical assaults. It included any episode that involved either an explicit or implicit challenge to the well-being, safety or health of ED nurses at their place of work (Mayhew & Chappell, 2005).

The term “patients” was broadened to include parents/guardians or carers who accompanied paediatric patients to the ED.
4.2 Response rate

Questionnaires were distributed to all financial members of the College of Emergency Nursing Australasia (CENA). The total membership of CENA at the time of sampling in 2010 was 1150. The final figures for participation are shown in Table 10. The total number of eligible participants with a completed questionnaire was 537 which resulted in a response rate for this study of 51%. Surveys of nurses are an important tool in nursing research, however they are often characterised by low response rates (VanGeest & Johnson, 2011). A systematic review of studies designed to improve response rates in nursing research analysed 22 publications reporting 30 experiments that compared recruitment strategies and found that the majority of studies (n = 27) reported response rates below 50%, with some less than 10% (VanGeest & Johnson, 2011).

<table>
<thead>
<tr>
<th>Stage/Action</th>
<th>Number of potential participants</th>
<th>Number of actual participants at each stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study packages sent</td>
<td>1150</td>
<td></td>
</tr>
<tr>
<td>Returned to sender</td>
<td>26</td>
<td>1124</td>
</tr>
<tr>
<td>Non respondents</td>
<td>526</td>
<td></td>
</tr>
<tr>
<td>Responses</td>
<td></td>
<td>598</td>
</tr>
<tr>
<td>Returned, Question 1 = Ineligible</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Returned Blank – non-consenting</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Questionnaire returned – incomplete</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Eligible participants – returned completed ...</td>
<td></td>
<td>531*</td>
</tr>
</tbody>
</table>

*NOTE: some respondents did not answer every question in the survey and consequently not all tables report responses from the total of 531 participants.

4.3 Characteristics of participants

The characteristics of the participants are reported in Tables 11 and 12.
Most participants were Registered Nurses (n = 526, 99%), including Clinical Nurse Consultants, Clinical Nurse Specialists, Clinical Nurse Educators and Nurse Practitioners. Eleven percent (n = 60) had management responsibilities and there were 36 (7%) Nurse Practitioners.
Table 11: Characteristics of participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Metropolitan (n = 233) (%)</th>
<th>Regional (n = 218) (%)</th>
<th>Other (n = 21) (%)</th>
<th>No postcode (n = 59) (%)</th>
<th>Total (n = 531) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing role</td>
<td>Enrolled Nurse</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Endorsed Enrolled Nurse</td>
<td>4 (2)</td>
<td>1 (&lt;1)</td>
<td>0</td>
<td>0</td>
<td>5 (1)</td>
</tr>
<tr>
<td></td>
<td>Registered Nurse</td>
<td>95 (41)</td>
<td>101 (46)</td>
<td>9 (43)</td>
<td>27</td>
<td>232 (44)</td>
</tr>
<tr>
<td></td>
<td>Clinical Nurse Consultant</td>
<td>9 (4)</td>
<td>9 (4)</td>
<td>0</td>
<td>4</td>
<td>22 (4)</td>
</tr>
<tr>
<td></td>
<td>Clinical Nurse Specialist</td>
<td>56 (24)</td>
<td>48 (22)</td>
<td>3 (14)</td>
<td>17</td>
<td>124 (23)</td>
</tr>
<tr>
<td></td>
<td>Clinical Nurse Educator</td>
<td>28 (12)</td>
<td>15 (7)</td>
<td>4 (19)</td>
<td>5</td>
<td>52 (10)</td>
</tr>
<tr>
<td></td>
<td>Nurse Unit Manager</td>
<td>28 (12)</td>
<td>27 (12)</td>
<td>3 (14)</td>
<td>2</td>
<td>60 (11)</td>
</tr>
<tr>
<td></td>
<td>Nurse Practitioner</td>
<td>13 (6)</td>
<td>17 (8)</td>
<td>2 (10)</td>
<td>4</td>
<td>36 (7)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>233</td>
<td>218</td>
<td>21</td>
<td>59</td>
<td>531</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Metropolitan (n = 232) (%)</th>
<th>Regional (n = 218) (%)</th>
<th>Other (n = 21) (%)</th>
<th>No postcode (n = 55) (%)</th>
<th>Total (n = 526) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>20-29</td>
<td>29 (13)</td>
<td>21 (10)</td>
<td>1 (5)</td>
<td>10</td>
</tr>
<tr>
<td>n = (526)</td>
<td></td>
<td>61 (12)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td>64 (28)</td>
<td>59 (27)</td>
<td>8 (38)</td>
<td>16</td>
<td>147 (28)</td>
</tr>
<tr>
<td>40-49</td>
<td>82 (35)</td>
<td>75 (34)</td>
<td>6 (29)</td>
<td>14</td>
<td>177 (34)</td>
</tr>
<tr>
<td>50-59</td>
<td>49 (21)</td>
<td>53 (24)</td>
<td>6 (29)</td>
<td>15</td>
<td>123 (23)</td>
</tr>
<tr>
<td>60+</td>
<td>8 (3)</td>
<td>10 (5)</td>
<td>0</td>
<td>0</td>
<td>18 (3)</td>
</tr>
<tr>
<td>Total</td>
<td>232</td>
<td>218</td>
<td>21</td>
<td>59</td>
<td>526</td>
</tr>
<tr>
<td>Category</td>
<td>Metropolitan (n = 233) (%)</td>
<td>Regional (n = 218) (%)</td>
<td>Other (n = 21) (%)</td>
<td>No postcode (n = 59) (%)</td>
<td>Total (n = 531) (%)</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------</td>
<td>------------------------</td>
<td>-------------------</td>
<td>--------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>FULL TIME</td>
<td>118 (51)</td>
<td>103 (47)</td>
<td>18 (86)</td>
<td>30</td>
<td>269 (51)</td>
</tr>
<tr>
<td>PART TIME</td>
<td>107 (46)</td>
<td>104 (48)</td>
<td>2 (10)</td>
<td>28</td>
<td>241 (45)</td>
</tr>
<tr>
<td>CASUAL</td>
<td>8 (34)</td>
<td>11 (5)</td>
<td>1 (5)</td>
<td>1</td>
<td>21 (4)</td>
</tr>
<tr>
<td>Total</td>
<td>233</td>
<td>218</td>
<td>21</td>
<td>59</td>
<td>531</td>
</tr>
</tbody>
</table>

- § Not all participants provided postcodes in response to these questions
- ≈ Only 526 participants provided a response to this question
<table>
<thead>
<tr>
<th>Variable</th>
<th>Range</th>
<th>Metropolitan (n = 232)</th>
<th>Regional (n = 218)</th>
<th>Other (n = 21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (n = 526)</td>
<td>23-65 years</td>
<td>42.4 (9.8)</td>
<td>42.0 (9.8)</td>
<td>42.9 (9.5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24.4 (9.1)</td>
</tr>
<tr>
<td>Years of nursing experience (n = 531)</td>
<td>2-40 years</td>
<td>19.2 (10.01)</td>
<td>20.7 (10.6)</td>
<td>19.8 (10.5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21.4 (9.7)</td>
</tr>
<tr>
<td>Years of ED nursing experience (n = 531)</td>
<td>1 -40 years</td>
<td>12.6 (7.6)</td>
<td>13.3 (7.9)</td>
<td>12.3 (7.3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11.9 (5.8)</td>
</tr>
<tr>
<td>HOURS OF PATIENT CARE (per week) (n = 531)</td>
<td>0 – 70 hours</td>
<td>32 (14.1)</td>
<td>30.1 (13.1)</td>
<td>33.0 (15.1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>35.8 (14.9)</td>
</tr>
</tbody>
</table>

- § Not all participants provided a postcode in response to this question
- ∞ Not all participants provided a response to this question
4.3.1 Age distribution of sample

Participants were aged between 23 and 65 years of age with a mean age of 42, and 60% of the sample (n = 318/526) were aged 40 and older. Data for age were analysed for two groups as shown below:

1) 23-39 years of age;
2) 40-65 years of age.

These data were analysed according to region and the results are shown in Table 13.

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Metropolitan (n = 232) (%)</th>
<th>Regional (n = 214) (%)</th>
<th>Other (n = 21) (%)</th>
<th>No postcode provided (n = 59)</th>
<th>Total (n = 526) (%)</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-39</td>
<td>93 (40)</td>
<td>80 (37)</td>
<td>9 (43)</td>
<td>26</td>
<td>208 (40)</td>
<td>0.71</td>
<td>0.870</td>
</tr>
<tr>
<td>40-65</td>
<td>139 (60)</td>
<td>134 (63)</td>
<td>12 (57)</td>
<td>33</td>
<td>318 (60)</td>
<td>1.05</td>
<td>0.790</td>
</tr>
</tbody>
</table>

§ Not all participants provided a postcode in response to this question

4.3.2 Nursing experience

The years of nursing experience overall in the sample ranged from two to more than 40 years with a mean of 20 years, and a mean of 13 years of ED specific nursing experience was reported. Please see Figures 3 and 4.
Figure 3: Years of nursing experience

Figure 4: Years of ED nursing experience
4.3.3 Work fraction and hours of patient care

The work fraction of participants was similar between full-time employment (n = 269) and part-time or casual employment (n = 262). The average hours of patient contact per week over a monthly period according to work fraction were as follows: nurses working full time had significantly higher mean hours of patient care (mean = 35.6, range = 0 - 70 hours) than nurses working part-time or casual (mean = 28, range = 0-70 hours), (p < 0.001). The mean of 28 hours for part-time and casual is almost three-quarters (74%) of a full-time workload of 38 hours per week.

The number of hours worked per week were categorised into three groups: half-time; full-time and over-time, where a full-time workload was considered to be 38 hours. These data were then compared for regional differences and no statistically significant results were identified, please see Table 14.
<table>
<thead>
<tr>
<th>Worked hours</th>
<th>Metropolitan (n = 229) (%)</th>
<th>Regional (n = 213) (%)</th>
<th>Other (n = 21) (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half-time</td>
<td>42 (18)</td>
<td>27 (13)</td>
<td>1 (5)</td>
<td>70 (15)</td>
<td>2</td>
<td>4.60</td>
<td>0.100† 0.124‡</td>
</tr>
<tr>
<td>Full time</td>
<td>119 (52)</td>
<td>118 (55)</td>
<td>10 (48)</td>
<td>247 (53)</td>
<td>2</td>
<td>0.62</td>
<td>0.735</td>
</tr>
<tr>
<td>Over-time</td>
<td>68 (30)</td>
<td>68 (32)</td>
<td>10 (48)</td>
<td>146 (32)</td>
<td>2</td>
<td>3.08</td>
<td>0.215</td>
</tr>
</tbody>
</table>

- § Only 463 participants provided postcodes in response to this question
- † Pearson’s chi-squared
- ‡ Fisher’s exact test
4.3.4 Geographic characteristics of sample

All states and territories in Australia were represented in the sample as shown below in Table 15 and Figure 5. The data were further classified according to postcode (n = 472) in these states and territories, into either metropolitan or regional areas and the results were evenly distributed between the two areas, (233 and 239 respectively). An “other” category included postcodes from remote areas and data from respondents who did not provide postcodes but indicated which state or territory they were from. This resulted in the following distribution: metropolitan, 233; regional, 218 and other, 21.
This section includes analyses by geographic location to determine whether there were any significant differences in the data when these groups were compared. There were 472 participants who answered this question.
4.4 Frequency of exposure to patient-related violence

The first aim of the study was to measure the frequency of individual emergency nurses reported exposure to patient-related workplace violence and associated outcomes in the preceding six months.

4.4.1 Point prevalence: nurse involvement in episodes of patient-related violence

The point prevalence for ED nurses who had experienced patient-related violence in their workplace in the preceding six month period was 87% (n=455/521) and 40% (n = 211/523) was reported for being involved in an episode of patient-related violence in the preceding week. This was in excess of the prevalence assumed when calculating the sample size needed for the study as detailed below: “It was estimated that a 30% response rate, was necessary and would result in a sample size of approximately 350 nurse participants. This would allow the estimation of the point prevalence of with 95% confidence intervals within +/- 5.4%, assuming a prevalence of 50%”.

These data were further analysed according to region and the results are shown in Table 16. The results for metropolitan and regional areas were selected and compared due to the influence of the “other” and “missing postcode” groups on the results. The number of nurses who had experienced episodes was consistent between these regions, with no statistical difference identified. These results are shown in Table 17.
Table 16: Episodes of patient-related violence

<table>
<thead>
<tr>
<th></th>
<th>Metropolitan (n = 230) (%)</th>
<th>Regional (n = 214) (%)</th>
<th>Other (n = 21) (%)</th>
<th>Missing postcode (n = 58) (%)</th>
<th>Total (n = 523) (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Episode in last week §</td>
<td>88 (38)</td>
<td>81 (38)</td>
<td>10 (48)</td>
<td>32 (55)</td>
<td>211 (40)</td>
<td>3</td>
<td>6.73</td>
<td>0.081</td>
</tr>
<tr>
<td>Episode in the last 6 months §</td>
<td>202 (87)</td>
<td>185 (88)</td>
<td>16 (76)</td>
<td>52 (91)</td>
<td>455 (87)</td>
<td>3</td>
<td>3.18</td>
<td>0.365</td>
</tr>
</tbody>
</table>

- § Only 465 and 464 participants respectively provided postcodes in response to this question

Table 17: Episodes of patient related violence: metropolitan and regional areas

<table>
<thead>
<tr>
<th></th>
<th>Metropolitan (n = 230) (%)</th>
<th>Regional (n = 214) (%)</th>
<th>Total (n = 444) (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Episode in last week §</td>
<td>88 (38)</td>
<td>81 (38)</td>
<td>169 (38)</td>
<td>2</td>
<td>0.002</td>
<td>0.969</td>
</tr>
<tr>
<td>Episode in the last 6 months §</td>
<td>202 (87)</td>
<td>185 (88)</td>
<td>387 (87)</td>
<td>2</td>
<td>0.226</td>
<td>0.635</td>
</tr>
</tbody>
</table>
The next section reports data from the 455 participants who reported being involved in violent episodes in the previous six months in the survey.

### 4.4.2 Number of episodes

The number of episodes of patient-related violence reported by participants in the six months prior to completing the survey ranged from 0 to 100 with a median of eight (IQR = 16). For analysis, the number of episodes was categorised to four groups as shown in Table 18. Most nurses reported experiencing between 0 and 10 episodes of patient-related violence in the preceding six months; however 167 nurses (37%) reported experiencing more than 10 episodes.

<table>
<thead>
<tr>
<th>Episodes</th>
<th>Metropolitan (n = 198) (%)</th>
<th>Regional (n = 184) (%)</th>
<th>Remote (n = 18) (%)</th>
<th>Total regions (n = 400)§</th>
<th>Totals overall (%) (n = 452)</th>
<th>95% CI (relate to total percentages in total column)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>121 (61)</td>
<td>124 (67)</td>
<td>11 (61)</td>
<td>256</td>
<td>285 (63)</td>
<td>59.8 – 66.2</td>
</tr>
<tr>
<td>11-20</td>
<td>33 (17)</td>
<td>33 (18)</td>
<td>4 (22)</td>
<td>70</td>
<td>84 (19)</td>
<td>17.7 – 19.5</td>
</tr>
<tr>
<td>21-30</td>
<td>19 (10)</td>
<td>13 (7)</td>
<td>3 (17)</td>
<td>35</td>
<td>37 (8)</td>
<td>7.8 – 8.6</td>
</tr>
<tr>
<td>31-100</td>
<td>25 (13)</td>
<td>14 (8)</td>
<td>0 (0)</td>
<td>39</td>
<td>46 (10)</td>
<td>9.7 – 10.7</td>
</tr>
</tbody>
</table>

§Only 452 participants provided postcodes in response to this question

### 4.4.3 Types of episodes

Participants were asked about the types of violence they had encountered and these results are summarised in Table 19. Verbal abuse was the most common form of violence experienced with 12 episodes per nurse per six months reported and there were five episodes per six months per nurse where verbal abuse progressed to physical contact. There were three episodes per six months per nurse that involved only physical contact against the nurse involved, and episodes that occurred while patients were in police custody were estimated to be seven per six months per nurse.
Table 19: Episodes of patient-related violence in past 6 months (n = 448)

<table>
<thead>
<tr>
<th>Type of episode</th>
<th>Total number of episodes Ω</th>
<th>Range</th>
<th>Mean (SD)</th>
<th>Median (IQR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal abuse &amp; non-physical behaviours (n = 427)</td>
<td>5018</td>
<td>1-100</td>
<td>11.8 (17.2)</td>
<td>6 (11)</td>
</tr>
<tr>
<td>Verbal abuse &amp; non-physical behaviours that progressed to physical contact (n = 189)</td>
<td>929</td>
<td>0-90</td>
<td>4.9 (8.7)</td>
<td>2 (4)</td>
</tr>
<tr>
<td>Only physical contact with people or objects (n = 92)</td>
<td>230</td>
<td>0-15</td>
<td>2.5 (2.7)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Episodes involving patients accompanied by police (n = 278)</td>
<td>1826</td>
<td>0-100</td>
<td>6.6 (6.6)</td>
<td>3 (5)</td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these items

4.4.4 Inevitability and frequency of episodes of violence

The majority of nurses (n = 473, 93%) of 511 respondents perceived patient-related violence to be an inevitable or somewhat inevitable part of their job as an ED nurse. Following analysis by region a statistically significant difference was identified between areas about not viewing patient-related violence as inevitable, and was less common in metropolitan areas (p = 0.026). However the result was based on a small total (n = 34), therefore the results should be interpreted with caution.

Nearly all participants (n = 502/510, 98%) were of the perception that the frequency of patient-related violence had increased or stayed the same over the course of their careers. This result was found to be consistent across all regions with no significant differences identified. See Table 20 for details.
Table 20: Perceived inevitability and frequency of violence by region

<table>
<thead>
<tr>
<th>Inevitability</th>
<th>Metropolitan (n = 226) (%)</th>
<th>Regional (n = 207) (%)</th>
<th>Other (n = 21) (%)</th>
<th>Total (n = 454) § (%)</th>
<th>d.f.</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>126 (56)</td>
<td>125 (60)</td>
<td>12 (57)</td>
<td>263 (58)</td>
<td>2</td>
<td>0.96</td>
<td>0.620</td>
</tr>
<tr>
<td>NO ×</td>
<td>11 (5)</td>
<td>19 (9)</td>
<td>4 (19)</td>
<td>34 (7)</td>
<td>2</td>
<td>7.14</td>
<td>0.028†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.026‡</td>
</tr>
<tr>
<td>SOMEWHAT</td>
<td>89 (39)</td>
<td>63 (30)</td>
<td>5 (24)</td>
<td>157 (35)</td>
<td>2</td>
<td>4.95</td>
<td>0.085</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Metropolitan (n = 226) (%)</th>
<th>Regional (n = 206) (%)</th>
<th>Other (n = 21) (%)</th>
<th>Total (n = 453) § (%)</th>
<th>d.f.</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreasing</td>
<td>3 (1)</td>
<td>5 (2)</td>
<td>0 (0)</td>
<td>8 (2)</td>
<td>2</td>
<td>1.15</td>
<td>0.563†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.650‡</td>
</tr>
<tr>
<td>Increasing</td>
<td>182 (81)</td>
<td>157 (76)</td>
<td>17 (81)</td>
<td>356 (79)</td>
<td>2</td>
<td>1.27</td>
<td>0.531</td>
</tr>
<tr>
<td>Staying the same</td>
<td>41 (18)</td>
<td>44 (21)</td>
<td>4 (19)</td>
<td>89 (20)</td>
<td>2</td>
<td>0.71</td>
<td>0.701†</td>
</tr>
</tbody>
</table>

† Pearson's chi-squared
‡ Fisher's exact test
§ Only 454 and 453 participants respectively provided postcodes in response to these questions
× The responses for “no” were low therefore these results should be interpreted with caution
4.5 The types of violent behaviours experienced by emergency nurses

The second aim of the study was to identify the types of violent behaviours experienced by ED nurses.

This section reports data from all participants.

4.5.1 Verbal abuse and non-physical behaviours

There was a range of types of verbal abuse and non-physical behaviours reported and swearing was the most common type; reported by nearly all ED nurses surveyed (n = 504). Participants were able to choose multiple items from a list of types of verbal abuse and on average participants reported 12 types each. For a list of the types of verbal abuse please see Table 21. Other common behaviours included shouting; anger, rudeness and making unreasonable demands.

Some comments included personal and gender-based comments about individual nurses from participants, for example: “personal names such as “fat bitch”, ”the ugly one” (p90). Other comments included descriptions of symbolic violence and aggression from participants, for example: “…videoing in department and waiting room, photographing staff…” (p178); “…kicking trolleys, urinating in corridor…” (p219); “…throwing chairs, spitting, urging patients in waiting room to become rowdy and complaining, pacing hallways…” (p207); “…pushing past others in triage line and verbally threatening staff…verbally threatening to kill staff and family…” (p332).

These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.
A chi-square test was conducted on the data for two variables: “type of verbal abuse” and “violent episode experienced in the last six months” with all categories except one, rumour mongering, found to be statistically significant as shown in Table 22. The results underscore the significance of the issue of verbal abuse for participants.
Table 22: Violent episode experienced and type of verbal abuse

<table>
<thead>
<tr>
<th>Type of verbal abuse</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swearing</td>
<td>89.72</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Name calling</td>
<td>49.02</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Making unreasonable demands</td>
<td>58.48</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Sarcasm</td>
<td>34.96</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Insulting/questioning professional ability e.g. incompetent, incapable</td>
<td>29.95</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Ridicule in front of others</td>
<td>26.96</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Anger</td>
<td>79.94</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Threatening comments to self, family, property</td>
<td>41.96</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Shouting</td>
<td>73.25</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Rudeness</td>
<td>46.04</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Rumour mongering</td>
<td>2.81</td>
<td>0.094</td>
</tr>
<tr>
<td>Sexual innuendo</td>
<td>14.35</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Taunting</td>
<td>21.46</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Staring</td>
<td>28.99</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Berating</td>
<td>13.38</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Gesturing</td>
<td>27.47</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Unjustified criticism</td>
<td>14.47</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Stepping into personal space</td>
<td>30.84</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Symbolic violence e.g. punching/hitting glass/desk at triage</td>
<td>33.57</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Formal complaints without cause</td>
<td>11.68</td>
<td>0.001</td>
</tr>
</tbody>
</table>

These data were further analysed according to geographic location and a summary shown in Table 23. Statistically significant differences were identified for “threatening comments – to self, family or property” (p = 0.003) which was more common in metropolitan areas than regional areas (n = 160/292, 55%) and “unjustified criticism” (p = 0.008) which was also more common in metropolitan areas (n = 103/200, 52%). A sub-set analysis was conducted to remove the effect of the “other group” and the results were subsequently found to not be statistically significant: “threatening comments”, p = 0.095, chi-squared = 2.78; and “unjustified criticism”, p = 0.443, chi-squared = 0.59. In addition while “gesturing” (p = 0.047) and
“sarcasm” (p = 0.044) revealed significant p-values the overall percentages were similar for metropolitan and regional areas so these results should be interpreted with caution.
Table 23: Types of verbal abuse (n = 452) § Ω ¥

<table>
<thead>
<tr>
<th>Type of verbal abuse</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swearing</td>
<td>220 (49)</td>
<td>205 (46)</td>
<td>21 (5)</td>
<td>446 (99)</td>
<td>2</td>
<td>3.9</td>
<td>0.519</td>
</tr>
<tr>
<td>Shouting</td>
<td>213 (50)</td>
<td>191 (45)</td>
<td>20 (5)</td>
<td>424 (93)</td>
<td>2</td>
<td>2.5</td>
<td>0.289</td>
</tr>
<tr>
<td>Anger</td>
<td>209 (50)</td>
<td>191 (45)</td>
<td>21 (5)</td>
<td>421 (93)</td>
<td>2</td>
<td>3.2</td>
<td>0.205</td>
</tr>
<tr>
<td>Rudeness</td>
<td>205 (50)</td>
<td>186 (45)</td>
<td>21 (5)</td>
<td>412 (91)</td>
<td>2</td>
<td>3.9</td>
<td>0.141</td>
</tr>
<tr>
<td>Making unreasonable demands</td>
<td>190 (51)</td>
<td>165 (44)</td>
<td>20 (5)</td>
<td>375 (83)</td>
<td>2</td>
<td>5.7</td>
<td>0.057</td>
</tr>
<tr>
<td>Name calling</td>
<td>174 (50)</td>
<td>161 (46)</td>
<td>14 (4)</td>
<td>349 (77)</td>
<td>2</td>
<td>0.7</td>
<td>0.886</td>
</tr>
<tr>
<td>Insulting/questioning professional ability e.g. incompetent, incapable</td>
<td>169 (49)</td>
<td>158 (46)</td>
<td>19 (5)</td>
<td>346 (76)</td>
<td>2</td>
<td>3.3</td>
<td>0.191</td>
</tr>
<tr>
<td>Sarcasm</td>
<td>157 (47)</td>
<td>161 (46)</td>
<td>19 (6)</td>
<td>337 (75)</td>
<td>2</td>
<td>6.2</td>
<td>0.044</td>
</tr>
<tr>
<td>Symbolic violence e.g. punching/hitting glass/desk at triage</td>
<td>150 (50)</td>
<td>136 (45)</td>
<td>16 (5)</td>
<td>302 (77)</td>
<td>2</td>
<td>1.6</td>
<td>0.446</td>
</tr>
<tr>
<td>Threatening comments to self, family, property</td>
<td>160 (55)</td>
<td>117 (40)</td>
<td>15 (5)</td>
<td>292 (64)</td>
<td>2</td>
<td>11.6</td>
<td>0.003</td>
</tr>
<tr>
<td>Stepping into personal space</td>
<td>143 (50)</td>
<td>128 (45)</td>
<td>16 (6)</td>
<td>287 (64)</td>
<td>2</td>
<td>2.5</td>
<td>0.284</td>
</tr>
<tr>
<td>Staring</td>
<td>131 (47)</td>
<td>129 (47)</td>
<td>17 (6)</td>
<td>277 (62)</td>
<td>2</td>
<td>4.9</td>
<td>0.086</td>
</tr>
<tr>
<td>Gesturing</td>
<td>112 (47)</td>
<td>110 (46)</td>
<td>16 (7)</td>
<td>238 (53)</td>
<td>2</td>
<td>6.1</td>
<td>0.047</td>
</tr>
<tr>
<td>Ridicule in front of others</td>
<td>104 (48)</td>
<td>97 (45)</td>
<td>15 (7)</td>
<td>216 (44)</td>
<td>2</td>
<td>5.8</td>
<td>0.054</td>
</tr>
<tr>
<td>Unjustified criticism</td>
<td>103 (52)</td>
<td>82 (41)</td>
<td>15 (8)</td>
<td>200 (44)</td>
<td>2</td>
<td>9.6</td>
<td>0.003</td>
</tr>
<tr>
<td>Berating</td>
<td>74 (50)</td>
<td>64 (43)</td>
<td>10 (7)</td>
<td>148 (32)</td>
<td>2</td>
<td>3.0</td>
<td>0.223</td>
</tr>
<tr>
<td>Formal complaints without cause</td>
<td>62 (49)</td>
<td>59 (46)</td>
<td>6 (5)</td>
<td>127 (28)</td>
<td>2</td>
<td>4.0</td>
<td>0.979</td>
</tr>
<tr>
<td>Taunting</td>
<td>60 (47)</td>
<td>58 (45)</td>
<td>10 (8)</td>
<td>128 (28)</td>
<td>2</td>
<td>4.7</td>
<td>0.095</td>
</tr>
<tr>
<td>Sexual innuendo</td>
<td>64 (52)</td>
<td>52 (42)</td>
<td>8 (6)</td>
<td>124 (28)</td>
<td>2</td>
<td>2.3</td>
<td>0.309</td>
</tr>
<tr>
<td>Rumour mongering</td>
<td>20 (51)</td>
<td>15 (38)</td>
<td>4 (10)</td>
<td>39 (9)</td>
<td>2</td>
<td>3.8</td>
<td>0.564†</td>
</tr>
</tbody>
</table>

- †Pearson’s chi-squared
- ‡Fisher’s exact test
- §Only 452 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.5.2 Physical behaviours

Destructive behaviour such as hitting or punching the safety glass at triage was identified as the most common physical behaviour displayed by violent patients. Other behaviours reported included spitting; kicking; hitting; punching and pushing. Participants were able to choose from a range of physical behaviours and on average each participant reported eight different types of physical violence. The use of weapons was reported by 64% of participants (n = 302) and this included both traditional and opportunistic weapons such as hospital equipment. Thirteen participants (3%) stated that they had been sexually assaulted. A number of categories had a high response rate as participants could choose more than one response with one noting: “…most of this can be seen on any regular shift in our ED. Sad isn’t it?” (p332) and another: “…most of this is often seen in emergency…” (p95).

Additional comments from participants included: “…kicked in stomach, threatened with blood filled syringe, threatened with Stanley knife, threatened with scissors…” (p394); “…head butting walls…” (p362); “…throwing container of vomit at staff…” (p261); “…the threat that radiates from a drug affected or psychotic person is difficult to describe. You FEEL the threat but its source is difficult to quantify as the patient is not rational…” (p214).

Please see Table 24.
Table 24: Physical behaviours (n = 468)

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Total responses Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destructive behaviour e.g. punching safety glass/table</td>
<td>376 (80)</td>
</tr>
<tr>
<td>Spitting</td>
<td>335 (72)</td>
</tr>
<tr>
<td>Kicking</td>
<td>321 (69)</td>
</tr>
<tr>
<td>Hitting</td>
<td>300 (64)</td>
</tr>
<tr>
<td>Punching</td>
<td>286 (61)</td>
</tr>
<tr>
<td>Pushing</td>
<td>285 (61)</td>
</tr>
<tr>
<td>Grabbing</td>
<td>265 (57)</td>
</tr>
<tr>
<td>Scratching</td>
<td>216 (46)</td>
</tr>
<tr>
<td>Use of hospital equipment as weapons e.g. sharps, chairs</td>
<td>215 (46)</td>
</tr>
<tr>
<td>Biting</td>
<td>203 (43)</td>
</tr>
<tr>
<td>Throwing/struck with object</td>
<td>153 (33)</td>
</tr>
<tr>
<td>Grabbing &amp; twisting a body part</td>
<td>150 (32)</td>
</tr>
<tr>
<td>Threat using body fluids</td>
<td>109 (23)</td>
</tr>
<tr>
<td>Inappropriate physical contact</td>
<td>108 (23)</td>
</tr>
<tr>
<td>Pulling hair/jewellery/clothing</td>
<td>99 (21)</td>
</tr>
<tr>
<td>Use of traditional weapon e.g. knife</td>
<td>87 (18)</td>
</tr>
<tr>
<td>Restraining/immobilising staff</td>
<td>51 (11)</td>
</tr>
<tr>
<td>Choking</td>
<td>41 (9)</td>
</tr>
<tr>
<td>Sexual assault</td>
<td>13 (3)</td>
</tr>
<tr>
<td>Other</td>
<td>11 (2)</td>
</tr>
<tr>
<td>Total</td>
<td>3624</td>
</tr>
</tbody>
</table>

Ω Participants could select more than 1 physical behaviour

A chi-squared analysis was conducted using type of physical behaviour and episode of violence in the past six months and the following behaviours were found to be highly significant with a p-value < 0.001: destructive behaviour, spitting, kicking, hitting, pushing, punching, grabbing, scratching, use of hospital equipment as weapons, biting and grabbing and twisting a body part. Please see Table 25 for details.
### Table 25: Chi-squared results for physical behaviours and episodes of violence

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destructive behaviour e.g. punching safety glass/table</td>
<td>17.7</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Spitting</td>
<td>18.05</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Kicking</td>
<td>17.33</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Hitting</td>
<td>16.5</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Punching</td>
<td>18.06</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Pushing</td>
<td>7.6</td>
<td>0.006</td>
</tr>
<tr>
<td>Grabbing</td>
<td>15.61</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Scratching</td>
<td>15.29</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Use of hospital equipment as weapons e.g. sharps, chairs</td>
<td>15.02</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Biting</td>
<td>13.77</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Throwing/struck with object</td>
<td>7.59</td>
<td>0.006</td>
</tr>
<tr>
<td>Grabbing &amp; twisting a body part</td>
<td>13.82</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Threat using body fluids</td>
<td>3.48</td>
<td>0.062</td>
</tr>
<tr>
<td>Inappropriate physical contact</td>
<td>3.78</td>
<td>0.052</td>
</tr>
<tr>
<td>Pulling hair/jewellery/clothing</td>
<td>1.62</td>
<td>0.203</td>
</tr>
<tr>
<td>Use of traditional weapon e.g. knife</td>
<td>1.83</td>
<td>0.176</td>
</tr>
<tr>
<td>Restraining/immobilising staff</td>
<td>2.4</td>
<td>0.121</td>
</tr>
<tr>
<td>Choking</td>
<td>2.17</td>
<td>0.141</td>
</tr>
<tr>
<td>Sexual assault</td>
<td>0.46</td>
<td>0.499</td>
</tr>
</tbody>
</table>

These data were further analysed according to geographic location and scratching was found to be more common in metropolitan areas (n = 106/189, 56%), a difference that approached statistical significance (p = 0.057). All other physical behaviours were reported consistently between the different regions. Please see Table 26 for details.
<table>
<thead>
<tr>
<th>Type of physical behaviour</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destructive behaviour e.g. punching safety glass/tables etc.</td>
<td>160 (49)</td>
<td>153 (47)</td>
<td>16 (5)</td>
<td>329 (78)</td>
<td>2</td>
<td>0.5</td>
<td>0.776</td>
</tr>
<tr>
<td>Spitting</td>
<td>150 (51)</td>
<td>132 (45)</td>
<td>10 (3)</td>
<td>292 (69)</td>
<td>2</td>
<td>2.59</td>
<td>0.274</td>
</tr>
<tr>
<td>Kicking</td>
<td>148 (52)</td>
<td>128 (45)</td>
<td>9 (3)</td>
<td>265 (68)</td>
<td>2</td>
<td>3.91</td>
<td>0.142</td>
</tr>
<tr>
<td>Hitting</td>
<td>130 (49)</td>
<td>121 (46)</td>
<td>14 (5)</td>
<td>265 (63)</td>
<td>2</td>
<td>0.99</td>
<td>0.609</td>
</tr>
<tr>
<td>Punching</td>
<td>132 (52)</td>
<td>111 (44)</td>
<td>9 (4)</td>
<td>252 (60)</td>
<td>2</td>
<td>2.47</td>
<td>0.291</td>
</tr>
<tr>
<td>Pushing</td>
<td>134 (53)</td>
<td>112 (44)</td>
<td>9 (4)</td>
<td>255 (61)</td>
<td>2</td>
<td>2.8</td>
<td>0.245</td>
</tr>
<tr>
<td>Grabbing</td>
<td>125 (53)</td>
<td>102 (43)</td>
<td>10 (4)</td>
<td>237 (56)</td>
<td>2</td>
<td>2.18</td>
<td>0.336</td>
</tr>
<tr>
<td>Scratching</td>
<td>106 (56)</td>
<td>76 (40)</td>
<td>7 (4)</td>
<td>189 (45)</td>
<td>2</td>
<td>5.7</td>
<td>0.057</td>
</tr>
<tr>
<td>Use of hospital equipment as weapons e.g. sharps</td>
<td>97 (51)</td>
<td>80 (42)</td>
<td>12 (6)</td>
<td>189 (45)</td>
<td>2</td>
<td>3.8</td>
<td>0.148</td>
</tr>
<tr>
<td>Biting</td>
<td>97 (54)</td>
<td>74 (42)</td>
<td>7 (4)</td>
<td>178 (42)</td>
<td>2</td>
<td>3.01</td>
<td>0.222</td>
</tr>
<tr>
<td>Throwing/struck with object</td>
<td>72 (53)</td>
<td>58 (43)</td>
<td>5 (4)</td>
<td>135 (32)</td>
<td>2</td>
<td>1.26</td>
<td>0.531</td>
</tr>
<tr>
<td>Grabbing and twisting a body part</td>
<td>70 (52)</td>
<td>57 (43)</td>
<td>7 (5)</td>
<td>134 (32)</td>
<td>2</td>
<td>1.10</td>
<td>0.575</td>
</tr>
<tr>
<td>Threat using body fluids e.g. blood</td>
<td>52 (58)</td>
<td>34 (38)</td>
<td>3 (3)</td>
<td>89 (21)</td>
<td>2</td>
<td>3.63</td>
<td>0.163†</td>
</tr>
<tr>
<td>Inappropriate physical contact</td>
<td>53 (55)</td>
<td>41 (42)</td>
<td>3 (3)</td>
<td>97 (23)</td>
<td>2</td>
<td>1.60</td>
<td>0.450†</td>
</tr>
<tr>
<td>Pulling hair/jewellery/clothing</td>
<td>50 (56)</td>
<td>38 (42)</td>
<td>2 (2)</td>
<td>90 (21)</td>
<td>2</td>
<td>2.48</td>
<td>0.289†</td>
</tr>
<tr>
<td>Use of traditional weapon e.g. knife</td>
<td>44 (53)</td>
<td>35 (42)</td>
<td>4 (5)</td>
<td>83 (20)</td>
<td>2</td>
<td>0.65</td>
<td>0.176†</td>
</tr>
<tr>
<td>Restraining/immobilising staff</td>
<td>24 (50)</td>
<td>23 (48)</td>
<td>1 (2)</td>
<td>48 (11)</td>
<td>2</td>
<td>0.71</td>
<td>0.701†</td>
</tr>
<tr>
<td>Choking</td>
<td>17 (43)</td>
<td>21 (53)</td>
<td>2 (5)</td>
<td>40 (10)</td>
<td>2</td>
<td>0.82</td>
<td>0.662†</td>
</tr>
<tr>
<td>Sexual assault</td>
<td>8 (67)</td>
<td>4 (33)</td>
<td>0 (0)</td>
<td>12 (3)</td>
<td>2</td>
<td>1.74</td>
<td>0.420†</td>
</tr>
</tbody>
</table>

- † Pearson’s chi-squared
- ‡ Fisher’s exact test
- § Only 421 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.5.3 Consequences of patient-related violence

This section reports data from the 455 participants who reported being involved in violent episodes in the previous six months in the survey.

4.5.3.1 Injuries

Ninety five of 449 participants (21%) reported that they had suffered a physical and/or psychological injury as a consequence of an episode of patient-related violence in the preceding six months. The category of psychological injuries was included to allow participants to list long-lasting and significant psychological diagnoses that had impacted on their well-being in the same way a physical injury would. This category was distinct from “emotional response, that measured participants’ emotions experienced in association with these violent episodes. These data were analysed according to region with the following results: metropolitan (n = 43/198, 22%), regional (n = 38/182, 21%) and other/remote (n = 4/17, 24%) §1. No statistically significant difference was identified between these regions (n = 397, chi-squared = 0.22, p = 0.975).

More respondents (n = 118), proceeded to answer the next question about the location of the most serious injury/illness that they had sustained as a consequence of patient-related violence. There were an additional 13 nurses who did not report actually sustaining an injury who answered this question and the researchers surmised that this may represent people who had sustained an injury outside the six month time period.

§ Only 85 participants provided postcodes in response to this question
4.5.3.2 Types of injury

The upper body was the most common site reported for a physical injury. Psychological injuries were reported by 55% of nurses, and represented over a quarter of all injuries reported. Participants were able to choose more than one type of injury and on average participants reported two different types of injury. Please see Table 27 for more details.

<table>
<thead>
<tr>
<th>Location of injury/i llness</th>
<th>Total responsesΩ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper body</td>
<td>83 (70)</td>
</tr>
<tr>
<td>Psychological state</td>
<td>65 (55)</td>
</tr>
<tr>
<td>Head, face ( including eyes &amp; ears) &amp; neck</td>
<td>48 (41)</td>
</tr>
<tr>
<td>Lower body</td>
<td>4 (3)</td>
</tr>
<tr>
<td>Other</td>
<td>7 (6)</td>
</tr>
<tr>
<td>Total</td>
<td>207</td>
</tr>
</tbody>
</table>

Ω Participants could provide more than one answer

Bruising was the most common type of physical injury sustained and was reported by three quarters of those who reported an injury, and occurred in 42% of all injuries sustained. “Other types” of trauma reported by participants included attempted strangulation and hair being pulled out (n = 5). Participants could select from a list of injuries and on average each participants reported two types of physical injury. See Table 28 for details.
4.5.3.3 Emotional response

A range of emotional responses were reported as a consequence of exposure to an episode of violence and these results are summarised in Table 29. Anger was the most common emotion reported, acknowledged by 250 nurses (65%). On average at least three emotional responses were reported for each participant who answered this question. Nurses frequently reported negative emotions such as unhappiness; a feeling of powerlessness, shock and surprise, anxiety and emotional blunting. Other emotional responses reported included shame, relationship issues, chronic pain/disability, panic attacks and Post Traumatic Stress Disorder (PTSD). Some of these emotional responses constituted long-term issues including depression, chronic pain or disability, altered sleep patterns, an increase in the use of alcohol and/or other substances and PTSD.
Table 29: Emotional Responses (n = 387)

<table>
<thead>
<tr>
<th>Emotion experienced</th>
<th>Total responsesΩ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>250 (65)</td>
</tr>
<tr>
<td>Unhappiness</td>
<td>150 (39)</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>134 (35)</td>
</tr>
<tr>
<td>Shock/surprise</td>
<td>128 (33)</td>
</tr>
<tr>
<td>Fear/anxiety re future episodes</td>
<td>108 (28)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>77 (20)</td>
</tr>
<tr>
<td>Emotional blunting</td>
<td>77 (20)</td>
</tr>
<tr>
<td>Altered sleep patterns</td>
<td>70 (18)</td>
</tr>
<tr>
<td>Irritability</td>
<td>58 (15)</td>
</tr>
<tr>
<td>Degradation</td>
<td>47 (12)</td>
</tr>
<tr>
<td>Withdrawal from people/situations</td>
<td>28 (7)</td>
</tr>
<tr>
<td>Guilt</td>
<td>28 (7)</td>
</tr>
<tr>
<td>Depression/low mood</td>
<td>27 (7)</td>
</tr>
<tr>
<td>Increase in use of alcohol or other substances/medications</td>
<td>24 (6)</td>
</tr>
<tr>
<td>Nightmares/flashbacks</td>
<td>19 (5)</td>
</tr>
<tr>
<td>Weight loss/gain</td>
<td>13 (3)</td>
</tr>
<tr>
<td>Other</td>
<td>22 (6)</td>
</tr>
<tr>
<td>Total</td>
<td>1260</td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these answers

Data were further analysed by region and no statistically significant differences were identified between emotions experienced by nurses following an episode of patient-related violence and region. Please see Table 30.
Table 30: Emotion experienced by participants by region (n = 353) § Ω ¥  

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>108 (50)</td>
<td>99 (46)</td>
<td>9 (4)</td>
<td>216 (61)</td>
<td>2</td>
<td>0.11</td>
<td>0.944</td>
</tr>
<tr>
<td>Unhappiness</td>
<td>78 (58)</td>
<td>58 (43)</td>
<td>3 (2)</td>
<td>139 (39)</td>
<td>2</td>
<td>3.39</td>
<td>0.184†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerlessness</td>
<td>61 (51)</td>
<td>50 (42)</td>
<td>8 (7)</td>
<td>119 (34)</td>
<td>2</td>
<td>2.56</td>
<td>0.278</td>
</tr>
<tr>
<td>Shock/surprise</td>
<td>55 (48)</td>
<td>52 (45)</td>
<td>8 (7)</td>
<td>115 (33)</td>
<td>2</td>
<td>2.25</td>
<td>0.324</td>
</tr>
<tr>
<td>Fear/anxiety re future episodes</td>
<td>49 (47)</td>
<td>50 (48)</td>
<td>6 (6)</td>
<td>105 (30)</td>
<td>2</td>
<td>0.75</td>
<td>0.689</td>
</tr>
<tr>
<td>Anxiety</td>
<td>37 (51)</td>
<td>33 (46)</td>
<td>2 (3)</td>
<td>72 (21)</td>
<td>2</td>
<td>0.61</td>
<td>0.738†</td>
</tr>
<tr>
<td>Emotional blunting</td>
<td>38 (56)</td>
<td>29 (43)</td>
<td>1 (1)</td>
<td>68 (19)</td>
<td>2</td>
<td>2.48</td>
<td>0.289†</td>
</tr>
<tr>
<td>Altered sleep patterns</td>
<td>34 (52)</td>
<td>30 (46)</td>
<td>1 (2)</td>
<td>65 (18)</td>
<td>2</td>
<td>1.57</td>
<td>0.457†</td>
</tr>
<tr>
<td>Irritability</td>
<td>22 (44)</td>
<td>27 (54)</td>
<td>1 (2)</td>
<td>50 (14)</td>
<td>2</td>
<td>1.82</td>
<td>0.403†</td>
</tr>
<tr>
<td>Degradation</td>
<td>19 (49)</td>
<td>20 (51)</td>
<td>0 (0)</td>
<td>39 (11)</td>
<td>2</td>
<td>2.13</td>
<td>0.344†</td>
</tr>
<tr>
<td>Withdrawal from people/situations</td>
<td>11 (48)</td>
<td>12 (52)</td>
<td>0 (0)</td>
<td>23 (7)</td>
<td>2</td>
<td>1.28</td>
<td>0.529†</td>
</tr>
<tr>
<td>Guilt</td>
<td>14 (54)</td>
<td>11 (43)</td>
<td>1 (4)</td>
<td>26 (7)</td>
<td>2</td>
<td>0.22</td>
<td>0.894†</td>
</tr>
<tr>
<td>Depression/low mood</td>
<td>11 (50)</td>
<td>11 (50)</td>
<td>0 (0)</td>
<td>22 (6)</td>
<td>2</td>
<td>1.10</td>
<td>0.577†</td>
</tr>
<tr>
<td>Increase in use of alcohol or other</td>
<td>11 (50)</td>
<td>10 (50)</td>
<td>0 (0)</td>
<td>21 (6)</td>
<td>2</td>
<td>1.03</td>
<td>0.596†</td>
</tr>
<tr>
<td>substances/medications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nightmares/flashbacks</td>
<td>11 (61)</td>
<td>7 (39)</td>
<td>0 (0)</td>
<td>18 (5)</td>
<td>2</td>
<td>1.57</td>
<td>0.456†</td>
</tr>
<tr>
<td>Weight loss/gain</td>
<td>7 (64)</td>
<td>4 (36)</td>
<td>0 (0)</td>
<td>11 (3)</td>
<td>2</td>
<td>1.20</td>
<td>0.549†</td>
</tr>
</tbody>
</table>

- †Pearson’s chi-squared
- ‡ Fisher’s exact test
- § Only 353 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.5.3.4 Professional effects

Professional impacts also were reported by nurses who had experienced patient-related violence, with a change in practice acknowledged. The majority of nurses (n = 276, 76%) provided responses that their experience with violence had directly impacted on their interaction with patients. This included feeling less empathy towards patients, a decline in the quality of care afforded patients and avoidance of patients. Almost one-third of nurses had either left or considered leaving the ED (n = 147, 31%); 69 (19%) had left or had considered leaving nursing altogether while a further 78 (22%) had left or considered relocating to clinical areas they perceived as being at lower risk for violent episodes. Other responses indicated diminished capacity to perform in a professional role (reduced morale, burnout/stress, and conflict with co-workers); and a perceived loss of competence/coping ability (diminishing/minimising the event, depersonalising the event and feelings of professional incompetence and self-doubt). On average three emotional effects were reported for each participant who answered this question. Please see Table 31.
### Table 31: Professional effects (n = 361)

<table>
<thead>
<tr>
<th>Professional effects</th>
<th>Total responsesΩ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of empathy towards patients</td>
<td>162 (45)</td>
</tr>
<tr>
<td>Reduced morale</td>
<td>138 (38)</td>
</tr>
<tr>
<td>Diminishing/minimising the event</td>
<td>124 (34)</td>
</tr>
<tr>
<td>Depersonalising the event</td>
<td>89 (25)</td>
</tr>
<tr>
<td>Burnout/stress</td>
<td>84 (23)</td>
</tr>
<tr>
<td>Avoidance of patients</td>
<td>79 (22)</td>
</tr>
<tr>
<td>Considered leaving the ED – to transfer to a lower risk area</td>
<td>78 (22)</td>
</tr>
<tr>
<td>Feelings of professional incompetence and self-doubt</td>
<td>74 (21)</td>
</tr>
<tr>
<td>Considered leaving nursing altogether</td>
<td>69 (19)</td>
</tr>
<tr>
<td>Decline in quality of care afforded patients</td>
<td>35 (10)</td>
</tr>
<tr>
<td>Conflict with co-workers</td>
<td>18 (5)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>950</strong></td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these answers

Data were further analysed according to region and the results are shown in Table 32 and no statistically significant differences were identified between the professional responses experienced by nurses across regions.
<table>
<thead>
<tr>
<th>Professional effects</th>
<th>Metropolitan</th>
<th>Regional</th>
<th>Other</th>
<th>Total</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of empathy towards patients</td>
<td>75 (54)</td>
<td>62 (44)</td>
<td>3 (2)</td>
<td>140 (40)</td>
<td>2</td>
<td>2.45</td>
<td>0.197†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.211‡</td>
</tr>
<tr>
<td>Reduced morale</td>
<td>62 (51)</td>
<td>55 (45)</td>
<td>5 (4)</td>
<td>121 (34)</td>
<td>2</td>
<td>0.24</td>
<td>0.888</td>
</tr>
<tr>
<td>Diminishing/minimising the event</td>
<td>55 (50)</td>
<td>47 (42)</td>
<td>9 (8)</td>
<td>111 (31)</td>
<td>2</td>
<td>4.83</td>
<td>0.089</td>
</tr>
<tr>
<td>Depersonalising the event</td>
<td>38 (48)</td>
<td>38 (48)</td>
<td>3 (4)</td>
<td>79 (22)</td>
<td>2</td>
<td>0.20</td>
<td>0.905†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.953‡</td>
</tr>
<tr>
<td>Burnout/stress</td>
<td>37 (49)</td>
<td>34 (45)</td>
<td>4 (5)</td>
<td>75 (21)</td>
<td>2</td>
<td>0.17</td>
<td>0.918†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.905‡</td>
</tr>
<tr>
<td>avoidance of patients</td>
<td>38 (51)</td>
<td>35 (47)</td>
<td>1 (1)</td>
<td>74 (21)</td>
<td>2</td>
<td>1.99</td>
<td>0.370†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.436‡</td>
</tr>
<tr>
<td>Considered leaving the ED – to transfer to a lower risk area</td>
<td>38 (54)</td>
<td>31 (44)</td>
<td>2 (3)</td>
<td>71 (20)</td>
<td>2</td>
<td>1.54</td>
<td>0.451†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.528‡</td>
</tr>
<tr>
<td>Feelings of professional incompetence and self-doubt</td>
<td>37 (54)</td>
<td>30 (43)</td>
<td>2 (3)</td>
<td>69 (20)</td>
<td>2</td>
<td>0.86</td>
<td>0.650†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.728‡</td>
</tr>
<tr>
<td>Considered leaving nursing altogether</td>
<td>31 (53)</td>
<td>28 (47)</td>
<td>0 (0)</td>
<td>59 (17)</td>
<td>2</td>
<td>3.16</td>
<td>0.206†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.209‡</td>
</tr>
<tr>
<td>Decline in quality of care afforded patients</td>
<td>16 (47)</td>
<td>18 (53)</td>
<td>0 (0)</td>
<td>34 (10)</td>
<td>2</td>
<td>2.03</td>
<td>0.362†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.449‡</td>
</tr>
<tr>
<td>Conflict with co-workers</td>
<td>8 (47)</td>
<td>8 (47)</td>
<td>1 (6)</td>
<td>17 (5)</td>
<td>2</td>
<td>0.10</td>
<td>0.950†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.755‡</td>
</tr>
</tbody>
</table>

- †Pearson’s chi-squared
- ‡Fisher’s exact test
- §Only 353 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.5.3.5  Impact on ability to work

Despite the physical and psychological injuries reported by participants and the personal and professional responses experienced following episodes of violence from patients, only 18 nurses of the 422 who answered this question (4%) reported that they had taken time off work as a consequence. Data were further analysed according to region with the following results: metropolitan (n = 11/185, 6%), regional (n = 5/173, 3%) and other/remote (n = 1/17, 6%) which was not statistically significant (chi-squared = 2.7, p = 0.438) §2. Five out of 418 participants (1%) had suffered a permanent disability necessitating a change in work duties or an inability to work. This included three metropolitan participants (3/184, 2%) and one each from regional (1/170, 1%) and other/remote (1/17, 6%) areas in a result that was not statistically significant (chi-squared = 4.6, p = 0.208).

4.6  Risk prevention and risk management strategies

The third study aim was to uncover ED nurses’ perceptions of risk prevention and risk management strategies adopted by their employer. This section reports data from the 455 participants who reported being involved in violent episodes in the previous six months in the survey.

4.6.1  Reporting of episodes of patient-related violence at work

Most nurses reported episodes of patient-related violence in their organisation (n = 319/453, 70%), however they did so selectively. More than three quarters reported “some” episodes: 251/330 (76%), while only 79/330 (24%) reported all episodes.

§ Only 17 participants provided postcodes in response to this question
Data were analysed according to geographic location and a statistically significant difference was identified between reporting of “some episodes” which was significantly more frequent in regional areas compared to metropolitan and remote (p = 0.047). A sub-set analysis was performed to exclude the influence of the “other group” and a statistically significant difference between metropolitan areas and regional areas was confirmed: (p = 0.009; chi-squared = 6.74). These figures illustrate that it was infrequent for nurses to report “all” episodes of patient-related violence, however most reported “some” episodes. Please see Table 33.
Table 33: Reporting of episodes of violence

<table>
<thead>
<tr>
<th>Region (Reported episodes %)</th>
<th>Metropolitan (n = 141) (%)</th>
<th>Regional (n = 136) (%)</th>
<th>Other (n = 15) (%)</th>
<th>Missing postcode (n = 38)</th>
<th>Total (n = 330) (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported ALL episodes</td>
<td>46 (33)</td>
<td>27 (20)</td>
<td>2 (13)</td>
<td>4</td>
<td>79 (24)</td>
<td>2</td>
<td>5.23</td>
<td>0.073† 0.082‡</td>
</tr>
<tr>
<td>Reported SOME episodes</td>
<td>95 (67)</td>
<td>109 (80)</td>
<td>13 (87)</td>
<td>34</td>
<td>251 (76)</td>
<td>2</td>
<td>6.11</td>
<td>0.047</td>
</tr>
</tbody>
</table>

- §Only 292 participants provided postcodes in response to this question
- † Pearson’s chi-squared
- ‡ Fisher’s exact test
4.6.1.1 Reasons for reporting

Participants who reported episodes of violence were asked to describe why they decided to do so and these results are summarised in Table 34.Æ

The main reasons for reporting were that it was a mandatory requirement of the organisation: “…hospital requirement…” (³p36); and to provide a record of the episode to inform management and colleagues: “…to keep a record so managers aware of severity of the problem…” (p20); “…standard procedures to track patients and identify re-offenders/increasingly violent patients. Also to warn other staff of potentially violent patients…” (p276); “…trying to get a case to have security at workplace and/or have Code Grey initiated…” (p328).

A Code Grey is defined as a hospital-wide internal security response to actual aggressive behaviour and a Code Black refers to a hospital-wide internal security response to actual or potential aggression involving a weapon or serious threat to personal safety (Victorian Government, 2005). Episodes also were reported if a Code Black or Grey had been called or if security and/or police involvement was necessary: “…code black called - RISKMAN must then be completed = reporting…” (p42); “…mandatory with code black call…” (p227). Safety issues and the severity of the episode also were cited as reasons for reporting: “…felt very unsafe and scared at times. Patients - mental health issues and/or drug affected…” (p19); “…I only report severe abuse. Most mental health/intoxicated people are abusive/uncooperative; depending on the shift you

Æ These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.

³ “p” refers to participants
Some participants stated that they did not report episodes for various reasons: “...I didn’t report as I felt I handled the situations effectively myself - also verbal violence is so common I consider it normal behaviour in the ED…” (p21); “…time constraints. IIMS online reporting not user friendly…” (p83). Others discussed the need to report repeat offenders: “…the patient was a repeat offender and became aggressive…” (p112); “…patients - frequent offenders that nobody reports so I decided that someone had to formalise a complaint about them…some patients have been “rewarded” with immediate medical treatment after being abusive at triage…” (p476).

### Table 34: Reasons for reporting episodes of patient-related violence (n = 311)

<table>
<thead>
<tr>
<th>Category</th>
<th>Responses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting is required by organisation</td>
<td>55 (18)</td>
</tr>
<tr>
<td>To have a record of the episode</td>
<td>54 (17)</td>
</tr>
<tr>
<td>Code Black/Grey called Duress/Security/Police involved</td>
<td>41 (13)</td>
</tr>
<tr>
<td>Safety issues/fearful</td>
<td>40 (13)</td>
</tr>
<tr>
<td>Abuse &amp; escalation (severity)</td>
<td>32 (10)</td>
</tr>
<tr>
<td>Potential complaint/liability/charges (legal factors)</td>
<td>13 (4)</td>
</tr>
<tr>
<td>Injury or property damage resulted</td>
<td>13 (4)</td>
</tr>
<tr>
<td>Physical violence</td>
<td>10 (3)</td>
</tr>
<tr>
<td>Did not report (time, reporting process or not significant)</td>
<td>10 (3)</td>
</tr>
<tr>
<td>Repeat offender</td>
<td>9 (3)</td>
</tr>
<tr>
<td>Threats made</td>
<td>8 (3)</td>
</tr>
<tr>
<td>Psychological trauma/distressed</td>
<td>6 (2)</td>
</tr>
<tr>
<td>Other</td>
<td>16 (5)</td>
</tr>
<tr>
<td>Multiples of above codes</td>
<td>4 (2)</td>
</tr>
</tbody>
</table>
4.6.1.2 Barriers to reporting

When asked to elaborate on the reasons for reporting only “some” episodes of patient-related violence, some participants answered that the episodes had been reported verbally only to staff members or documented in the patient notes. The barriers to reporting episodes are summarised in Table 35. On average each participant reported more than three barriers each. The most frequent barriers cited by participants included time constraints; the volume of episodes; a perception that the patient had diminished responsibility due to their physical condition or cognitive state; the belief that nothing would change as a consequence of reporting; the perception that such episodes were an accepted and expected part of their day to day job and perceived lack of follow-up or response from management. Other barriers cited included: - fear of the consequences of reporting: “…having to go to court (maybe) and face the perpetrator…” (p256) and a lack of support from colleagues in security: “…contacted security when one episode occurred - got told ”he always behaves like this!” (p356).

Over a third of participant responses about barriers to change referred to deficiencies in the actions of management, either directly: “lack of follow up from management” (n = 103, 35%); or indirectly: “don’t expect anything to change” (n = 137, 46%); and “it is an accepted/expected part of the job” (n = 123, 41%).

4 æ These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.

4 “p” refers to participants
<table>
<thead>
<tr>
<th>Barrier</th>
<th>Total responses Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time constraints</td>
<td>168 (57)</td>
</tr>
<tr>
<td>Too many episodes/too busy to report</td>
<td>155 (52)</td>
</tr>
<tr>
<td>Diminished responsibility of patient e.g. cognitively impaired</td>
<td>140 (47)</td>
</tr>
<tr>
<td>Don’t expect anything to change in the long term</td>
<td>137 (46)</td>
</tr>
<tr>
<td>It is an accepted/expected part of the job</td>
<td>123 (41)</td>
</tr>
<tr>
<td>Lack of follow up/response from management</td>
<td>103 (35)</td>
</tr>
<tr>
<td>Process too complicated</td>
<td>85 (29)</td>
</tr>
<tr>
<td>Feel they can manage episodes effectively</td>
<td>84 (28)</td>
</tr>
<tr>
<td>Not sure how to report</td>
<td>12 (4)</td>
</tr>
<tr>
<td>Fear of being blamed for episode</td>
<td>11 (4)</td>
</tr>
<tr>
<td>Fear of lack of support from colleagues</td>
<td>6 (2)</td>
</tr>
<tr>
<td>Other</td>
<td>12 (4)</td>
</tr>
<tr>
<td>Total</td>
<td>1016</td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these items

Data were analysed according to region and no statistically significant difference was identified as shown in Table 36.
<table>
<thead>
<tr>
<th>Barrier</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time constraints</td>
<td>76 (52)</td>
<td>63 (43)</td>
<td>6 (4)</td>
<td>145 (54)</td>
<td>2</td>
<td>1.35</td>
<td>0.717†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.678‡</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too many episodes/too busy to report</td>
<td>77 (57)</td>
<td>51 (38)</td>
<td>8 (6)</td>
<td>136 (50)</td>
<td>2</td>
<td>6.3</td>
<td>0.099</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diminished responsibility of patient e.g.</td>
<td>62 (54)</td>
<td>45 (39)</td>
<td>7 (6)</td>
<td>114 (42)</td>
<td>2</td>
<td>3.20</td>
<td>0.202</td>
</tr>
<tr>
<td>cognitively impaired</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t expect anything to change in the long</td>
<td>56 (47)</td>
<td>56 (47)</td>
<td>6 (5)</td>
<td>118 (44)</td>
<td>2</td>
<td>0.31</td>
<td>0.855</td>
</tr>
<tr>
<td>term</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is an accepted/expected part of the job</td>
<td>54 (50)</td>
<td>51 (47)</td>
<td>3 (3)</td>
<td>108 (40)</td>
<td>2</td>
<td>1.6</td>
<td>0.663†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.714‡</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of follow up/response from management</td>
<td>40 (45)</td>
<td>41 (46)</td>
<td>8 (9)</td>
<td>89 (33)</td>
<td>2</td>
<td>5.5</td>
<td>0.137</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process too complicated</td>
<td>37 (52)</td>
<td>30 (42)</td>
<td>4 (6)</td>
<td>71 (26)</td>
<td>2</td>
<td>2.5</td>
<td>0.484†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.641‡</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feel they can manage episodes effectively</td>
<td>40 (49)</td>
<td>37 (45)</td>
<td>5 (6)</td>
<td>82 (30)</td>
<td>2</td>
<td>1.2</td>
<td>0.764</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not sure how to report</td>
<td>4 (40)</td>
<td>6 (60)</td>
<td>0 (0)</td>
<td>10 (4)</td>
<td>2</td>
<td>1.25</td>
<td>0.742†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.705‡</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of being blamed for episode</td>
<td>4 (40)</td>
<td>6 (60)</td>
<td>0 (0)</td>
<td>10 (4)</td>
<td>2</td>
<td>1.2</td>
<td>0.756†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.465‡</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of lack of support from colleagues</td>
<td>1 (25)</td>
<td>3 (75)</td>
<td>0 (0)</td>
<td>4 (&lt; 1)</td>
<td>2</td>
<td>1.6</td>
<td>0.668†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.705‡</td>
</tr>
</tbody>
</table>

- † Pearson's chi-squared
- ‡ Fisher's exact test
- § Only 271 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.6.1.3 Reporting methods

The most common reporting methods reported were informal in nature and included information given verbally to other staff at handover or at other opportunistic times such as morning or afternoon tea, with the most frequently used method of documentation in the patient notes which was reported by more than three quarters of participants (n = 257/337, 76%). Formal reporting methods, paper or electronic, were used by 74% of participants. Other reporting methods listed included notifying the police or security either directly or through the activation of Codes Grey or Black. Participants reported an average of three reporting methods each for this question. Please see Table 37.

<table>
<thead>
<tr>
<th>Reporting methods</th>
<th>Total responses Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documented in patient notes</td>
<td>257 (76)</td>
</tr>
<tr>
<td>Verbally to manager/team leader</td>
<td>230 (68)</td>
</tr>
<tr>
<td>Informally at handover</td>
<td>223 (66)</td>
</tr>
<tr>
<td>Electronic report e.g. Incident Information Management System</td>
<td>176 (52)</td>
</tr>
<tr>
<td>Paper report</td>
<td>75 (22)</td>
</tr>
<tr>
<td>Other</td>
<td>34 (10)</td>
</tr>
<tr>
<td>Total</td>
<td>995</td>
</tr>
</tbody>
</table>

Ω Participants could choose more than 1 item

Data were further analysed according to geographic location and the results were consistent between metropolitan and regional areas as shown in Table 38.
Table 38: Reporting method by region (n = 307) § Ω ¥

<table>
<thead>
<tr>
<th>Method</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documented in patient notes</td>
<td>113 (50)</td>
<td>102 (45)</td>
<td>14 (6)</td>
<td>227 (74)</td>
<td>2</td>
<td>3.71</td>
<td>0.294</td>
</tr>
<tr>
<td>Verbally to manager/team leader</td>
<td>98 (48)</td>
<td>96 (47)</td>
<td>9 (4)</td>
<td>206 (67)</td>
<td>2</td>
<td>0.23</td>
<td>0.973</td>
</tr>
<tr>
<td>Informally at handover</td>
<td>100 (50)</td>
<td>87 (44)</td>
<td>11 (6)</td>
<td>199 (65)</td>
<td>2</td>
<td>1.69</td>
<td>0.639</td>
</tr>
<tr>
<td>Electronic report e.g. Incident Information Management System</td>
<td>71 (46)</td>
<td>80 (52)</td>
<td>4 (3)</td>
<td>155 (50)</td>
<td>2</td>
<td>3.89</td>
<td>0.274†</td>
</tr>
<tr>
<td>Paper report</td>
<td>28 (46)</td>
<td>30 (49)</td>
<td>3 (5)</td>
<td>61 (20)</td>
<td>2</td>
<td>0.68</td>
<td>0.712†</td>
</tr>
</tbody>
</table>

- † Pearson’s chi-squared
- ‡ Fisher’s exact test
- § Only 307 participants provided postcodes in response to this question
- Ω Participants could choose more than 1 item
- ¥ Percentages have been calculated as row percentages
4.6.2 Management response

This section reports data from the 455 participants who reported being involved in violent episodes in the previous six months in the survey.

More than half of those surveyed (n = 256/395, 65%) reported that they were satisfied with their employer’s initial response to the reported episode; however 139 participants (35%) were not satisfied. Data were further analysed according to geographic location and no significant differences were found between nurses’ satisfaction with employer response following an episode of patient-related violence and location. The results were: metropolitan (n = 122/177, 69%), regional (n = 97/157, 62%) and other/remote (n = 10/16, 63%) (Chi-squared = 2.44, p = 0.486).

Two hundred and sixty five respondents indicated that they had received immediate support from management and/or counselling or debriefing; however 165 nurses stated that they had received no response. Action against the perpetrator was reported by 75 participants indicating that a verbal or written warning had been issued, and police involvement was reported by 56 nurses. Please see Table 39.

<table>
<thead>
<tr>
<th>Response</th>
<th>Total responses Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offered immediate support</td>
<td>186 (46)</td>
</tr>
<tr>
<td>No response</td>
<td>165 (41)</td>
</tr>
<tr>
<td>Offered counselling/debriefing</td>
<td>79 (19)</td>
</tr>
<tr>
<td>Verbal warning given to offender</td>
<td>68 (17)</td>
</tr>
<tr>
<td>Police involved</td>
<td>56 (14)</td>
</tr>
<tr>
<td>Written warning to offender</td>
<td>7 (2)</td>
</tr>
<tr>
<td>Blamed nurse/reporter</td>
<td>3 (1)</td>
</tr>
<tr>
<td>Total</td>
<td>564</td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these items
Data for employer response to episodes of violence were further analysed according to geographical location and a statistically significant difference identified for the response “written warning to offender” and this was more common in regional and remote areas compared to metropolitan. However the low number of responses for this response means that the results should be treated with caution. By contrast, more participants in metropolitan areas reported that a verbal warning had been given to an offender (n = 39/62, 63%), however this was not found to be statistically significant and the small number involved mean this result should be interpreted with caution. Please see Table 40.
Table 40: Employer response to reported violence by region (n = 407) § Ω ¥

<table>
<thead>
<tr>
<th>Response</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offered immediate support</td>
<td>91 (55)</td>
<td>66 (40)</td>
<td>8 (5)</td>
<td>165 (41)</td>
<td>2</td>
<td>4.1</td>
<td>0.250</td>
</tr>
<tr>
<td>No response</td>
<td>69 (47)</td>
<td>71 (48)</td>
<td>8 (5)</td>
<td>148 (36)</td>
<td>2</td>
<td>1.6</td>
<td>0.646</td>
</tr>
<tr>
<td>Offered counselling/debriefing</td>
<td>41 (58)</td>
<td>28 (39)</td>
<td>2 (3)</td>
<td>71 (17)</td>
<td>2</td>
<td>2.9</td>
<td>0.407†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.306‡</td>
</tr>
<tr>
<td>Verbal warning given to offender</td>
<td>39 (63)</td>
<td>22 (35)</td>
<td>1 (2)</td>
<td>62 (15)</td>
<td>2</td>
<td>6.7</td>
<td>0.083†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.065‡</td>
</tr>
<tr>
<td>Police involved</td>
<td>20 (43)</td>
<td>24 (52)</td>
<td>2 (4)</td>
<td>46 (11)</td>
<td>2</td>
<td>2.7</td>
<td>0.448†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.685‡</td>
</tr>
<tr>
<td>Written warning to offender</td>
<td>1 (14)</td>
<td>4 (57)</td>
<td>2 (29)</td>
<td>7 (2)</td>
<td>2</td>
<td>13.8</td>
<td>0.003†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.021‡</td>
</tr>
<tr>
<td>Blamed nurse/reporter</td>
<td>1 (33)</td>
<td>1 (33)</td>
<td>1 (33)</td>
<td>3 (1)</td>
<td>2</td>
<td>7.2</td>
<td>0.067†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.128‡</td>
</tr>
</tbody>
</table>

- † Pearson’s chi-squared
- ‡ Fisher’s exact test
- § Only 407 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.6.3 Management of episodes

This section reports data from all participants.

4.6.3.1 Actions following episodes of patient-related violence: Coping methods and support

Nurses reported an average of two coping methods each and the majority of nurses reported that informal debriefing was their preferred way of coping with the aftermath of an episode of violence. Informal debriefing involved other staff members or family and friends. Formal channels were accessed less frequently, and included talking with management, formal debriefing, employer counselling services and private counselling. Forty four nurses took no action following an episode and 16 stated that “nothing helped”. Other actions cited included exercise which was reported by 14 nurses as being a positive way of coping with the after effects of an episode of violence. Please refer to Table 41.
<table>
<thead>
<tr>
<th>Action</th>
<th>Total response Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal debriefing with other staff</td>
<td>441 (87)</td>
</tr>
<tr>
<td>Talking with friends &amp; family</td>
<td>261 (51)</td>
</tr>
<tr>
<td>Talking with Nurse Unit Manager/managers</td>
<td>210 (41)</td>
</tr>
<tr>
<td>Formal group debriefing</td>
<td>83 (16)</td>
</tr>
<tr>
<td>Took no action</td>
<td>44 (9)</td>
</tr>
<tr>
<td>Employer counselling services e.g. Employee Assistance Program</td>
<td>43 (9)</td>
</tr>
<tr>
<td>Private counselling services</td>
<td>19 (4)</td>
</tr>
<tr>
<td>Talking with Human Resource or Occupational Health &amp; Safety representative</td>
<td>17 (3)</td>
</tr>
<tr>
<td>Talking with union or professional association</td>
<td>16 (3)</td>
</tr>
<tr>
<td>Nothing helped</td>
<td>16 (3)</td>
</tr>
<tr>
<td>Other</td>
<td>28 (6)</td>
</tr>
<tr>
<td>Total</td>
<td>1178</td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these responses

Data were further analysed according to region and no statistical differences were identified as shown in Table 42.
Table 42: Actions effective in dealing with consequences of patient-related violence by region (n = 421) § Ω ¥

<table>
<thead>
<tr>
<th>Actions</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal debriefing with other staff</td>
<td>194 (50)</td>
<td>178 (46)</td>
<td>18 (5)</td>
<td>390 (93)</td>
<td>2</td>
<td>3.49</td>
<td>0.840</td>
</tr>
<tr>
<td>Talking with friends &amp; family</td>
<td>117 (49)</td>
<td>111 (47)</td>
<td>9 (4)</td>
<td>237 (56)</td>
<td>2</td>
<td>4.54</td>
<td>0.209</td>
</tr>
<tr>
<td>Talking with Nurse Unit Manager/managers</td>
<td>101 (54)</td>
<td>79 (42)</td>
<td>7 (4)</td>
<td>187 (44)</td>
<td>2</td>
<td>3.19</td>
<td>0.364</td>
</tr>
<tr>
<td>Formal group debriefing</td>
<td>39 (53)</td>
<td>33 (45)</td>
<td>2 (3)</td>
<td>74 (18)</td>
<td>2</td>
<td>1.37</td>
<td>0.654†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.722‡</td>
</tr>
<tr>
<td>Took no action</td>
<td>17 (43)</td>
<td>20 (50)</td>
<td>3 (8)</td>
<td>40 (10)</td>
<td>2</td>
<td>3.89</td>
<td>0.480†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.373‡</td>
</tr>
<tr>
<td>Employer counselling services e.g. Employee Assistance Program</td>
<td>25 (64)</td>
<td>12 (31)</td>
<td>2 (5)</td>
<td>39 (9)</td>
<td>2</td>
<td>4.10</td>
<td>0.129†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.098‡</td>
</tr>
<tr>
<td>Private counselling services</td>
<td>7 (41)</td>
<td>9 (53)</td>
<td>1 (6)</td>
<td>17 (4)</td>
<td>2</td>
<td>0.50</td>
<td>0.781†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.611‡</td>
</tr>
<tr>
<td>Talking with Human Resources or Occupational Health &amp; Safety representative</td>
<td>11 (73)</td>
<td>4 (27)</td>
<td>0 (0)</td>
<td>15 (4)</td>
<td>2</td>
<td>3.79</td>
<td>0.152†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.235‡</td>
</tr>
<tr>
<td>Talking with union or professional association</td>
<td>10 (67)</td>
<td>5 (33)</td>
<td>0 (0)</td>
<td>15 (4)</td>
<td>2</td>
<td>2.18</td>
<td>0.336†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.440‡</td>
</tr>
<tr>
<td>Nothing helped</td>
<td>5 (38)</td>
<td>7 (54)</td>
<td>1 (8)</td>
<td>13 (3)</td>
<td>2</td>
<td>0.81</td>
<td>0.668†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.447‡</td>
</tr>
</tbody>
</table>

- † Pearson’s chi-squared
- ‡ Fisher’s exact test
- § Only 421 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.6.3.2 Actions following episodes of patient-related violence: Support and follow up

Participants were asked if they were offered access to recognised counselling services following their most significant episode of patient-related violence in the preceding 6 months. Almost three quarters of the 505 nurses who answered this question reported that they had not been offered access or that they felt this was not applicable (n = 356, 70%). In addition 273/438 (62%) nurses stated that they had not been provided with adequate information, support and follow up or that this was not applicable in their situation.

These data were further analysed according to geographic location and no statistical differences were found between regions as shown in Table 43.
<table>
<thead>
<tr>
<th>Access to counselling</th>
<th>Metropolitan (n = 225) (%)</th>
<th>Regional (n = 203) (%)</th>
<th>Other (n = 21) (%)</th>
<th>Total (n = 449) § (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>67 (30)</td>
<td>62 (31)</td>
<td>6 (29)</td>
<td>135 (30)</td>
<td>2</td>
<td>1.12</td>
<td>0.981</td>
</tr>
<tr>
<td>No</td>
<td>114 (51)</td>
<td>103 (51)</td>
<td>12 (57)</td>
<td>229 (51)</td>
<td>2</td>
<td>0.33</td>
<td>0.847</td>
</tr>
<tr>
<td>N/A</td>
<td>44 (20)</td>
<td>38 (19)</td>
<td>3 (14)</td>
<td>85 (19)</td>
<td>2</td>
<td>0.36</td>
<td>0.836†</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adequate follow up</th>
<th>Metropolitan (n = 215) (%)</th>
<th>Regional (n = 196) (%)</th>
<th>Other (n = 19) (%)</th>
<th>Total (n = 430) § (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>98 (46)</td>
<td>80 (41)</td>
<td>8 (42)</td>
<td>186 (43)</td>
<td>2</td>
<td>5.64</td>
<td>0.465</td>
</tr>
<tr>
<td>No</td>
<td>78 (36)</td>
<td>88 (45)</td>
<td>10 (53)</td>
<td>176 (41)</td>
<td>2</td>
<td>4.28</td>
<td>0.118</td>
</tr>
<tr>
<td>Not involved in any episodes</td>
<td>39 (18)</td>
<td>28 (14)</td>
<td>1 (53)</td>
<td>68 (16)</td>
<td>2</td>
<td>2.81</td>
<td>0.246†</td>
</tr>
</tbody>
</table>

† Pearson’s chi-squared
‡ Fisher’s exact test
§ Only 449 and 430 participants respectively provided postcodes in response to these questions
Nurses were asked to elaborate about support and follow up and the main categories that emerged are shown in Table 44. A lack of follow up or response from management was the most common reason stated: “…incident form completed but no follow-up from management as it was considered insignificant…” (p509); “…have never had anyone follow-up a RISKMAN I have submitted regarding a violent or aggressive incident in the ED…” (p456); “…nil support from management… tend to blame others rather than give support to nursing staff…” (p406); “…My manager listened to my story and then proceeded to give me her own examples of violence towards her in the past. I felt that my story was not as significant as hers and therefore not worthy of even a complaint. I almost apologised for bringing it to her attention…” (p388).

Nurses also reported that they felt that they did not require support following an episode or had decided not to report the episode of violence: “…I would not want any anyway. I deal with it myself…” (p457); “…I felt like I wasn’t too concerned about it at the time - and the support available I think would be embarrassing to attend…”(p416); “…after many years on emergency nursing you become less affected emotionally or develop coping mechanisms…” (p392); “…All were verbal abuse where security and police responded promptly, no longer distresses me as I often have to deal with it…” (p71). Other nurses stated that such violence was perceived by themselves and management as just part of the job of ED nursing: “…violence has become an accepted part of my job…” (p526); “…our ED does not wish to acknowledge that violence exists. We are NOT allowed to have posters, material about violence. We do NOT have a policy as ‘it doesn’t happen here’…” (p507); “…just got used to it, it’s like a weekly event…” (p495); “…after 20 years’ experience in the ED, violence has become an unfortunately accepted part of my job…” (p480).

Less than 20% of participants reported that support was offered or available in their department: “…EAP is always there if I feel it’s needed. I am fully supported at work for any incidents…” (p463); “…contacted by senior admin - offered EAP and reassured that
systems will continue to be looked at…” (426). Informal debriefing with colleagues was also discussed: “… we talked about it among ourselves. I wasn’t interested in any real follow up…” (p512)”…; we just talked among ourselves… we were upset… it took some days for me to sort it out in brain - I blame the patient…” (p342); “…After many years of nursing, I find just talking things over with work colleagues is adequate - I have never felt the need for recognised counselling…” (p292).Æ5

Table 44: Support following an episode of patient-related violence (n = 277)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Total responses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of follow up/response</td>
<td>88 (32)</td>
</tr>
<tr>
<td>Support not required/not reported</td>
<td>60 (22)</td>
</tr>
<tr>
<td>Support available</td>
<td>51 (18)</td>
</tr>
<tr>
<td>Part of the job</td>
<td>31 (11)</td>
</tr>
<tr>
<td>Informal debriefing</td>
<td>31 (11)</td>
</tr>
<tr>
<td>Police involvement</td>
<td>5 (2)</td>
</tr>
<tr>
<td>Time constraints</td>
<td>3 (1)</td>
</tr>
<tr>
<td>Other</td>
<td>8 (3)</td>
</tr>
</tbody>
</table>

4.6.4 Employer response

4.6.4.1 Barriers to change

The majority of nurses (n = 406/498, 82%) reported that no changes were introduced following their most significant episode of patient-related violence and these data

Æ These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.

Æ “p” refers to participants

210
were further analysed according to region. This included 174/217 metropolitan nurses (80%), 168/205 regional nurses (82%) and 18/20 from the other/remote category (90%). §

Participants were then asked to suggest reasons for the lack of change, and analysis of these responses is summarised in Table 45. Participants perceived that there was no solution to the problem of patient-related violence due to the volume of episodes and a workplace culture where violence was viewed as an expected part of ED nursing: “…exposure to violence is accepted in the ED…” (p191); “…violent episodes rife within the dept. Problem is all pervasive…” (p240); “…I think it’s assumed that it’s ‘part of the job’…” (p247); “…because it (violence) has become so commonplace it goes unnoticed…” (p313); “…A lot of the violence is verbal and subtle and not something you would be complaining about otherwise you just couldn’t go back to work. When you are full time as I have been in the past these verbal abuses may happen every day - you can’t take it personally…” (p353); “…there are so many we have a saying “if you haven’t been abused six times in your shift you haven’t had a good day…” (p101). Other participants adopted the view that it was too hard or not possible to implement changes following an episode of patient-related violence: “…no practical solution…” (p497); “…it is looked upon as being too hard to address, a one-off situation that won’t happen again therefore doesn’t need addressing…” (p97); “…Impossible to eliminate…” (p57); “…patient was intoxicated on alcohol/drugs - when she strangled me. Security & CDA officers already there: what else could be done - unfortunate result…” (p93).

Another barrier to change that emerged from the data was an unsupportive attitude on the part of management and a tendency to therefore ignore episodes of violence: “…apathy on the part of management…” (p518); “…managers excuse themselves from

---

§ Only 442 participants provided postcodes in response to this question
situations…” (p486); “…we are supposed to be able to withstand such behaviour as management thinks the patient is always right…” (p413); “…they didn’t believe it was significant for a nurse to get hurt…” (p364); “…incident not seen as being important enough to introduce change…” (p283). There was also acknowledgement of the financial cost of changes: “…no finances to introduce changes…” (p323); “…ED is geographic nightmare and would take excessive funds to change the environment…” (p272); “…Cost to implement real changes is too high…” (p255).

Some nurses did not feel that changes were necessary or warranted: “…protocols in place already and followed…” (p446).Æ7

| Table 45: Barriers to change (n = 335) |
|--------------------------------------|----------------------------------|
| **Categories**                       | **Total responses (%)**          |
| No solution                          | 119 (36)                         |
| Unsupportive management includes cost implications | 107 (32) |
| Adequate measures already in place   | 47 (14)                          |
| Not necessary/not applicable/not reported | 29 (9)  |
| Unknown                              | 23 (7)                           |
| Inadequate measures in place         | 5 (1)                            |
| Other                                | 5 (1)                            |

4.6.4.2 Changes implemented

Æ These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.

Æ “p” refers to participants
Immediate changes following an episode of violence were reported to be implemented by 92/498 (18%) participants and these included 43/217 metropolitan participants (20%), 37/205 regional nurses (18%) and 2/20 from the “other/remote” regions (10%) §8. These changes included: increased security presence in the ED and the introduction of duress alarms: “…security upgrade…” (p450); “…after a doctor was assaulted - security officers were employed in ED. Often they are too busy with scheduled psych patients and not able to patrol over very big and busy ED…” (p379). Modification of the ED was also discussed with respect to the environment; access, the use of CCTV and signage: “…installation of CCTV, security door…” (489); “…we now have security guards on night duty for “schoolies week”, Christmas and New Year and other peak celebration times. Also for OSH requirements and to attain minimum standards we now have a screened off triage area - a safe withdrawal room, video monitoring of waiting room and entrance and hazard alarm bells…” (p273). Æ Please see Table 46.

§ Only 442 participants provided postcodes in response to this question

Æ These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.

“p” refers to participants
Table 46: Changes implemented following an episode of patient-related violence (n = 89)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total responsesΩ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased security presence</td>
<td>31 (35)</td>
</tr>
<tr>
<td>Alarms/codes</td>
<td>21 (24)</td>
</tr>
<tr>
<td>Policies/management plans</td>
<td>20 (22)</td>
</tr>
<tr>
<td>Staff training</td>
<td>15 (17)</td>
</tr>
<tr>
<td>Environmental changes/mental health dedicated room</td>
<td>14 (16)</td>
</tr>
<tr>
<td>Staff support/debriefing</td>
<td>12 (13)</td>
</tr>
<tr>
<td>Restricted access/lockdown</td>
<td>7 (8)</td>
</tr>
<tr>
<td>Cameras</td>
<td>6 (7)</td>
</tr>
<tr>
<td>Police/legal</td>
<td>6 (7)</td>
</tr>
<tr>
<td>Signage</td>
<td>5 (6)</td>
</tr>
<tr>
<td>Other</td>
<td>6 (7)</td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
</tr>
</tbody>
</table>

Ω More than 1 category per response was coded

4.6.4.3 Attitude of management

More than half of the participants (n = 314/515, 61%) reported that their immediate managers were approachable and supportive following an episode. However 39% (n = 201/515) reported that their immediate managers or team leaders were only somewhat approachable and supportive, or not at all approachable following an episode of patient-related violence. Fewer nurses reported that members of upper management were supportive with 318 of 506 nurses (63%) reporting that upper management were only somewhat approachable and supportive or not approachable at all following an episode of violence. Data were further analysed according to region and a statistically significant result identified for “upper management” who were perceived to be unsupportive by regional employees more frequently than metropolitan nurses. A sub-set analysis was conducted to confirm this result by excluding the influence of the “other” region and the results were found to be significantly different between the metropolitan and regional areas: p = 0.003, chi-squared = 8.54. Please see Table 47.
### Table 47: Management support by region

<table>
<thead>
<tr>
<th></th>
<th>Metropolitan (n = 229) (%)</th>
<th>Regional (n = 208) (%)</th>
<th>Other (n = 21) (%)</th>
<th>Total (n = 458) § (%)</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immediate management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES</td>
<td>145 (63)</td>
<td>124 (60)</td>
<td>11 (52)</td>
<td>280 (61)</td>
<td>1.38</td>
<td>0.709</td>
</tr>
<tr>
<td>NO</td>
<td>9 (4)</td>
<td>13 (6)</td>
<td>0 (0)</td>
<td>22 (5)</td>
<td>2.82</td>
<td>0.423 †</td>
</tr>
<tr>
<td>SOMEWHAT</td>
<td>75 (33)</td>
<td>71 (34)</td>
<td>10 (48)</td>
<td>156 (34)</td>
<td>1.91</td>
<td>0.592</td>
</tr>
<tr>
<td><strong>Upper management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES</td>
<td>96 (42)</td>
<td>67 (33)</td>
<td>6 (29)</td>
<td>169 (38)</td>
<td>5.15</td>
<td>0.161</td>
</tr>
<tr>
<td>NO</td>
<td>46 (20)</td>
<td>65 (32)</td>
<td>4 (19)</td>
<td>115 (26)</td>
<td>8.15</td>
<td>0.043 †</td>
</tr>
<tr>
<td>SOMEWHAT</td>
<td>84 (37)</td>
<td>71 (35)</td>
<td>11 (52)</td>
<td>166 (37)</td>
<td>2.61</td>
<td>0.456</td>
</tr>
</tbody>
</table>

- § Only 458 and 450 participants respectively provided postcodes in response to these questions
- † Pearson’s chi-squared
- ‡ Fisher’s exact test
4.6.5 Risk prevention strategies

The most common risk prevention strategies identified by ED nurses were duress alarms; restricted access to the department (for example the use of swipe cards); access to training such as aggression minimisation training; referral to the police if a situation deteriorated and the use of safety glass at triage. The use of security was reported by the majority of participants (n = 479/515, 93%) with personnel either based in or near the department. Increased security measures after hours were noted by 33% of participants (n = 170). On average, participants reported eight strategies each in response to this question. Twelve participants noted that the current measures in their department were inadequate and eight reported a lack of a security and/or police presence when requested. Please see Table 48.
Table 48: Risk prevention/minimisation measures (n = 515)

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Total response Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duress alarms</td>
<td>461 (90)</td>
</tr>
<tr>
<td>Restricted access to the department e.g. key or card access</td>
<td>450 (87)</td>
</tr>
<tr>
<td>Access to training e.g. Aggression minimisation training</td>
<td>414 (80)</td>
</tr>
<tr>
<td>Police called if a situation deteriorates</td>
<td>399 (78)</td>
</tr>
<tr>
<td>Safety glass window at triage</td>
<td>377 (73)</td>
</tr>
<tr>
<td>Signage e.g. Zero Tolerance posters</td>
<td>352 (68)</td>
</tr>
<tr>
<td>Security personnel available but based elsewhere in department</td>
<td>287 (56)</td>
</tr>
<tr>
<td>Availability of restraints and policies for their use</td>
<td>286 (56)</td>
</tr>
<tr>
<td>Use of patient management plans</td>
<td>254 (49)</td>
</tr>
<tr>
<td>Security personnel based in department</td>
<td>192 (37)</td>
</tr>
<tr>
<td>Clear policies for management of aggression</td>
<td>179 (35)</td>
</tr>
<tr>
<td>Increased security measures after hours</td>
<td>170 (33)</td>
</tr>
<tr>
<td>Fixing of moveable objects that could be used as weapons e.g. chairs</td>
<td>101 (20)</td>
</tr>
<tr>
<td>Consultation with management about prevention</td>
<td>98 (19)</td>
</tr>
<tr>
<td>Other</td>
<td>25 (&lt;1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4045</strong></td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these responses

These data were categorised for region and significant results were identified for “access to training, for example Aggression Minimisation”, “availability of restraints and policies for their use” and “security personnel based in the department”, which were all more frequently reported in metropolitan locations (p<0.001).

Significant results also were evident with regards to the “presence of safety glass at triage” (p = 0.013) and “clear policies for the management of aggression” (p = 0.024) which also were more frequently reported in metropolitan areas.

A sub-set analysis was conducted on these variables to exclude the influence of the “other” region. The presence of a safety glass window at triage was found to not be statistically significant: p = 0.424, chi-squared = 0.64.
However all other significant variables were confirmed to be statistically significant: “access to training, for example Aggression Minimisation”, “availability of restraints and policies for their use”, “security personnel based in the department” (p-values <0.001); and “clear policies for the management of aggression” was also found to be significant: (p = 0.005, chi-squared = 7.73). All measures were more commonly reported in metropolitan areas. Please see Table 49 for details.
Table 49: Risk prevention/minimisation measures by region (n = 463) § Ω ¥

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duress alarms</td>
<td>206 (50)</td>
<td>186 (45)</td>
<td>18 (4)</td>
<td>410 (89)</td>
<td>2</td>
<td>0.97</td>
<td>0.616</td>
</tr>
<tr>
<td>Restricted access to the department e.g. key or card access</td>
<td>201 (50)</td>
<td>185 (46)</td>
<td>14 (4)</td>
<td>400 (86)</td>
<td>2</td>
<td>5.72</td>
<td>0.057</td>
</tr>
<tr>
<td>Access to training e.g. Aggression minimisation training</td>
<td>198 (55)</td>
<td>148 (41)</td>
<td>16 (4)</td>
<td>362 (79)</td>
<td>2</td>
<td>18.4</td>
<td>&lt;0.001†</td>
</tr>
<tr>
<td>Police called if a situation deteriorates</td>
<td>168 (47)</td>
<td>171 (48)</td>
<td>16 (5)</td>
<td>355 (77)</td>
<td>2</td>
<td>2.43</td>
<td>0.296</td>
</tr>
<tr>
<td>Safety glass window at triage</td>
<td>171 (51)</td>
<td>153 (46)</td>
<td>9 (3)</td>
<td>333 (72)</td>
<td>2</td>
<td>8.67</td>
<td>0.013</td>
</tr>
<tr>
<td>Signage e.g. Zero Tolerance posters</td>
<td>152 (49)</td>
<td>144 (47)</td>
<td>13 (4)</td>
<td>309 (67)</td>
<td>2</td>
<td>0.016</td>
<td>0.925</td>
</tr>
<tr>
<td>Security personnel available but based elsewhere in department</td>
<td>132 (52)</td>
<td>114 (45)</td>
<td>10 (4)</td>
<td>256 (55)</td>
<td>2</td>
<td>1.25</td>
<td>0.535</td>
</tr>
<tr>
<td>Availability of restraints and policies for their use</td>
<td>150 (60)</td>
<td>95 (38)</td>
<td>4 (2)</td>
<td>249 (54)</td>
<td>2</td>
<td>29.57</td>
<td>&lt;0.001†</td>
</tr>
<tr>
<td>Use of patient management plans</td>
<td>123 (54)</td>
<td>92 (41)</td>
<td>12 (5)</td>
<td>227 (49)</td>
<td>2</td>
<td>5.78</td>
<td>0.056</td>
</tr>
<tr>
<td>Security personnel based in department</td>
<td>108 (64)</td>
<td>58 (34)</td>
<td>3 (2)</td>
<td>169 (37)</td>
<td>2</td>
<td>23.53</td>
<td>&lt;0.001†</td>
</tr>
<tr>
<td>Clear policies for management of aggression</td>
<td>93 (58)</td>
<td>61 (38)</td>
<td>6 (4)</td>
<td>160 (35)</td>
<td>2</td>
<td>7.44</td>
<td>0.024</td>
</tr>
<tr>
<td>Increased security measures after hours</td>
<td>78 (52)</td>
<td>67 (45)</td>
<td>4 (3)</td>
<td>149 (32)</td>
<td>2</td>
<td>1.99</td>
<td>0.370†</td>
</tr>
<tr>
<td>Fixing of moveable objects that could be used as weapons e.g. chairs</td>
<td>49 (55)</td>
<td>35 (39)</td>
<td>3 (3)</td>
<td>87 (19)</td>
<td>2</td>
<td>2.17</td>
<td>0.337†</td>
</tr>
<tr>
<td>Consultation with management about prevention</td>
<td>50 (59)</td>
<td>33 (39)</td>
<td>2 (2)</td>
<td>85 (18)</td>
<td>2</td>
<td>4.12</td>
<td>0.127†</td>
</tr>
</tbody>
</table>

- † Pearson’s chi-squared
- ‡ Fisher’s exact test
- § Only 463 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.6.5.1 Follow up strategies

Participants were asked which risk management strategies had been adopted by their employer and 62% (n = 267/432) reported that episodes of patient-related violence were investigated by management with prompt follow up and feedback provided. On average each participant identified three follow up strategies that were utilised at their place of employment. However 15 nurses reported that there were no risk management follow up strategies available at their place of employment while 12 stated that whilst they existed there was a lack of feedback and action on the part of their employer. “Other” risk management follow up strategies included debriefing and counselling of both a formal and informal nature. Please see Table 50 for clarification.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Total responses Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigating reported episodes – prompt follow-up &amp; feedback</td>
<td>267 (62)</td>
</tr>
<tr>
<td>Staff counselling services</td>
<td>231 (54)</td>
</tr>
<tr>
<td>Informal debriefing at handover</td>
<td>210 (49)</td>
</tr>
<tr>
<td>Rotating staff in high risk areas e.g. triage</td>
<td>161 (37)</td>
</tr>
<tr>
<td>Consulting with staff about Occupational Health &amp; Safety issues</td>
<td>154 (36)</td>
</tr>
<tr>
<td>Reporting episodes to police</td>
<td>128 (30)</td>
</tr>
<tr>
<td>Formal debriefing</td>
<td>110 (25)</td>
</tr>
<tr>
<td>External counselling services</td>
<td>110 (25)</td>
</tr>
<tr>
<td>Other</td>
<td>31 (7)</td>
</tr>
<tr>
<td>Total</td>
<td><strong>1402</strong></td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these responses

Risk management follow-up strategies were analysed according to region and the results are shown in Table 51. Except for “reporting episodes to police”, there were more risk management strategies adopted in metropolitan areas and for three of these responses there were significant differences between regions. These significant strategies were: “investigating reported episodes – prompt follow-up and feedback”;

220
“staff counselling services” and “rotating staff in high risk areas, for example triage” which were all found to be more common in metropolitan areas compared to regional and other/remote areas. A sub-set analysis was performed to confirm these results and exclude the influence of the smaller “other” region on results and all results were found to be statistically significant. “Investigating reported episodes – prompt follow-up and feedback”: (p = 0.002, chi-squared = 9.78); “staff counselling services”: (p < 0.001, chi-squared = 12.58) and “rotating staff in high risk areas, for example triage”: (p = 0.001, chi-squared = 10.74).
<table>
<thead>
<tr>
<th>Strategy</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigating reported episodes – prompt follow-up &amp; feedback</td>
<td>137 (57)</td>
<td>94 (39)</td>
<td>8 (3)</td>
<td>239 (59)</td>
<td>2</td>
<td>12.46</td>
<td>0.002</td>
</tr>
<tr>
<td>Staff counselling services</td>
<td>120 (58)</td>
<td>78 (38)</td>
<td>9 (4)</td>
<td>207 (51)</td>
<td>2</td>
<td>12.49</td>
<td>0.006</td>
</tr>
<tr>
<td>Informal debriefing at handover</td>
<td>102 (55)</td>
<td>78 (42)</td>
<td>7 (4)</td>
<td>187 (46)</td>
<td>2</td>
<td>3.82</td>
<td>0.282</td>
</tr>
<tr>
<td>Rotating staff in high risk areas e.g. triage</td>
<td>89 (61)</td>
<td>54 (37)</td>
<td>2 (1)</td>
<td>145 (36)</td>
<td>2</td>
<td>15.39</td>
<td>0.002†</td>
</tr>
<tr>
<td>Consulting with staff about Occupational Health &amp; Safety issues</td>
<td>77 (56)</td>
<td>55 (40)</td>
<td>5 (4)</td>
<td>137 (34)</td>
<td>2</td>
<td>3.89</td>
<td>0.274</td>
</tr>
<tr>
<td>Reporting episodes to police</td>
<td>50 (43)</td>
<td>61 (53)</td>
<td>5 (4)</td>
<td>116 (29)</td>
<td>2</td>
<td>3.82</td>
<td>0.281</td>
</tr>
<tr>
<td>Formal debriefing</td>
<td>59 (60)</td>
<td>35 (35)</td>
<td>5 (5)</td>
<td>99 (25)</td>
<td>2</td>
<td>7.19</td>
<td>0.066</td>
</tr>
<tr>
<td>External counselling services</td>
<td>51 (50)</td>
<td>43 (43)</td>
<td>7 (7)</td>
<td>101 (25)</td>
<td>2</td>
<td>4.25</td>
<td>0.236</td>
</tr>
</tbody>
</table>

- † Pearson’s chi-squared
- ‡ Fisher’s exact test
- § Only 404 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.6.6 Policies and procedures

Participants were asked if they believed that their organisation’s policies and procedures related to the prevention and management of patient-related violence were effective. The majority perceived that the policies and procedures were ineffective or only “somewhat” effective (n = 417/503, 83%). These data were further analysed according to region and the results overall were found to be statistically significant overall (p = 0.004). There were consistently higher results for the perceived effectiveness of policies and procedures in metropolitan areas, which is consistent with the results previously detailed for risk management strategies. Policies were regarded as “effective” (p = 0.025) more often in metropolitan areas and “not effective” (p = 0.004) more often in regional areas. A sub-set analysis was performed on these results to exclude the influence of the “other” region and a statistically significant result confirmed for “policies not perceived to be effective”, which was more common in regional areas (p = 0.001, chi-squared = 10.24). The result for policies regarded as “effective” more often in metropolitan areas was also found to be statistically significant (p = 0.010, chi-squared 6.68). Please see Table 52.
<table>
<thead>
<tr>
<th></th>
<th>Metropolitan (n = 223) (%)</th>
<th>Regional (n = 204) (%)</th>
<th>Other (n = 21) (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>51 (23)</td>
<td>26 (13)</td>
<td>3 (14)</td>
<td>80 (18)</td>
<td>2</td>
<td>9.57</td>
<td>0.023†</td>
</tr>
<tr>
<td>NO</td>
<td>53 (24)</td>
<td>78 (38)</td>
<td>10 (48)</td>
<td>141 (31)</td>
<td>2</td>
<td>13.19</td>
<td>0.004‡</td>
</tr>
<tr>
<td>SOMEWHAT</td>
<td>119 (53)</td>
<td>100 (49)</td>
<td>8 (38)</td>
<td>227 (51)</td>
<td>2</td>
<td>3.91</td>
<td>0.272</td>
</tr>
</tbody>
</table>

† Pearson’s chi-squared
‡ Fisher’s exact test
§ Only 448 participants provided postcodes in response to this question
Participants were asked to elaborate on this question and the categories identified are shown in Table 53 \( ^{10} \). The main reasons cited were that no clear policies existed or they were ineffective and/or out-dated in nature: “...they are not practised. Staff is not encouraged, or knows how to complete necessary forms...” (p433); “...perhaps if they were strictly enforced they might be...” (p390); “...have not seen such a policy here...” (p432); “...we try within our policies but they do not keep up with what is happening on the coal front...” (p332). Lack of training opportunities and absence of adequate security also were discussed: “...still talking about aggression minimisation course - but no progress...” (p503); “...have never been educated in current workplace about managing aggression...” (p419); “...No training has been made available for a number of years, and the training available is inadequate...” (p87); “...lack of permanent security...” (p509).

Some nurses perceived that no policy would ever be effective in eliminating patient-related violence: “...sometimes it is irrelevant what policies are available particularly if patient is irrational due to mental illness, drug/alcohol affected or dementia...” (p412); “...it is just expected that it’s going to happen so put up with it!” (p408); the policies exist but there is a feeling that nothing really changes (p345). The lack of enforcement of the exiting Zero Tolerance policy was also listed as a factor: “...while we have a zero tolerance policy it is not always enforced...” (p309). Other factors discussed included a lack of support from management; and the costs involved: “...budget restrictions and restricted support for training...” (p64).

---

10 \( ^{10} \) These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.

10 “p” refers to participants
### Table 53: Policies and procedures: factors impacting on their effectiveness (n = 124)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Responses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No clear policy/ineffective</td>
<td>24 (19)</td>
</tr>
<tr>
<td>Violence can't be eliminated</td>
<td>22 (18)</td>
</tr>
<tr>
<td>No Zero Tolerance</td>
<td>16 (13)</td>
</tr>
<tr>
<td>Training</td>
<td>15 (12)</td>
</tr>
<tr>
<td>Policy not followed</td>
<td>12 (10)</td>
</tr>
<tr>
<td>Security</td>
<td>12 (10)</td>
</tr>
<tr>
<td>Lack of support</td>
<td>9 (7)</td>
</tr>
<tr>
<td>Other</td>
<td>21 (17)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>131</strong></td>
</tr>
</tbody>
</table>

Ω More than 1 category could be assigned to each participant

### 4.6.7 Aggression minimisation training

Participants were asked a number of questions regarding aggression minimisation training at their workplace and these answers are summarised in Table 54. This training was reported to be available in most EDs, however 24% of those surveyed (n = 114/467) had never completed any training and the majority (n = 334/454, 74%) had not completed regular refresher programs. More than half of the nurses who had completed the training felt that such training was an effective risk management strategy.

### Table 54: Aggression minimisation training

<table>
<thead>
<tr>
<th></th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Not sure (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available at workplace (n = 508)</td>
<td>429 (84)</td>
<td>79 (16)</td>
<td></td>
<td>508</td>
</tr>
<tr>
<td>Completed by participant (n = 467)</td>
<td>353 (76)</td>
<td>114 (24)</td>
<td></td>
<td>467</td>
</tr>
<tr>
<td>Perceived to be effective (n = 359)</td>
<td>202 (56)</td>
<td>68 (19)</td>
<td>89 (25)</td>
<td>359</td>
</tr>
<tr>
<td>Regular refresher program (n = 454)</td>
<td>120 (26)</td>
<td>334 (74)</td>
<td></td>
<td>454</td>
</tr>
</tbody>
</table>

¥ Percentages have been calculated as row percentages
Data were further analysed according to geographic area and a significant difference was identified where aggression minimisation training was more common in metropolitan locations compared to regional and other (p=0.003). A sub-set analysis was performed on significant results to exclude the effect of the “other” region. Training was confirmed to “not be available” in the workplace more often in regional areas: p = 0.001, chi-squared = 11.69. This result is consistent with the result regarding the effectiveness of such training, which was perceived not to be effective more often in regional areas, (sub-set analysis: p = 0.016, chi-squared = 5.85). The results illustrate that more training was available in metropolitan areas, however lack of access to regular refresher programs was reported by 74% of participants overall. Please see Table 55.
<table>
<thead>
<tr>
<th>Available at workplace</th>
<th>Metropolitan (n = 230) (%)</th>
<th>Regional (n = 201) (%)</th>
<th>Other (n = 21) (%)</th>
<th>Total (n = 452) § (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>206 (90)</td>
<td>156 (78)</td>
<td>18 (86)</td>
<td>380 (84)</td>
<td>1</td>
<td>11.45</td>
<td>0.003</td>
</tr>
<tr>
<td>No</td>
<td>24 (10)</td>
<td>45 (22)</td>
<td>3 (14)</td>
<td>72 (16)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Completed by participant</th>
<th>Metropolitan (n = 219) (%)</th>
<th>Regional (n = 177) (%)</th>
<th>Other (n = 18) (%)</th>
<th>Total (n = 414) § (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>166 (76)</td>
<td>125 (71)</td>
<td>15 (83)</td>
<td>306 (74)</td>
<td>1</td>
<td>2.23</td>
<td>0.328</td>
</tr>
<tr>
<td>NO</td>
<td>53 (24)</td>
<td>52 (29)</td>
<td>3 (17)</td>
<td>108 (26)</td>
<td>1</td>
<td>2.23</td>
<td>0.328</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceived to be effective</th>
<th>Metropolitan (n = 166) (%)</th>
<th>Regional (n = 129) (%)</th>
<th>Other (n = 16) (%)</th>
<th>Total (n = 311) § (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>97 (58)</td>
<td>67 (52)</td>
<td>8 (50)</td>
<td>172 (55)</td>
<td>2</td>
<td>1.43</td>
<td>0.489</td>
</tr>
<tr>
<td>NO</td>
<td>22 (13)</td>
<td>31 (24)</td>
<td>6 (38)</td>
<td>59 (19)</td>
<td>2</td>
<td>9.25</td>
<td>0.010</td>
</tr>
<tr>
<td>NOT SURE</td>
<td>47 (28)</td>
<td>31 (24)</td>
<td>2 (13)</td>
<td>80 (26)</td>
<td>2</td>
<td>2.24</td>
<td>0.326†</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regular refresher program</th>
<th>Metropolitan (n = 203) (%)</th>
<th>Regional (n = 180) (%)</th>
<th>Other (n = 17) (%)</th>
<th>Total (n = 400) § (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>58 (29)</td>
<td>39 (22)</td>
<td>6 (35)</td>
<td>103 (26)</td>
<td>1</td>
<td>3.22</td>
<td>0.199</td>
</tr>
<tr>
<td>NO</td>
<td>145 (71)</td>
<td>141 (78)</td>
<td>11 (65)</td>
<td>297 (74)</td>
<td>1</td>
<td>3.22</td>
<td>0.199</td>
</tr>
</tbody>
</table>

- § Not all participants provided postcodes in response to this question
Participants were asked how long ago they had completed aggression minimisation training and the results are shown in Table 56. More than half of those surveyed had completed their last refresher two or more years ago (n = 161/299, 54%), and 13 nurses (4%) had not completed any training in the last 10 years. Less than half of those surveyed had completed such training within the last year. Some participants did not answer this question using a numerical response, for example “not sure” and “a while ago”, therefore the responses in Table 56 do not equal the participant responses.

<table>
<thead>
<tr>
<th>Years since AGM training completed</th>
<th>Total responses Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;=1</td>
<td>135 (45)</td>
</tr>
<tr>
<td>2</td>
<td>65 (22)</td>
</tr>
<tr>
<td>3</td>
<td>28 (9)</td>
</tr>
<tr>
<td>4</td>
<td>19 (6)</td>
</tr>
<tr>
<td>5-9</td>
<td>36 (12)</td>
</tr>
<tr>
<td>&gt;=10</td>
<td>13 (4)</td>
</tr>
<tr>
<td>Total</td>
<td>296</td>
</tr>
</tbody>
</table>

Ω Note some participants did not give a specific number as their answer

4.6.8 Feeling safe at work

Nurses were asked to describe how safe they felt at work and responses were coded along a continuum from “Mostly safe” to “Moderately safe” to “Sometimes don’t feel safe” and “Not safe”. Responses in the moderately safe category included verbal abuse and participants here were noted to always be wary. These findings are summarised in Table 57. Fifty four nurses reported feeling unsafe at work. Comments include: “...very unsafe as staff numbers low at night and access to department...often difficult to get police to attend and often security away and not available for some time...” (p 76); “...felt safer in active service in the Australian Army!” (p 475) and
“...Feel unsafe and not supported...” (p. 243). One hundred and seventy nurses stated that they felt “Moderately safe” or “Sometimes unsafe” and their comments included “...I usually feel safe within the dept. but am sometimes concerned about walking to my car after an incident...” (p. 234); “...reasonably safe, most of the time. Not all hours of the day covered by security staff...” p247 and “...I feel relatively safe, sometimes things feel a little out of control though...” (p193). Approximately half of the respondents stated that they felt “Mostly safe” at work. This statement was often qualified with the reason for feeling safe, for example”...I have martial arts background - so feel quite safe..” (p. 464) and “...I feel safe at work due to the presence of security...” (p402).Æ11

<table>
<thead>
<tr>
<th>Level of safety</th>
<th>Total responses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly safe</td>
<td>241 (51)</td>
</tr>
<tr>
<td>Moderately safe (but always wary, includes verbal abuse)</td>
<td>59 (13)</td>
</tr>
<tr>
<td>Sometimes don’t feel safe</td>
<td>111 (24)</td>
</tr>
<tr>
<td>Not safe</td>
<td>54 (12)</td>
</tr>
<tr>
<td>Other</td>
<td>4 (&lt;1)</td>
</tr>
<tr>
<td>Total</td>
<td>469</td>
</tr>
</tbody>
</table>

A chi-squared analysis comparing level of safety to violent episodes experienced in the last six months did not produce a statistically significant result (p =0.141).

11.Æ These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.

11 “p” refers to participants
These data were compared by region and the results are shown in Table 58 and were found to be statistically significant overall ($p = 0.036$). Analysis of the specific categories found that regional participants felt “not safe” more often than their metropolitan counterparts ($p = 0.054$).
Table 58: Levels of safety by region (n = 418) §

<table>
<thead>
<tr>
<th>Level of safety</th>
<th>Metropolitan (n = 212) (%)</th>
<th>Regional (n = 187) (%)</th>
<th>Other (n = 19) (%)</th>
<th>Total (n = 418) (%)</th>
<th>d.f.</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly safe</td>
<td>110 (52)</td>
<td>92 (49)</td>
<td>13 (68)</td>
<td>215 (51)</td>
<td>2</td>
<td>2.59</td>
<td>0.574</td>
</tr>
<tr>
<td>Moderately safe (but always wary, includes verbal abuse)</td>
<td>31 (15)</td>
<td>16 (9)</td>
<td>2 (11)</td>
<td>49 (12)</td>
<td>2</td>
<td>3.56</td>
<td>0.169†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.153‡</td>
</tr>
<tr>
<td>Sometimes don't feel safe</td>
<td>52 (25)</td>
<td>49 (26)</td>
<td>1 (5)</td>
<td>102 (24)</td>
<td>2</td>
<td>4.10</td>
<td>0.129†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.113‡</td>
</tr>
<tr>
<td>Not safe</td>
<td>17 (8)</td>
<td>29 (16)</td>
<td>2 (11)</td>
<td>48 (11)</td>
<td>2</td>
<td>5.50</td>
<td>0.064†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.054‡</td>
</tr>
<tr>
<td>Other</td>
<td>2 (1)</td>
<td>1 (1)</td>
<td>1 (5)</td>
<td>4 (1)</td>
<td>2</td>
<td>4.07</td>
<td>0.131†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.210‡</td>
</tr>
</tbody>
</table>

- † Pearson's chi-squared
- ‡ Fisher's exact test
- § Only 418 participants provided postcodes in response to this question
A logistic regression analysis was conducted on the level of safety felt by participants and violent episodes experienced in the last six months and the results are shown in Table 59. This means that participants who felt “moderately safe”; “sometimes didn’t feel safe” and who did not feel safe as a result of experiencing violence in the preceding six months, were more than twice as likely to experience an episode of violence compared to those who felt “mostly safe”.

<table>
<thead>
<tr>
<th>Level of safety</th>
<th>OR</th>
<th>95% CI</th>
<th>Standard error</th>
<th>z-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly safe (reference group)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately safe (but always wary, includes verbal abuse)</td>
<td>2.09</td>
<td>0.78-5.04</td>
<td>1.04</td>
<td>1.47</td>
<td>0.141</td>
</tr>
<tr>
<td>Sometimes don’t feel safe</td>
<td>1.95</td>
<td>0.94-4.07</td>
<td>0.73</td>
<td>1.78</td>
<td>0.075</td>
</tr>
<tr>
<td>Not safe</td>
<td>2.41</td>
<td>0.82-7.07</td>
<td>1.32</td>
<td>1.61</td>
<td>0.108</td>
</tr>
<tr>
<td>Other</td>
<td>0.58</td>
<td>0.59-5.71</td>
<td>0.68</td>
<td>-0.47</td>
<td>0.640</td>
</tr>
</tbody>
</table>

Triage was identified by 34/469 participants as an area of concern where they felt vulnerable, isolated and unsafe: “…most days I feel safe, although at triage, it can get unsafe and intimidating…” (p29); “…triage is somewhat unsafe…” (p132); “…some underlying anxiety especially with a triage shift…” (p147); “…while working at triage the nurse is first in line of vision and a “sitting duck” if someone either drove by/walked in with a loaded gun…” (p176); “…I will be verbally assaulted at least once at triage…” (p222).

4.7 Precipitants and antecedents

The fourth study aim was to identify factors associated with patient-related workplace violence that precipitate, escalate or de-escalate episodes of violence. This section reports data from all participants.
4.7.1 Nurse characteristics

4.7.1.1 Age

As previously stated the data for age were categorised into two groups and the majority of participants in both age groups had experienced a violent episode (n = 455/521, 87%). This included 92% (n = 227) of those aged between 23 and 39 years of age and 84% (n = 246) of those aged between 40 and 65 years of age.

A logistic regression was performed with “violent episodes experienced in the last six months” as the dependent variable and “age group” as the predictor variable. The odds of a violent episode in the past 6-months decreased by approximately 60% for those in the 40 plus age-group (OR = 0.41, 95% CI 0.24, 0.69), (p = 0.001).

Data for age also were analysed as continuous variable. A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “age” as the predictor variable. The odds ratio for the “age” coefficient was 0.96 with a 95% confidence interval of (0.94, 0.99); (p-value = 0.005). This means that for every year increase in age the odds of experiencing an episode of violence decreased by 4%. This was further analysed over a five year period using the natural log of the odds ratio (0.82), and for every five years increase in age the odds of experiencing an episode of violence decreased by 18%.

The results comparing “age groups” and categories of numbers of episodes experienced are shown in Table 60. Nurses in the older age group reported higher numbers across most categories compared to their younger counterparts, however this was not statistically significant (chi-squared = 7.21, p = 0.065).
4.7.1.2 Years of experience

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “years’ of nursing experience” as the predictor variable. The odds ratio was 0.97 with a 95% confidence interval of (0.95, 0.99) and a p-value of 0.0065. This means that for every year of nursing experience there was a 3% reduction in the odds of experiencing an episode of patient-related violence. For every five years of nursing experience this corresponded to a 14 percent reduction (log = 0.86).

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “years’ experience working in the ED” as the predictor variable (continuous data). The odds ratio for “years’ experience working in the ED” was 0.96 with a 95% confidence interval of (0.93, 0.99) and a p-value = 0.006. This means that for every year increase in ED nursing experience the odds of experiencing an episode of violence decreased by approximately four percent. For every five years of ED experience the odds decreased by approximately 18% (log = 0.82).

A logistic regression comparing “age” and “years of experience in the ED” compared to “violent episodes experienced in the last six months” was conducted and the
results are shown in Table 61. We were not able to determine the independent effects of “age” and “years’ of experience in the ED”.

<table>
<thead>
<tr>
<th>Violent episode in the last 6 months (reference group)</th>
<th>Odds ratio</th>
<th>95% CI</th>
<th>Standard error</th>
<th>z-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years ED</td>
<td>0.97</td>
<td>0.93-1.01</td>
<td>0.02</td>
<td>-1.37</td>
<td>0.172</td>
</tr>
<tr>
<td>Age</td>
<td>0.98</td>
<td>0.95-1.01</td>
<td>0.02</td>
<td>-1.21</td>
<td>0.226</td>
</tr>
</tbody>
</table>

### 4.7.1.3 Work fraction

A chi-square test was conducted on work fraction: “full-time and part-time/casual positions” and “violent episodes experienced in the last six months”, and no statistically significant difference was found between the groups (chi-square = 0.75, p= 0.386). The number of episodes experienced was categorised into four groups and compared to work fraction as shown in Table 62 and Figure 6. The number of episodes experienced was greater for full-time employees across all groups except one, however this was not found to be statistically significant (p = 0.582).
Table 62: Number of episodes reported by work-fraction

<table>
<thead>
<tr>
<th></th>
<th>0-10 (n = 285) (%)</th>
<th>11-20 (n = 84) (%)</th>
<th>21-30 (n = 37) (%)</th>
<th>31-100 (n = 46) (%)</th>
<th>Total (n = 452) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>147 (52)</td>
<td>41 (49)</td>
<td>22 (59)</td>
<td>23 (50)</td>
<td>233 (52)</td>
</tr>
<tr>
<td>Part-time</td>
<td>130 (46)</td>
<td>43 (51)</td>
<td>15 (41)</td>
<td>22 (48)</td>
<td>210 (46)</td>
</tr>
<tr>
<td>Casual</td>
<td>8 (3)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>1 (2)</td>
<td>9 (2)</td>
</tr>
<tr>
<td>(Part-time/casual)</td>
<td>(138)</td>
<td>(43)</td>
<td>(15)</td>
<td>(23)</td>
<td>(219)</td>
</tr>
</tbody>
</table>

Figure 6: Work fraction and episodes of violence

Data for hours worked were categorised into three groups: half-time, full-time and over-time in accordance with workloads typically reported by nurses. These groups were then compared to the number of violent episodes experienced over six months, with very similar results for “full-time” and “over-time” as shown in Table 63, and Figure 7.
A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “average hours per week” as the predictor variable. The odds ratio for average hours was 1.04 with a 95% confidence interval of (1.02, 1.06) and a p-value = 0.63. This means that for every additional hour worked there is approximately a four percent increase in the odds of experiencing an episode of violence. This was further analysed over an eight hour period using the natural
log of the odds ratio (1.37), and for every additional eight hours worked, or one shift, there was a 22% increase in the odds of experiencing an episode.

### 4.7.1.4 Region

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “region” (metropolitan, regional or remote) as the predictor variable and the results are shown in Table 64. The odds of experiencing an episode of violence was 14% less in regional areas compared to metropolitan and 50% less in remote areas. There was no significant difference between regions in the odds of a nurse experiencing an episode of violence in the past 6-months (see Table 64).

<table>
<thead>
<tr>
<th>Violent episodes</th>
<th>Odds ratio</th>
<th>95% CI</th>
<th>Standard error</th>
<th>z-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional</td>
<td>0.860336</td>
<td>0.51-1.46</td>
<td>0.2323178</td>
<td>-0.56</td>
<td>0.577</td>
</tr>
<tr>
<td>Other</td>
<td>0.491088</td>
<td>0.17-1.43</td>
<td>0.2688492</td>
<td>-1.30</td>
<td>0.194</td>
</tr>
</tbody>
</table>

### 4.7.2 Nursing-related factors

Participants were asked if nurses who were the victims of violence from patients had a nursing approach/manner that made them more likely to experience such behaviour. More than half of the participants who answered this question were in agreement with this statement or were “not sure” (n = 311/509, 61%). These data were analysed according to region and the results were consistent across areas with no statistically significant differences identified as shown in Table 65.
<table>
<thead>
<tr>
<th>Approach/manner</th>
<th>Metropolitan (n = 224) (%)</th>
<th>Regional (n = 206) (%)</th>
<th>Other (n = 21) (%)</th>
<th>Total (n = 451) § (%)</th>
<th>d.f.</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>82 (37)</td>
<td>68 (33)</td>
<td>6 (29)</td>
<td>156 (35)</td>
<td>2</td>
<td>2.10</td>
<td>0.551</td>
</tr>
<tr>
<td>No</td>
<td>87 (39)</td>
<td>82 (40)</td>
<td>7 (33)</td>
<td>176 (39)</td>
<td>2</td>
<td>0.37</td>
<td>0.942</td>
</tr>
<tr>
<td>Not sure</td>
<td>55 (25)</td>
<td>56 (27)</td>
<td>8 (38)</td>
<td>119 (26)</td>
<td>2</td>
<td>3.59</td>
<td>0.309</td>
</tr>
</tbody>
</table>

- § Only 418 participants provided postcodes in response to this question
Participants who had answered “yes” were asked to expand on their answer, and the analysis of these responses is summarised in Table 66. The main categories to emerge related to the manner and attitude in which nurses approached patients in general, for example a “superior” attitude, a lack of empathy or patience, being dismissive and their temperament in general. Other items of note included poor cue recognition, aggression minimisation and communication skills.

Nurses who displayed a nursing approach that could be perceived as dismissive or lacking in empathy when dealing with patients were perceived to more likely to experience violence. For example approaching patients in a rude, aggressive and/or abrupt way with a certain tone and/or displaying body language that seemed to inflame rather than control a situation: “…being aggressive/ dismissive/ authoritarian encourages an escalation of patient aggression” (p26); some who have a more aggressive manner tend to experience more negative behaviour” (p217). Nurse attitude was also cited as a contributory factor, and this included comments about being judgemental and/or defensive towards patients: “…some nurses do have a confrontational attitude which gets them into trouble…” (p29); “…initial attitudes displayed towards patients can escalate aggression…” (p506); “… usually low tolerance or with pre-conceived ideas of patient…poor attitudes…” (p288). A lack of empathy towards patients was also mentioned by participants: “…they don’t listen/ empathise…” (p378); “…lack of empathy, not attempting to provide information, comfort…” (p67).

The manner in which nurses handled themselves was also discussed, with more confident nurses less likely to experience problems: “Some staff do not have the skills to deal with potentially violent patients - they lack confidence and can become scared or aggressive in response” (p517); “…nurses who may be timid and not so self-assured can attract this behaviour. Lack of communication skills/lack of confidence can exacerbate these situations” (p509); “…some nurses do not seem to have experience or ability to recognise potentially aggressive behaviour” (p421). Nurses were thought to be more likely to
experience violence if they possessed poor communication skills: “…some nurses just don’t have a clue about the way they communicate with patients…” (p502); “…some nurses with poor communication attract violence to some degree…” (p401).

### Table 66: Nursing practice (n = 236)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total responses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>112 (47)</td>
</tr>
<tr>
<td>Inadequate cue recognition &amp; aggression management skills</td>
<td>57 (24)</td>
</tr>
<tr>
<td>Front line staff</td>
<td>27 (11)</td>
</tr>
<tr>
<td>Overworked/time pressure/burnt out</td>
<td>11 (5)</td>
</tr>
<tr>
<td>Poor communication skills</td>
<td>9 (4)</td>
</tr>
<tr>
<td>Other</td>
<td>20 (8)</td>
</tr>
</tbody>
</table>

### 4.7.3 Patient-related factors

#### 4.7.3.1 Groups of patients

The majority of nurses surveyed reported that there were specific groups of patients who they perceived were more likely than others to display violent behaviour (n = 455/506, 90%). These data were further analysed according to region and no statistically significant differences were identified (p = 0.265). Participants were asked to elaborate and the analysis of these responses is outlined in Table 67. Patients under the influence of drugs and alcohol were identified as the group at most risk of

---

12 These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.

12 “p” refers to participants
patient-related violence: “…amphetamine affected patients…” (p528); “…intoxicated and substance abuse…” (p518) followed by those perceived to have mental health issues.

The age of patients was also discussed, specifically in regards to two main groups, young patients, aged between 16 and 25 years of age, and elderly patients: “…16-25 year old age group…” (p518); “…16-25 year olds…especially if illicit substances are on board…” (p517). Male patients and parents also were identified as being groups at risk of displaying violent behaviour: “…frustrated parents of a young child…” (p483); “…parents of young children who have to wait for treatment/nursing care…” (p436); “…parents, they are their child’s advocate, as I work in a paeds ED, parents are always there and I realise that they are “doing it for their child” but still unacceptable…” (p340).

Other responses included Non-English speaking patients and Indigenous patients: “…Indigenous population under influence of alcohol…” (p185). Patients from lower socio-economic backgrounds also were identified: “…when they have a tattoo to teeth ratio of 3:1…” (p1). Participants also were asked a specific question about whether they perceived that socio-economic indicators played a significant role in episodes of patient-related violence. Two-thirds (n = 342/510) answered in the affirmative while 17% (n = 84/510) answered that they were “not sure”. The issue of Indigenous patients, in particular with regards to alcohol and a propensity for violence, was not further investigated. These data came from participant comments and not from specific survey questions therefore no further analysis was conducted.
### Table 67: Groups of patients more likely to exhibit violent behaviour (n = 460)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total responses Ω</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug &amp; alcohol</td>
<td>375</td>
</tr>
<tr>
<td>Mental health</td>
<td>249</td>
</tr>
<tr>
<td>Age</td>
<td>113</td>
</tr>
<tr>
<td>Male gender</td>
<td>41</td>
</tr>
<tr>
<td>Parents</td>
<td>24</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Indigenous</td>
<td>25</td>
</tr>
<tr>
<td>Non-English speakers</td>
<td>25</td>
</tr>
<tr>
<td>Previous history</td>
<td>9</td>
</tr>
<tr>
<td>Lower socio-economic status</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>864</td>
</tr>
</tbody>
</table>

Ω More than 1 category could be assigned to each participant

### 4.7.3.2 Age of patients

Patients aged 35 years and younger were identified as the highest risk ages by over three-quarters of those surveyed (n = 417/507, 82%). Participants identified the highest risk age groups for violence as those between 26 and 35 years (n = 241/507, 48%) and 16 and 25 years (n = 164/507, 32%), as shown in Table 68.

### Table 68: Patient Age Groups (n = 507)

<table>
<thead>
<tr>
<th>Age Group (years)</th>
<th>Total responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;16</td>
<td>12 (2)</td>
</tr>
<tr>
<td>16-25</td>
<td>164 (32)</td>
</tr>
<tr>
<td>26-35</td>
<td>241 (48)</td>
</tr>
<tr>
<td>36-45</td>
<td>67 (13)</td>
</tr>
<tr>
<td>46-55</td>
<td>7 (1)</td>
</tr>
<tr>
<td>56-65</td>
<td>8 (2)</td>
</tr>
<tr>
<td>66-75</td>
<td>3 (1)</td>
</tr>
<tr>
<td>&gt;76</td>
<td>5 (1)</td>
</tr>
</tbody>
</table>

Data were further analysed according to geographic location and a significant difference was found between regions for patients aged under 16 years of age (p=
0.014), and the risk was higher in metropolitan areas, however the small numbers involved mean that this result should be interpreted with caution. In addition no statistically significant differences were identified between age grouping of patients and region overall (chi-squared = 11.366, p-value = 0.123). Please see Table 69 for more detail.
Table 69: Age grouping of perpetrators of violence by region

<table>
<thead>
<tr>
<th>Age group</th>
<th>Metropolitan (n = 224) (%)</th>
<th>Regional (n = 209) (%)</th>
<th>Other (n = 14) (%)</th>
<th>Total (n = 447) § (%)</th>
<th>d.f.</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;16</td>
<td>11 (5)</td>
<td>1 (&lt;1)</td>
<td>0 (0)</td>
<td>12 (3)</td>
<td>2</td>
<td>8.83</td>
<td>0.012†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.014‡</td>
</tr>
<tr>
<td>16-25</td>
<td>68 (30)</td>
<td>72 (34)</td>
<td>8 (57)</td>
<td>148 (33)</td>
<td>2</td>
<td>1.24</td>
<td>0.539</td>
</tr>
<tr>
<td>26-35</td>
<td>108 (48)</td>
<td>98 (47)</td>
<td>3 (21)</td>
<td>209 (47)</td>
<td>2</td>
<td>0.67</td>
<td>0.706†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.697‡</td>
</tr>
<tr>
<td>36-45</td>
<td>27 (12)</td>
<td>32 (15)</td>
<td>2 (14)</td>
<td>61 (14)</td>
<td>2</td>
<td>1.81</td>
<td>0.554†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.628‡</td>
</tr>
<tr>
<td>46-55</td>
<td>3 (1)</td>
<td>2 (1)</td>
<td>0 (0)</td>
<td>5 (1)</td>
<td>2</td>
<td>0.38</td>
<td>0.826†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.999‡</td>
</tr>
<tr>
<td>56-65</td>
<td>3 (1)</td>
<td>2 (1)</td>
<td>1 (7)</td>
<td>6 (1)</td>
<td>2</td>
<td>2.26</td>
<td>0.324†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.325‡</td>
</tr>
<tr>
<td>66-75</td>
<td>2 (&lt;1)</td>
<td>1 (&lt;1)</td>
<td>0 (0)</td>
<td>3 (1)</td>
<td>2</td>
<td>0.43</td>
<td>0.808†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.999‡</td>
</tr>
<tr>
<td>&gt;75</td>
<td>2 (&lt;1)</td>
<td>1 (&lt;1)</td>
<td>0 (0)</td>
<td>3 (1)</td>
<td>2</td>
<td>0.43</td>
<td>0.808†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.999‡</td>
</tr>
</tbody>
</table>

† Pearson’s chi-squared
‡ Fisher’s exact test
§ Only 448 participants provided postcodes in response to this question
4.7.3.3 Triage category

The most common triage categories of patients responsible for episodes of violence were reported to be three and four as shown in Table 70. Please see Table 8: Triage categories in the Research Design chapter for an explanation of the triage system used in Australia.

<table>
<thead>
<tr>
<th>Triage category</th>
<th>Total response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 (1)</td>
</tr>
<tr>
<td>2</td>
<td>70 (14)</td>
</tr>
<tr>
<td>3</td>
<td>204 (42)</td>
</tr>
<tr>
<td>4</td>
<td>197 (40)</td>
</tr>
<tr>
<td>5</td>
<td>15 (3)</td>
</tr>
</tbody>
</table>

Data were further analysed according to region and a statistically significant difference was identified for Triage category 2, with more perpetrators reported in this category in metropolitan areas compared to regional and other/remote. Please see Table 71.
Table 71: Triage category of perpetrators of violence

<table>
<thead>
<tr>
<th>Triage category</th>
<th>Metropolitan (n = 217) (%)</th>
<th>Regional (n = 199) (%)</th>
<th>Other (n = 19) (%)</th>
<th>Total (n = 435) § (%)</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 (2)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>5 (1)</td>
<td>5.08</td>
<td>0.079† 0.089‡</td>
</tr>
<tr>
<td>2</td>
<td>39 (18)</td>
<td>18 (9)</td>
<td>3 (16)</td>
<td>60 (14)</td>
<td>7.02</td>
<td>0.030† 0.025‡</td>
</tr>
<tr>
<td>3</td>
<td>86 (40)</td>
<td>86 (43)</td>
<td>6 (32)</td>
<td>178 (41)</td>
<td>1.27</td>
<td>0.530† 0.549‡</td>
</tr>
<tr>
<td>4</td>
<td>81 (37)</td>
<td>88 (44)</td>
<td>9 (47)</td>
<td>178 (41)</td>
<td>2.38</td>
<td>0.304† 0.291‡</td>
</tr>
<tr>
<td>5</td>
<td>6 (3)</td>
<td>7 (4)</td>
<td>1 (5)</td>
<td>14 (3)</td>
<td>0.46</td>
<td>0.796† 0.541‡</td>
</tr>
</tbody>
</table>

- † Pearson’s chi-squared
- ‡ Fisher’s exact test
- §Only 435 participants provided postcodes in response to this question
4.7.3.4 Clinical presentation

The most commonly reported clinical presentations of patients exhibiting violent behaviour were alcohol intoxication; mental health issues; substance abuse; anxiety and agitation; dementia and pain. On average each participant reported five types of clinical presentation for this question. Other responses included references to parents accompanying children to the ED: “…child was having a prolonged seizure mother arrived and was verbally aggressive…” (p110); “…paediatric patients…so it always the parents…” (p511); “…parents of patients…couldn’t realise child was unwell…” (p321). Please refer to Table 72 for more detail.

<table>
<thead>
<tr>
<th>Diagnoses</th>
<th>Total responses Ω</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol intoxication</td>
<td>411 (84)</td>
<td></td>
</tr>
<tr>
<td>Mental health issues</td>
<td>380 (77)</td>
<td></td>
</tr>
<tr>
<td>Substance misuse</td>
<td>373 (76)</td>
<td></td>
</tr>
<tr>
<td>Anxiety &amp; agitation</td>
<td>217 (44)</td>
<td></td>
</tr>
<tr>
<td>Dementia</td>
<td>142 (29)</td>
<td></td>
</tr>
<tr>
<td>Pain</td>
<td>134 (27)</td>
<td></td>
</tr>
<tr>
<td>Disorientation/confusion</td>
<td>99 (20)</td>
<td></td>
</tr>
<tr>
<td>Head injury</td>
<td>91 (19)</td>
<td></td>
</tr>
<tr>
<td>Delirium</td>
<td>75 (15)</td>
<td></td>
</tr>
<tr>
<td>Trauma</td>
<td>73 (15)</td>
<td></td>
</tr>
<tr>
<td>Fear</td>
<td>65 (13)</td>
<td></td>
</tr>
<tr>
<td>Paediatric emergency</td>
<td>53 (11)</td>
<td></td>
</tr>
<tr>
<td>Cognitive dysfunction</td>
<td>47 (10)</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>31 (6)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>38 (8)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2229</td>
<td></td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these responses

A chi-squared analysis was performed on episodes of violence in the last six months and the list of diagnoses or clinical signs and symptoms displayed by patients and
alcohol intoxication, mental health issues and substance misuse were all found to be highly significant \((p < 0.001)\). In addition anxiety and agitation \((p = 0.047)\) and delirium \((p = 0.010)\) were found to be significant, please see Table 73.

### Table 73: Chi-squared analysis results clinical diagnoses and episodes of violence

<table>
<thead>
<tr>
<th>Diagnoses</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol intoxication</td>
<td>25.28</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Mental health issues</td>
<td>25.18</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Substance misuse</td>
<td>15.18</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Anxiety &amp; agitation</td>
<td>3.96</td>
<td>0.047</td>
</tr>
<tr>
<td>Dementia</td>
<td>3.13</td>
<td>0.069</td>
</tr>
<tr>
<td>Pain</td>
<td>1.29</td>
<td>0.130</td>
</tr>
<tr>
<td>Disorientation/confusion</td>
<td>1.62</td>
<td>0.203</td>
</tr>
<tr>
<td>Head injury</td>
<td>3.55</td>
<td>0.059</td>
</tr>
<tr>
<td>Delirium</td>
<td>6.65</td>
<td>0.010</td>
</tr>
<tr>
<td>Trauma</td>
<td>1.21</td>
<td>0.271</td>
</tr>
<tr>
<td>Fear</td>
<td>0.12</td>
<td>0.734</td>
</tr>
<tr>
<td>Paediatric emergency</td>
<td>2.71</td>
<td>0.100</td>
</tr>
<tr>
<td>Cognitive dysfunction</td>
<td>0.85</td>
<td>0.355</td>
</tr>
</tbody>
</table>

Logistic regression analysis was then performed on the significant diagnoses. A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “alcohol intoxication” (as a diagnosis) as the predictor variable. The odds ratio for alcohol intoxication is 3.38 with a 95% confidence interval of \((2.07, 5.53)\) and a p-value <0.001. This means that the odds of experiencing a violent episode were more than three times greater where the patient presented with a specific diagnosis of alcohol intoxication.

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “substance abuse” (as a diagnosis) as the predictor variable. The odds ratio for substance abuse was 2.54 with a 95% confidence interval of \((1.57, 4.11)\) and a p-value <0.001. This means that the odds of a
violent episode occurring were more than twice as high when patients present with a specific diagnosis of substance abuse.

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “mental health issues” (as a diagnosis) as the predictor variable. The odds ratio for mental health diagnosis was 3.30 with a 95% confidence interval of (2.04, 5.34) and a p-value <0.001. This means that the odds of a violent episode occurring were more than three times higher where a patient presented with a mental health diagnosis.

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “disorientation/confusion” (as a diagnosis) as the predictor variable. The odds ratio for “disorientation/confusion” was 1.55 with a 95% confidence interval of (0.79, 3.04) and a p-value = 0.206. A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “cognitive dysfunction” (as a diagnosis) as the predictor variable. The odds ratio for “cognitive dysfunction” was 1.57 with a 95% confidence interval of (0.60, 4.08) and a p-value = 0.359.

Data were further analysed according to region and statistically significant differences identified for “delirium”, “cognitive dysfunction” and “paediatric emergency” which were all more common in metropolitan areas. A sub-set analysis was performed on these three variables and “paediatric emergency” was found to be consistently statistically significant: p = 0.005, chi-squared = 7.81. The results for delirium (p = 0.021, chi-squared = 5.35); cognitive dysfunction (p = 0.016, chi-squared = 5.83) and “pain” (p = 0.041, chi-squared = 6.37) also were found to be significant. Please see Table 74 for more detail.
Table 74: Diagnoses or clinical signs and symptoms according to geographic location (n = 445) § ¥

<table>
<thead>
<tr>
<th>Diagnoses</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol intoxication</td>
<td>178 (49)</td>
<td>166 (46)</td>
<td>20 (5)</td>
<td>364 (82)</td>
<td>2</td>
<td>4.09</td>
<td>0.129</td>
</tr>
<tr>
<td>Mental Health issues</td>
<td>174 (52)</td>
<td>147 (44)</td>
<td>15 (4)</td>
<td>336 (76)</td>
<td>2</td>
<td>2.88</td>
<td>0.236</td>
</tr>
<tr>
<td>Substance misuse</td>
<td>166 (50)</td>
<td>151 (46)</td>
<td>14 (4)</td>
<td>331 (74)</td>
<td>2</td>
<td>0.34</td>
<td>0.845</td>
</tr>
<tr>
<td>Anxiety &amp; agitation</td>
<td>98 (50)</td>
<td>87 (45)</td>
<td>10 (5)</td>
<td>195 (44)</td>
<td>2</td>
<td>0.75</td>
<td>0.510</td>
</tr>
<tr>
<td>Dementia</td>
<td>71 (55)</td>
<td>53 (41)</td>
<td>5 (4)</td>
<td>129 (29)</td>
<td>2</td>
<td>2.29</td>
<td>0.318</td>
</tr>
<tr>
<td>Pain</td>
<td>53 (45)</td>
<td>55 (47)</td>
<td>10 (8)</td>
<td>118 (27)</td>
<td>2</td>
<td>6.37</td>
<td>0.041</td>
</tr>
<tr>
<td>Disorientation/Confusion</td>
<td>54 (59)</td>
<td>33 (36)</td>
<td>4 (4)</td>
<td>91 (20)</td>
<td>2</td>
<td>4.68</td>
<td>0.096†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.085‡</td>
</tr>
<tr>
<td>Head injury</td>
<td>47 (56)</td>
<td>32 (38)</td>
<td>5 (6)</td>
<td>84 (19)</td>
<td>2</td>
<td>2.87</td>
<td>0.239</td>
</tr>
<tr>
<td>Delirium</td>
<td>44 (64)</td>
<td>24 (35)</td>
<td>1 (1)</td>
<td>69 (16)</td>
<td>2</td>
<td>7.31</td>
<td>0.026†</td>
</tr>
<tr>
<td>Trauma</td>
<td>36 (56)</td>
<td>23 (36)</td>
<td>5 (8)</td>
<td>64 (14)</td>
<td>2</td>
<td>4.28</td>
<td>0.118</td>
</tr>
<tr>
<td>Fear</td>
<td>36 (62)</td>
<td>19 (33)</td>
<td>3 (5)</td>
<td>58 (13)</td>
<td>2</td>
<td>4.82</td>
<td>0.090†</td>
</tr>
<tr>
<td>Paediatric emergency</td>
<td>34 (68)</td>
<td>14 (28)</td>
<td>2 (4)</td>
<td>50 (11)</td>
<td>2</td>
<td>7.96</td>
<td>0.019†</td>
</tr>
<tr>
<td>Cognitive dysfunction e.g. hypoxia</td>
<td>28 (62)</td>
<td>13 (29)</td>
<td>4 (9)</td>
<td>45 (10)</td>
<td>2</td>
<td>7.09</td>
<td>0.029†</td>
</tr>
</tbody>
</table>

- † Pearson’s chi-squared
- ‡ Fisher’s exact test
- § Only 445 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.7.3.5 Patient-specific precipitants/contributing factors

Participants were asked what patient-specific factors they perceived to be precipitants or contributing factors to episodes of violence and these responses were similar to those identified in responses about clinical presentation. The majority of nurses reported that alcohol intoxication and substance abuse were the two main risk factors. Other patient specific factors identified included mental health diagnoses; unrealistic expectations of patients and a past history of violence. Please see Table 75.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Total responses Ω</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol intoxication</td>
<td>489 (96)</td>
</tr>
<tr>
<td>Illicit substance abuse</td>
<td>477 (93)</td>
</tr>
<tr>
<td>Mental health diagnoses</td>
<td>429 (84)</td>
</tr>
<tr>
<td>Patients’ unrealistic expectations of staff &amp; health system</td>
<td>417 (81)</td>
</tr>
<tr>
<td>Past history of violence</td>
<td>415 (81)</td>
</tr>
<tr>
<td>Dementia</td>
<td>262 (51)</td>
</tr>
<tr>
<td>Cultural issues</td>
<td>214 (42)</td>
</tr>
<tr>
<td>Acute pain</td>
<td>212 (41)</td>
</tr>
<tr>
<td>Cognitive dysfunction e.g. hypoxia</td>
<td>186 (36)</td>
</tr>
<tr>
<td>Other</td>
<td>7 (1)</td>
</tr>
<tr>
<td>Total</td>
<td>3108</td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these responses

Chi-squared analysis was conducted on patient-specific factors and episodes of violence in the past six months and “alcohol intoxication”, “illicit substance abuse”, “mental health diagnoses”, “patients’ unrealistic expectations of staff and health system” and “past history of violence” were all found to be highly significant (p < 0.001). In addition “cultural issues” (p = 0.013), “acute pain” (p = 0.026) and “cognitive dysfunction” (p = 0.037) were found to be significant as shown in Table 76.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol intoxication</td>
<td>38.06</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Illicit substance abuse</td>
<td>31.93</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Mental health diagnoses</td>
<td>17.33</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Patients' unrealistic expectations of staff &amp; health system</td>
<td>19.97</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Past history of violence</td>
<td>22.51</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Dementia</td>
<td>0.93</td>
<td>0.336</td>
</tr>
<tr>
<td>Cultural issues</td>
<td>6.13</td>
<td>0.013</td>
</tr>
<tr>
<td>Acute pain</td>
<td>4.97</td>
<td>0.026</td>
</tr>
<tr>
<td>Cognitive dysfunction e.g. hypoxia</td>
<td>4.34</td>
<td>0.037</td>
</tr>
</tbody>
</table>

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “alcohol intoxication” (patient-specific factor) as the predictor variable. The odds ratio for alcohol intoxication was 6.05 with a 95% confidence interval of (3.23, 11.35) and a p-value <0.001. This means that nurses dealing with patients who were intoxicated by alcohol were six times more likely to experience a violent episode.

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “substance abuse” (as a patient-specific factor) as the predictor variable. The odds ratio for substance abuse was 4.82 with a 95% confidence interval of (2.68, 8.64) and a p-value <0.001. This means that there was a five-fold increase in the likelihood of experiencing an episode of violence where a patient presented with substance abuse.

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “mental health issues” (as a patient specific factor) as the predictor variable. The odds ratio for mental health was 2.85 with a 95% confidence interval of (1.72, 4.73) and a p-value <0.001. This means that the odds of a
violent episode occurring were almost three times greater where a patient presented with mental health issues.

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “cognitive dysfunction” (as a patient-specific factor) as the predictor variable. The odds ratio for “cognitive dysfunction” were 1.76 with a 95% confidence interval of (1.03, 3.02) and a p-value = 0.039. This means that the odds of a violent episode in the past six-months occurring were more than one and half times higher where a patient presented with cognitive dysfunction.

Data were further analysed according to geographical location and the results are shown in Table 77. A statistically significant difference was identified for cultural issues, which was greater in metropolitan areas (p = 0.002). This result was confirmed with a sub-set analysis that excluded the “other” group: (p < 0.001, chi-squared = 13.1).
<table>
<thead>
<tr>
<th>Patient specific factors</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol intoxication</td>
<td>211 (49)</td>
<td>201 (46)</td>
<td>21 (5)</td>
<td>433 (95)</td>
<td>2</td>
<td>2.38</td>
<td>0.304</td>
</tr>
<tr>
<td>Illicit substance misuse</td>
<td>206 (49)</td>
<td>194 (46)</td>
<td>20 (5)</td>
<td>420 (92)</td>
<td>2</td>
<td>0.92</td>
<td>0.633</td>
</tr>
<tr>
<td>Mental Health diagnoses</td>
<td>186 (49)</td>
<td>174 (46)</td>
<td>16 (4)</td>
<td>376 (82)</td>
<td>2</td>
<td>0.16</td>
<td>0.922</td>
</tr>
<tr>
<td>Patients’ unrealistic expectations of staff &amp; health system</td>
<td>181 (50)</td>
<td>166 (45)</td>
<td>18 (5)</td>
<td>365 (80)</td>
<td>2</td>
<td>1.03</td>
<td>0.597</td>
</tr>
<tr>
<td>Past history of violence</td>
<td>183 (50)</td>
<td>166 (45)</td>
<td>16 (4)</td>
<td>365 (80)</td>
<td>2</td>
<td>0.38</td>
<td>0.825</td>
</tr>
<tr>
<td>Dementia</td>
<td>120 (52)</td>
<td>107 (46)</td>
<td>6 (3)</td>
<td>233 (51)</td>
<td>2</td>
<td>4.07</td>
<td>0.131</td>
</tr>
<tr>
<td>Cultural issues</td>
<td><strong>114 (59)</strong></td>
<td><strong>71 (37)</strong></td>
<td><strong>8 (4)</strong></td>
<td><strong>193 (42)</strong></td>
<td>2</td>
<td><strong>12.54</strong></td>
<td><strong>0.002</strong></td>
</tr>
<tr>
<td>Acute pain</td>
<td>90 (47)</td>
<td>91 (47)</td>
<td>11 (6)</td>
<td>192 (42)</td>
<td>2</td>
<td>1.70</td>
<td>0.427</td>
</tr>
<tr>
<td>Cognitive dysfunction e.g. hypoxia</td>
<td>84 (51)</td>
<td>72 (44)</td>
<td>9 (5)</td>
<td>165 (36)</td>
<td>2</td>
<td>1.06</td>
<td>0.590</td>
</tr>
</tbody>
</table>

- § Only 456 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.7.3.6  Patient-specific behaviours (cues/indicators of imminent violent behaviour)

A number of patient-specific behaviours were consistently identified by the majority of nurses as warning signs for impending violence by nurses including agitation; tone of voice; attitude, pacing, menacing and staring. Other behaviours identified by nurses included shouting and swearing; expressing dissatisfaction and the use of threats and being withdrawn and lack of eye contact. On average participants identified five patient-specific behaviours each out of a possible six. Please see Table 78.

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Total responsesΩ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agitation</td>
<td>483 (94)</td>
</tr>
<tr>
<td>Tone of voice</td>
<td>463 (90)</td>
</tr>
<tr>
<td>Attitude</td>
<td>448 (88)</td>
</tr>
<tr>
<td>Pacing</td>
<td>446 (87)</td>
</tr>
<tr>
<td>Menacing</td>
<td>369 (72)</td>
</tr>
<tr>
<td>Staring</td>
<td>352 (69)</td>
</tr>
<tr>
<td>Other</td>
<td>27 (5)</td>
</tr>
<tr>
<td>Total</td>
<td>2588</td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these responses

A chi-squared analysis on episodes of violence and patient-specific behaviours was conducted with all behaviours found to be statistically significant, please see Table 79.
<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agitation</td>
<td>49.61</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Tone of voice</td>
<td>21.98</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Attitude</td>
<td>12.61</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Pacing</td>
<td>14.48</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Menacing</td>
<td>8.82</td>
<td>0.003</td>
</tr>
<tr>
<td>Staring</td>
<td>8.31</td>
<td>0.004</td>
</tr>
</tbody>
</table>

Data were further analysed by geographical region and no statistically significant differences were detected, please see Table 80.
Table 80: Patient specific factors according to geographic location (n = 457) § Ω ¥

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agitation</td>
<td>211 (49)</td>
<td>198 (46)</td>
<td>21 (5)</td>
<td>430 (94)</td>
<td>2</td>
<td>2.16</td>
<td>0.340</td>
</tr>
<tr>
<td>Tone of voice</td>
<td>196 (48)</td>
<td>193 (47)</td>
<td>20 (5)</td>
<td>409 (89)</td>
<td>2</td>
<td>3.30</td>
<td>0.192</td>
</tr>
<tr>
<td>Attitude</td>
<td>191 (49)</td>
<td>185 (47)</td>
<td>17 (4)</td>
<td>393 (86)</td>
<td>2</td>
<td>0.76</td>
<td>0.684</td>
</tr>
<tr>
<td>Pacing</td>
<td>191 (49)</td>
<td>187 (48)</td>
<td>18 (5)</td>
<td>393 (86)</td>
<td>2</td>
<td>1.26</td>
<td>0.532</td>
</tr>
<tr>
<td>Menacing</td>
<td>156 (49)</td>
<td>152 (48)</td>
<td>10 (3)</td>
<td>318 (70)</td>
<td>2</td>
<td>4.30</td>
<td>0.117</td>
</tr>
<tr>
<td>Staring</td>
<td>159 (51)</td>
<td>144 (48)</td>
<td>11 (4)</td>
<td>314 (69)</td>
<td>2</td>
<td>2.22</td>
<td>0.330</td>
</tr>
</tbody>
</table>

- § Only 457 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.7.4 Environmental factors

4.7.4.1 Time of day

Two hundred and two participants (41%) identified the afternoon shift, between 1500 and 2300 hours as the time period where the majority of violent episodes occurred. However 196 (39%) of respondents reported that more than one of these time periods was significant in this regard. Please see Table 81.

<table>
<thead>
<tr>
<th>Time period</th>
<th>Total responses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0700-1500</td>
<td>32 (6)</td>
</tr>
<tr>
<td>1500-2300</td>
<td>202 (41)</td>
</tr>
<tr>
<td>2300-0700</td>
<td>67 (14)</td>
</tr>
<tr>
<td>More than 1 time period</td>
<td>196 (39)</td>
</tr>
</tbody>
</table>

When asked when the majority of episodes of patient-related violence occurred, more than half of the 419 participants who answered the question nominated the weekend and/or public holidays as the highest risk period (n = 125, 54%), compared with weekdays (n = 194, 46%). However when asked to elaborate some participants noted that the difference between days was only slight and that violence: “…can happen anytime…” (p379).

4.7.4.2 Time of year

Expanding on this, participants were asked if they felt that any one season or time of year was a higher risk period for episodes of violence, to which 194/506 (38%) answered in the affirmative. The results were analysed according to geographical
Participants were then asked to elaborate on their response and these results are outlined in Table 82. Holiday periods, especially the Christmas period, were identified as high risk periods: “...summer - more people out, Christmas functions, family breakdown...” (p492); “…over holiday periods – e.g. Christmas - extended waiting times as busier in the Emergency Department…” (p367); “…Christmas, associated with increased stress and alcohol, increased family stresses…” (p291). Other periods identified included winter: “…probably winter due to increased activity and longer waiting times…” (p474); summer: “…summer and public holidays with concerts and alcohol and drugs…” (p445); weekends and times of a full moon: “…full moons do not help - I know studies negate this but they need to do several months working in ED to see the reality…” (p 332); “…Full moons: I know there is no empirical evidence to support this but anecdotally EDs and ambulance services experience more disruptions during full moons!...” (p384). Some overlap between categories is acknowledged, for example Christmas in Australia occurs in summer and summer is a holiday period for school children and university students. Æ

---

13 § Only 442 participants provided postcodes in response to this question

14 Æ These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.

14 “p” refers to participants
Table 82: Time of year (n = 196)

<table>
<thead>
<tr>
<th>Time of year</th>
<th>Total responses Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holiday periods</td>
<td>125 (64)</td>
</tr>
<tr>
<td>Winter</td>
<td>55 (28)</td>
</tr>
<tr>
<td>Summer</td>
<td>42 (21)</td>
</tr>
<tr>
<td>Full moon</td>
<td>22 (11)</td>
</tr>
<tr>
<td>Weekends</td>
<td>15 (8)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>259</strong></td>
</tr>
</tbody>
</table>

More than 1 category could be reported by each participant

4.7.5 Nursing activities

Participants perceived the highest risk nursing activities for patient-related violence to be triaging; communicating with patients, managing reactions to delays and taking patient histories. Please refer to Table 83 for more detail.
Table 83: Nursing activities (n = 496)

<table>
<thead>
<tr>
<th>Nursing activity</th>
<th>Total responses Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triaging</td>
<td>358 (72)</td>
</tr>
<tr>
<td>Communicating with patients</td>
<td>329 (66)</td>
</tr>
<tr>
<td>Managing patients’ reactions to delays</td>
<td>304 (61)</td>
</tr>
<tr>
<td>Taking patient history</td>
<td>217 (44)</td>
</tr>
<tr>
<td>Restraining patients</td>
<td>195 (39)</td>
</tr>
<tr>
<td>Assisting patients in waiting room</td>
<td>150 (30)</td>
</tr>
<tr>
<td>No activity</td>
<td>100 (20)</td>
</tr>
<tr>
<td>Performing invasive procedures</td>
<td>94 (19)</td>
</tr>
<tr>
<td>Giving injectable medications</td>
<td>61 (12)</td>
</tr>
<tr>
<td>Giving oral medications</td>
<td>50 (10)</td>
</tr>
<tr>
<td>Positioning patients</td>
<td>40 (8)</td>
</tr>
<tr>
<td>Mobilising or transferring patients</td>
<td>35 (7)</td>
</tr>
<tr>
<td>Assisting with Activities of Daily Living (ADLs)</td>
<td>27 (5)</td>
</tr>
<tr>
<td>Other</td>
<td>11 (2)</td>
</tr>
<tr>
<td>Total</td>
<td>1971</td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these responses

Nursing activities were compared against the variable “violent episode in the previous 6 months” using a chi-squared analysis and the results are shown in Table 84. Triaging, managing patients’ reactions to delays and restraining patients were all highly significant with p <0.001. In addition assisting patients in the waiting room and communicating with patients also were found to be significant.

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “triaging” (nursing activity) as the predictor variable. The odds ratio for triaging was 2.91 with a 95% confidence interval of (1.80, 4.71) and a p-value <0.001. This means that the odds of experiencing a violent episode were almost three times higher for nurses engaged in triaging patients.
### Table 84: Chi-squared analysis results for nursing activity and episode of violence

<table>
<thead>
<tr>
<th>Nursing activity</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triaging</td>
<td>20.21</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Communicating with patients</td>
<td>8.84</td>
<td>0.003</td>
</tr>
<tr>
<td>Managing patients’ reactions to delays</td>
<td>15.19</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Taking patient history</td>
<td>3.04</td>
<td>0.081</td>
</tr>
<tr>
<td>Restraining patients</td>
<td>13.59</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Assisting patients in waiting room</td>
<td>11.91</td>
<td>0.001</td>
</tr>
<tr>
<td>No activity</td>
<td>3.59</td>
<td>0.166</td>
</tr>
<tr>
<td>Performing invasive procedures</td>
<td>1.45</td>
<td>0.229</td>
</tr>
<tr>
<td>Giving injectable medications</td>
<td>1.57</td>
<td>0.210</td>
</tr>
<tr>
<td>Giving oral medications</td>
<td>0.07</td>
<td>0.793</td>
</tr>
<tr>
<td>Positioning patients</td>
<td>3.52</td>
<td>0.061</td>
</tr>
<tr>
<td>Mobilising or transferring patients</td>
<td>1.30</td>
<td>0.254</td>
</tr>
<tr>
<td>Assisting with Activities of Daily Living (ADLs)</td>
<td>1.36</td>
<td>0.244</td>
</tr>
</tbody>
</table>

Data were further analysed according to geographic location and a sub-set analysis was performed on two variables: “giving oral medications” (p = 0.011, chi-squared = 6.48) and “restraining” (p = 0.013, chi-squared = 6.2) and significant differences were identified between regional and metropolitan areas. Please see Table 85.
<table>
<thead>
<tr>
<th>Nursing activity</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triaging</td>
<td>156 (49)</td>
<td>149 (46)</td>
<td>16 (5)</td>
<td>321 (72)</td>
<td>2</td>
<td>0.78</td>
<td>0.678</td>
</tr>
<tr>
<td>Communicating with patients</td>
<td>150 (52)</td>
<td>130 (45)</td>
<td>11 (4)</td>
<td>291 (65)</td>
<td>2</td>
<td>1.87</td>
<td>0.392</td>
</tr>
<tr>
<td>Managing patients’ reactions to delays</td>
<td>134 (50)</td>
<td>119 (45)</td>
<td>14 (5)</td>
<td>267 (60)</td>
<td>2</td>
<td>1.30</td>
<td>0.521</td>
</tr>
<tr>
<td>Assisting patients in waiting room</td>
<td>72 (52)</td>
<td>59 (43)</td>
<td>7 (5)</td>
<td>138 (31)</td>
<td>2</td>
<td>0.98</td>
<td>0.613</td>
</tr>
<tr>
<td>Giving injectable medications</td>
<td>31 (53)</td>
<td>23 (40)</td>
<td>4 (7)</td>
<td>58 (13)</td>
<td>2</td>
<td>1.72</td>
<td>0.422‡</td>
</tr>
<tr>
<td>Giving oral medications</td>
<td>33 (69)</td>
<td>14 (29)</td>
<td>1 (2)</td>
<td>48 (11)</td>
<td>2</td>
<td>8.09</td>
<td>0.017†</td>
</tr>
<tr>
<td>Performing invasive procedures</td>
<td>49 (58)</td>
<td>32 (38)</td>
<td>3 (4)</td>
<td>84 (19)</td>
<td>2</td>
<td>3.29</td>
<td>0.193†</td>
</tr>
<tr>
<td>Taking patient history</td>
<td>93 (48)</td>
<td>91 (47)</td>
<td>10 (5)</td>
<td>194 (43)</td>
<td>2</td>
<td>0.54</td>
<td>0.763</td>
</tr>
<tr>
<td>Mobilising or transferring patients</td>
<td>17 (55)</td>
<td>13 (42)</td>
<td>1 (3)</td>
<td>31 (7)</td>
<td>2</td>
<td>0.44</td>
<td>0.801†</td>
</tr>
<tr>
<td>Restraining</td>
<td>98 (57)</td>
<td>85 (38)</td>
<td>8 (5)</td>
<td>171 (38)</td>
<td>2</td>
<td>7.34</td>
<td>0.025†</td>
</tr>
<tr>
<td>Assisting with ADLs</td>
<td>14 (64)</td>
<td>8 (36)</td>
<td>0 (0)</td>
<td>22 (5)</td>
<td>2</td>
<td>2.46</td>
<td>0.292‡</td>
</tr>
<tr>
<td>Positioning</td>
<td>21 (60)</td>
<td>13 (37)</td>
<td>1 (3)</td>
<td>35 (8)</td>
<td>2</td>
<td>1.75</td>
<td>0.417†</td>
</tr>
<tr>
<td>No activity</td>
<td>53 (58)</td>
<td>35 (38)</td>
<td>5 (5)</td>
<td>91 (20)</td>
<td>2</td>
<td>3.59</td>
<td>0.166</td>
</tr>
</tbody>
</table>

- † Pearson’s chi-squared
- ‡ Fisher’s exact test
- § Only 446 participants provide postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
In addition, participants were asked to name three common activities performed during their working day that they considered to be high risk activities for patient-related violence in the ED. Analysis of these responses is summarised in Table 86. Triage was identified as the highest risk activity, and participants noted that this was especially so when the department was busy and waiting times were lengthy. Managing reactions to these delays was also recognised as a high risk activity: “…Excessive waiting times for treatment/transfer/registrar review of patient…” (p14); “…Explaining reasons for delay in treatment/test results etc…” (p51). Dealing with patients with a mental health diagnosis, including assessment and nursing care, was cited as a high risk nursing activity: “…medicating mental health patients…” (p106); “…Assessing mental health patients…” (p30). The nursing care and assessment of patients under the influence of drugs and/or alcohol also were deemed to be high risk activities: “…managing substance misuse and intoxication…” (p452); “…nursing patients on evening/night duty while under the influence of alcohol and/or illicit substances…” (p150); “…Dealing with drug &/or alcohol affected patients often from the first instance of meeting when taking history…” (p108).

Patient assessment, general nursing care, for example assisting with patients with activities of daily living, giving oral medications and assisting with positioning or transferring and invasive procedures were all identified as activities at high risk of leading to violence from patients. Other high risk activities identified included dealing with patients in the waiting room, especially when the department was experiencing high demand: “…entering the Waiting Room during periods of long treatment delay…” (p486); “…Walking into waiting room full of patients & families who have been waiting excessively on a busy shift…” (p60); “…checking patients in the waiting room…” (p8); dealing with abusive relatives or friends of patients: “…dealing with parents where child abuse is suspected…” (p11); “…resuscitating un-well child - parents become violent…” (p198); and restraining patients: “…restraining intoxicated patients…” (p31); “…restraining unsafe patients…” (p289). There was some overlap between
categories, for example discussion of restraint included patients with a mental health
and/or substance abuse intoxication and answers identifying patients with mental
health diagnoses also referred to dual diagnoses of substance abuse. \textsuperscript{AE} \textsuperscript{15}

<table>
<thead>
<tr>
<th></th>
<th>1 (n = 482) (%)</th>
<th>2 (n = 467) (%)</th>
<th>3 (n = 419) (%)</th>
<th>Total (n = 1368) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triage</td>
<td>252 (52)</td>
<td>34 (7)</td>
<td>28 (7)</td>
<td>314 (23)</td>
</tr>
<tr>
<td>Delays</td>
<td>61 (13)</td>
<td>70 (15)</td>
<td>73 (16)</td>
<td>204 (15)</td>
</tr>
<tr>
<td>Mental Health patients</td>
<td>41 (9)</td>
<td>79 (17)</td>
<td>55 (13)</td>
<td>175 (13)</td>
</tr>
<tr>
<td>Drug &amp; Alcohol</td>
<td>29 (6)</td>
<td>61 (13)</td>
<td>66 (16)</td>
<td>156 (11)</td>
</tr>
<tr>
<td>Patient assessment</td>
<td>29 (6)</td>
<td>64 (14)</td>
<td>31 (7)</td>
<td>124 (9)</td>
</tr>
<tr>
<td>General nursing care</td>
<td>14 (3)</td>
<td>36 (8)</td>
<td>40 (10)</td>
<td>90 (7)</td>
</tr>
<tr>
<td>Waiting room</td>
<td>17 (4)</td>
<td>40 (9)</td>
<td>20 (5)</td>
<td>77 (6)</td>
</tr>
<tr>
<td>Invasive procedures e.g. cannulation</td>
<td>11 (2)</td>
<td>27 (6)</td>
<td>25 (6)</td>
<td>63 (5)</td>
</tr>
<tr>
<td>Abusive carers/support persons</td>
<td>6 (1)</td>
<td>13 (3)</td>
<td>26 (6)</td>
<td>45 (3)</td>
</tr>
<tr>
<td>Restraining patients</td>
<td>7 (1)</td>
<td>14 (3)</td>
<td>22 (5)</td>
<td>43 (3)</td>
</tr>
<tr>
<td>Other</td>
<td>15 (3)</td>
<td>29 (6)</td>
<td>33 (8)</td>
<td>77 (6)</td>
</tr>
</tbody>
</table>

4.7.6 Staffing issues

Staffing issues reported to be significant contributing or precipitating factors for
patient-related violence included workload and time management issues; inadequate
staffing; inadequate communication with patients, for example regarding waiting

\textsuperscript{15} AE These data were free-text responses that were subsequently categorised by two independent
researchers who achieved consensus about the final categories and content of these data items.

\textsuperscript{15} “p” refers to participants
times and lack of skills to manage episodes (n = 332, 66%). “Other reasons” cited included inadequate security (n = 10), lack of skills in managing mental health patients (n = 6) and factors specific to the management of the ED (n = 12). Please see Table 87.

Table 87: Staffing issues (n = 506)

<table>
<thead>
<tr>
<th>Issue</th>
<th>Total responsesΩ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload &amp; time management</td>
<td>397 (78)</td>
</tr>
<tr>
<td>Inadequate staffing</td>
<td>369 (73)</td>
</tr>
<tr>
<td>Inadequate communication with patients e.g. about waiting times</td>
<td>366 (72)</td>
</tr>
<tr>
<td>Lack of staff skills to manage episodes of patient-related violence</td>
<td>332 (66)</td>
</tr>
<tr>
<td>Nursing practice &amp; attitudes of individual nurses</td>
<td>302 (60)</td>
</tr>
<tr>
<td>Poor skills mix</td>
<td>295 (58)</td>
</tr>
<tr>
<td>Time/day of shift</td>
<td>175 (35)</td>
</tr>
<tr>
<td>Professional communication issues e.g. handover/documentation</td>
<td>158 (31)</td>
</tr>
<tr>
<td>Other</td>
<td>33 (7)</td>
</tr>
<tr>
<td>Total</td>
<td>2427</td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these responses

A chi-squared analysis was conducted on staffing issues and episodes of violence with the variables “poor skills mix” (p = 0.001); “workload and time management” (p = 0.004) and “time/day of shift” (p = 0.026) were found to be statistically significant factors. Please see Table 88 for details.
Table 88: Chi-squared analysis results for staffing issues and episodes of violence

<table>
<thead>
<tr>
<th>Staffing issue</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload &amp; time management</td>
<td>8.43</td>
<td>0.004</td>
</tr>
<tr>
<td>Inadequate staffing</td>
<td>3.15</td>
<td>0.076</td>
</tr>
<tr>
<td>Inadequate communication with patients e.g. about waiting times</td>
<td>2.48</td>
<td>0.116</td>
</tr>
<tr>
<td>Lack of staff skills to manage episodes of patient-related violence</td>
<td>0.93</td>
<td>0.334</td>
</tr>
<tr>
<td>Nursing practice &amp; attitudes of individual nurses</td>
<td>0.38</td>
<td>0.828</td>
</tr>
<tr>
<td>Poor skills mix</td>
<td>11.21</td>
<td>0.001</td>
</tr>
<tr>
<td>Time/day of shift</td>
<td>4.98</td>
<td>0.026</td>
</tr>
<tr>
<td>Professional communication issues e.g. handover/documentation</td>
<td>0.089</td>
<td>0.767</td>
</tr>
</tbody>
</table>

The results of a logistic regression found that for the variable “poor skills mix” the odds ratio was 2.25 (95% CI 1.07-3.27), *p* = 0.027 which means that for where a poor skills mix exists nurses were more than twice as likely to experience patient-related violence. For the variable: “workload and time management” the odds ratio was 2.06 (95% CI 1.26 – 3.27), *p* = 0.004 which means that where workload and time management issues were reported, nurses were twice as likely to experience an episode of violence.

Data were further analysed according to geographic location and no statistically significant differences identified between metropolitan and regional areas. Please see Table 89 for more detail.
<table>
<thead>
<tr>
<th>Staffing issue</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload &amp; time management</td>
<td>179 (51)</td>
<td>160 (45)</td>
<td>15 (4)</td>
<td>354 (76)</td>
<td>2</td>
<td>0.86</td>
<td>0.652</td>
</tr>
<tr>
<td>Inadequate staffing</td>
<td>163 (50)</td>
<td>146 (45)</td>
<td>17 (5)</td>
<td>326 (72)</td>
<td>2</td>
<td>1.923</td>
<td>0.382</td>
</tr>
<tr>
<td>Inadequate communication with patients e.g. about waiting times</td>
<td>164 (52)</td>
<td>138 (44)</td>
<td>13 (4)</td>
<td>315 (69)</td>
<td>2</td>
<td>2.78</td>
<td>0.249</td>
</tr>
<tr>
<td>Lack of staff skills to manage episodes of patient-related violence</td>
<td>149 (50)</td>
<td>134 (45)</td>
<td>14 (5)</td>
<td>297 (62)</td>
<td>2</td>
<td>0.43</td>
<td>0.807</td>
</tr>
<tr>
<td>Nursing practice &amp; attitudes of individual nurses</td>
<td>136 (51)</td>
<td>121 (45)</td>
<td>12 (4)</td>
<td>269 (56)</td>
<td>2</td>
<td>0.38</td>
<td>0.828</td>
</tr>
<tr>
<td>Poor skills mix</td>
<td>134 (49)</td>
<td>123 (45)</td>
<td>14 (5)</td>
<td>271 (56)</td>
<td>2</td>
<td>0.82</td>
<td>0.662</td>
</tr>
<tr>
<td>Time/day of shift</td>
<td>80 (51)</td>
<td>68 (44)</td>
<td>8 (5)</td>
<td>156 (34)</td>
<td>2</td>
<td>0.76</td>
<td>0.685</td>
</tr>
<tr>
<td>Professional communication issues</td>
<td>72 (51)</td>
<td>64 (45)</td>
<td>5 (4)</td>
<td>141 (29)</td>
<td>2</td>
<td>0.51</td>
<td>0.773</td>
</tr>
</tbody>
</table>

- § Only 457 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.7.7 ED-specific issues

4.7.7.1 Area of department

The triage area was identified as the highest risk area in the ED for patient-related violence, followed by patient cubicles and the waiting room. Areas reported in the “other” category included not in the department, transferring to another department and house doctor. Please refer to Table 90.

<table>
<thead>
<tr>
<th>Area</th>
<th>Total responses Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triage</td>
<td>388 (78)</td>
</tr>
<tr>
<td>Patient cubicles</td>
<td>359 (72)</td>
</tr>
<tr>
<td>Waiting room</td>
<td>318 (64)</td>
</tr>
<tr>
<td>Resuscitation room</td>
<td>205 (41)</td>
</tr>
<tr>
<td>Corridors</td>
<td>181 (36)</td>
</tr>
<tr>
<td>Ambulance bay</td>
<td>119 (24)</td>
</tr>
<tr>
<td>Observation room</td>
<td>108 (22)</td>
</tr>
<tr>
<td>Other</td>
<td>79 (16)</td>
</tr>
<tr>
<td>Total</td>
<td>1757</td>
</tr>
</tbody>
</table>

Ω Participants could choose more than 1 response

A chi-squared analysis was performed comparing area of the department to episodes of violence on the last six months and triage, patient cubicles and the ambulance bay were all identified as being highly significant (p < 0.001). The resuscitation room (p = 0.002) and waiting room (p = 0.010) also were found to be statistically significant, please see Table 91 for details.
<table>
<thead>
<tr>
<th>Area of the department</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triage</td>
<td>29.43</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Patient cubicles</td>
<td>23.00</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Waiting room</td>
<td>6.64</td>
<td>0.010</td>
</tr>
<tr>
<td>Resuscitation room</td>
<td>9.23</td>
<td>0.002</td>
</tr>
<tr>
<td>Corridors</td>
<td>1.39</td>
<td>0.239</td>
</tr>
<tr>
<td>Ambulance bay</td>
<td>12.36</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Observation room</td>
<td>1.81</td>
<td>0.179</td>
</tr>
</tbody>
</table>

Data were further analysed according to region and the results are shown in Table 92. The variable “resuscitation room” was found to be highly significant (p<0.001) with this location reported almost twice as often in metropolitan areas compared to regional. “Corridors” also were reported more in metropolitan areas in a result that was statistically significant (p = 0.046). A sub-set analysis was performed to exclude the effect of the “other” region on the results, and both areas of the department were still found to be statistically significant: “resuscitation room” (p < 0.001, chi-squared = 20.6) and “corridors” (p = 0.010, chi-squared = 6.57).
<table>
<thead>
<tr>
<th>Area</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triage</td>
<td>173 (50)</td>
<td>154 (45)</td>
<td>16 (5)</td>
<td>343 (76)</td>
<td>2</td>
<td>1.20</td>
<td>0.752</td>
</tr>
<tr>
<td>Patient cubicles</td>
<td>158 (49)</td>
<td>151 (47)</td>
<td>14 (4)</td>
<td>323 (71)</td>
<td>2</td>
<td>4.53</td>
<td>0.210</td>
</tr>
<tr>
<td>Waiting room</td>
<td>143 (50)</td>
<td>128 (45)</td>
<td>15 (5)</td>
<td>286 (63)</td>
<td>2</td>
<td>4.45</td>
<td>0.217</td>
</tr>
<tr>
<td>Resuscitation room</td>
<td>111 (63)</td>
<td>56 (32)</td>
<td>9 (5)</td>
<td>176 (39)</td>
<td>2</td>
<td>24.58</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Corridors</td>
<td>93 (58)</td>
<td>60 (38)</td>
<td>6 (4)</td>
<td>159 (35)</td>
<td>2</td>
<td>7.80</td>
<td>0.046</td>
</tr>
<tr>
<td>Ambulance bay</td>
<td>60 (58)</td>
<td>41 (40)</td>
<td>2 (2)</td>
<td>103 (23)</td>
<td>2</td>
<td>5.33</td>
<td>0.077†</td>
</tr>
<tr>
<td>Observation room</td>
<td>46 (50)</td>
<td>40 (43)</td>
<td>6 (7)</td>
<td>92 (20)</td>
<td>2</td>
<td>2.20</td>
<td>0.532</td>
</tr>
</tbody>
</table>

- † Pearson’s chi-squared
- ‡ Fisher’s exact test
- § Only 454 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
Logistic regression analysis was performed on the three most significant areas identified: triage, patient cubicles and the waiting room. The results for “violent episode experienced in the last six months” as the dependent variable and “triage” (area of the department) as the predictor variable were: an odds ratio for triage was 3.63 with a 95% confidence interval of (2.24, 5.9) and a p-value <0.001. This means that the odds of a violent episode in the past 6-months occurring were almost four times greater for nurses working in triage.

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “patient cubicles” (area of the department) as the predictor variable. The odds ratio for patient cubicles was 3.13 (95% CI 1.93, 5.06), p- <0.001. This means that the odds of a violent episode in the past 6-months occurring were more than three times greater for nurses working in patient cubicles.

A logistic regression was performed with “violent episode experienced in the last six months” as the dependent variable and “waiting room” (area of the department) as the predictor variable. The odds ratio for the waiting room was 1.85 (95% CI 1.15, 2.97), p =0.011. This means that the odds of a violent episode in the past 6-months occurring were almost two times greater for nurses working in the waiting room.

The results for “violent episode experienced in the last six months” as the dependent variable and “ambulance bay” (area of the department) as the predictor variable were an odds ratio of 4.16 (95% CI 1.77-9.89), p = 0.001. This means that the odds of a violent episode are increased by more than four times for nurses working in the ambulance bay.

The results for “violent episode experienced in the last six months” as the dependent variable and “resuscitation room” (area of the department) as the predictor variable were an odds ratio of 2.29 (95% CI 1.33 – 3.96), p = 0.003. This means that the odds of a violent episode were more than double for nurses working in the resuscitation room.
4.7.7.2 ED-specific precipitants

Ninety nine percent of nurses surveyed (n = 501) reported that waiting times and delays were the main ED specific precipitant for patient-related violence. Overcrowding; noise levels; lack of privacy and personal space issues also were consistently identified by nurses as factors of concern. Other factors identified included patient specific reactions to the environment including the ability to manipulate the waiting system using past knowledge: “…violence often rewarded by allowing them to queue jump…” (p507); “…visibility - i.e. playing to an audience…” (p144); the negative impact of the environment on mental health patients: “…the ED is not the ideal environment for caring for the acutely unwell psychiatric patient…” (p140); and security concerns: “…lack of security presence/ perception of no consequences of patient-related violence towards staff…” (p9). Please see Table 93.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Total responses Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long waiting times/delays</td>
<td>501 (99)</td>
</tr>
<tr>
<td>Over-crowding</td>
<td>318 (63)</td>
</tr>
<tr>
<td>Lack of privacy</td>
<td>262 (52)</td>
</tr>
<tr>
<td>Noise levels</td>
<td>257 (51)</td>
</tr>
<tr>
<td>Personal space issues</td>
<td>248 (49)</td>
</tr>
<tr>
<td>Environmental factors e.g. lighting &amp; temperature</td>
<td>172 (34)</td>
</tr>
<tr>
<td>Other</td>
<td>41 (8)</td>
</tr>
<tr>
<td>Total</td>
<td>1799</td>
</tr>
</tbody>
</table>

Ω Participants could respond to all of these responses

A chi-squared analysis was performed on the factors specific to the ED and experiencing a violent episode in the previous six months and the variable “long waiting times and delays” was found to be highly significant (<0.001), with “lack of privacy” also significant (p = 0.031). Please see Table 94.
The results of a logistic regression analysis performed on long waiting times and delays and episodes of violence were OR (5.11, 95% CI 2.71-9.66), p-value <0.001. This means that the odds of experiencing an episode of violence increased by more than five times where patients experienced long waiting times and delays. The same analysis was performed on the variable “lack of privacy” and the results were: OR (1.69, 95% CI 1.05-2.75), p-value = 0.32.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long waiting times/delays</td>
<td>29.69</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Over-crowding</td>
<td>1.54</td>
<td>0.214</td>
</tr>
<tr>
<td>Lack of privacy</td>
<td>4.67</td>
<td>0.031</td>
</tr>
<tr>
<td>Noise levels</td>
<td>0.05</td>
<td>0.827</td>
</tr>
<tr>
<td>Personal space issues</td>
<td>1.89</td>
<td>0.169</td>
</tr>
<tr>
<td>Environmental factors e.g. lighting &amp; temperature</td>
<td>1.19</td>
<td>0.275</td>
</tr>
</tbody>
</table>

Data were further analysed according to geographic location a statistically significant difference in “over-crowding” in metropolitan areas was identified (p = 0.046). However a sub-set analysis to exclude the effects of the “other” region did not yield a statistically significant result: p = 0.231, chi-squared = 1.44. Please see Table 95 for further detail.
Table 95: Factors specific to the Emergency Department by geographic location (n = 472) § ¥

<table>
<thead>
<tr>
<th>Factor</th>
<th>Metropolitan (%)</th>
<th>Regional (%)</th>
<th>Other (%)</th>
<th>Total (%)</th>
<th>d.f.</th>
<th>chi-squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long waiting times/delays</td>
<td>221 (51)</td>
<td>194 (44)</td>
<td>21 (5)</td>
<td>436 (92)</td>
<td>2</td>
<td>7.30</td>
<td>0.063</td>
</tr>
<tr>
<td>Over-crowding</td>
<td>149 (52)</td>
<td>126 (44)</td>
<td>10 (4)</td>
<td>285 (60)</td>
<td>2</td>
<td>8.00</td>
<td>0.046</td>
</tr>
<tr>
<td>Lack of privacy</td>
<td>114 (48)</td>
<td>110 (47)</td>
<td>12 (5)</td>
<td>236 (50)</td>
<td>2</td>
<td>0.721</td>
<td>0.417</td>
</tr>
<tr>
<td>Noise levels</td>
<td>122 (53)</td>
<td>100 (43)</td>
<td>9 (4)</td>
<td>231 (49)</td>
<td>2</td>
<td>4.74</td>
<td>0.192</td>
</tr>
<tr>
<td>Personal space issues</td>
<td>119 (54)</td>
<td>94 (43)</td>
<td>6 (3)</td>
<td>219 (46)</td>
<td>2</td>
<td>5.93</td>
<td>0.115</td>
</tr>
<tr>
<td>Environmental factors</td>
<td>80 (54)</td>
<td>63 (42)</td>
<td>6 (4)</td>
<td>149 (32)</td>
<td>2</td>
<td>2.95</td>
<td>0.399</td>
</tr>
</tbody>
</table>

- § Only 472 participants provided postcodes in response to this question
- Ω Participants could respond to all of these items
- ¥ Percentages have been calculated as row percentages
4.7.8 Escalation of episodes

Participants were asked what factors they believed contributed to episodes of violence escalating from minor to major incidents. The analysis of these responses is summarised in Table 96. Three main categories were identified, professional factors, patient-specific factors and factors specific to the ED. Professional factors included poor communication skills: “…staff communication skills…” (p519); a lack of de-escalation skills and/or an inability to recognise the warning signs of impending violence by nurses: “…staff not recognising and reacting to signs of increasing aggression…” (p524), “…lack of awareness of people’s changing behaviour…” (p509); and staff manner or attitude: “…staff being antagonistic with patients…” (p494), “…staff aggression…” (p501).

Patient-specific factors discussed included the unrealistic expectations of patients presenting to the ED: “…unrealistic expectations…” (p537); the presence of drug and alcohol intoxication in patients: ”…effects of drugs and alcohol…” (p525); and the management of patients with mental health diagnoses: “…poor medical control/communication with psych patients…” (p349), “…long periods of time spent by mental health patients in the department waiting for beds…” (p296). The attitudes of patients and their previous experiences with the system also were discussed by participants: “…patients experience/learned behaviours which have worked for them in the past…” (p486), ”…learned behaviour…” (p488), ”…attention seeking behaviour…” (p462), “…a history of violence and the belief that nurses can do so much more…” (p439).

These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.
Factors specific to the ED included waiting times: “…long waiting periods…” (p535), the environment: “…limited facilities to de-escalate noise/stimulation… overcrowding…” (p445), “…overcrowding…no privacy…noise…” (p323), and staffing: “…staffing issues to observe patients more frequently…” (p461).

Table 96: Factors contributing to escalation of episodes (n = 457)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Sub-categories</th>
<th>Totals Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>Poor communication</td>
<td>162 (35)</td>
</tr>
<tr>
<td></td>
<td>Lack of de-escalation skills</td>
<td>133 (29)</td>
</tr>
<tr>
<td></td>
<td>Staff manner/attitude</td>
<td>62 (14)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>357</td>
</tr>
<tr>
<td>Patient-specific</td>
<td>Unrealistic expectations</td>
<td>69 (15)</td>
</tr>
<tr>
<td></td>
<td>Patient attitudes</td>
<td>49 (11)</td>
</tr>
<tr>
<td></td>
<td>Drug &amp; alcohol</td>
<td>59 (13)</td>
</tr>
<tr>
<td></td>
<td>Mental health patients</td>
<td>17 (4)</td>
</tr>
<tr>
<td></td>
<td>Patients’ needs not met</td>
<td>12 (3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>206</td>
</tr>
<tr>
<td>ED specific</td>
<td>Waiting times</td>
<td>110 (24)</td>
</tr>
<tr>
<td></td>
<td>Environment</td>
<td>35 (8)</td>
</tr>
<tr>
<td></td>
<td>Staffing</td>
<td>19 (4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>164</td>
</tr>
</tbody>
</table>

Ω More than 1 category could be assigned to each participant

4.7.9 Logistic regression to identify most significant risk factors

A logistic regression analysis was performed to identify the most significant risk factors for patient related violence and the results are shown in Table 97. The three main factors identified were triage, alcohol intoxication and substance misuse, in order of statistical significance. Working at triage emerged as the most significant risk factors with nurses working here almost three times more likely to experience an episode of violence (p < 0.001).
Table 97: Logistic regression for main risk factors and episode of violence

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR</th>
<th>95 %CI</th>
<th>Standard error</th>
<th>z-value</th>
<th>p-factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Episode of violence in the last 6 months (Reference group)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.98</td>
<td>0.95-1.01</td>
<td>0.02</td>
<td>-0.90</td>
<td>0.369</td>
</tr>
<tr>
<td>Years ED</td>
<td>0.96</td>
<td>0.92-1.01</td>
<td>0.02</td>
<td>-1.71</td>
<td>0.088</td>
</tr>
<tr>
<td>Alcohol intoxication</td>
<td>2.10</td>
<td>0.59-7.49</td>
<td>1.36</td>
<td>1.15</td>
<td>0.251</td>
</tr>
<tr>
<td>Substance misuse</td>
<td>1.68</td>
<td>0.51-5.53</td>
<td>0.73</td>
<td>0.86</td>
<td>0.390</td>
</tr>
<tr>
<td>Triage</td>
<td>2.72</td>
<td>1.60-4.61</td>
<td>1.02</td>
<td>3.72</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

4.8 Violence from the parents of paediatric patients

The fifth study aim was to investigate the issue of violence with respect to younger adults (16-25 years of age) and the parents of paediatric patients. This section reports data from all participants.

Two hundred and twelve participants of the 498 who answered the question (43%) reported experiencing violence from the parents of their paediatric patients. These data were analysed according to region with: 98/220 (45%) of metropolitan nurses, 94/199 (47%) of regional nurses and 6/21 (29%) of those in other areas reporting that they had experienced violence from this group. This result was found to be statistically significant (p = 0.008). §16

Participants were asked what age group of parents they had experienced this violence from and nearly three-quarters nominated those aged 35 or younger (n = 148/212, 70%) as the highest risk group. Please see Table 98.

§16 Only 440 participants provided postcodes in response to this question
In the majority of cases the term “parent” did not distinguish whether it was the mother or father of the child, or if both parents were involved. Individually both mothers and fathers were identified as the perpetrators of episodes of violence in equal numbers. A small number of participants mentioned other relatives including step-parents and grandparents. Please see Table 99.

### Table 99: Relationship to the paediatric patient (n= 203)

<table>
<thead>
<tr>
<th>Relationship to child</th>
<th>Total responses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent</td>
<td>94 (46)</td>
</tr>
<tr>
<td>Mother</td>
<td>47 (23)</td>
</tr>
<tr>
<td>Father</td>
<td>47 (23)</td>
</tr>
<tr>
<td>Other</td>
<td>15 (7)</td>
</tr>
<tr>
<td>Total</td>
<td>203</td>
</tr>
</tbody>
</table>

### 4.9 Recommendations to minimise/prevent the occurrence of patient-related violence

The final study aim was to develop recommendations for employers about patient-related violence and safety in the workplace for ED nurses.
Participants were asked their opinion about the most effective way to prevent or minimise the occurrence of patient-related violence in the ED. These answers were coded into 10 categories as presented in Table 100.

<table>
<thead>
<tr>
<th>Category</th>
<th>Total responses(\Omega)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero Tolerance Policy</td>
<td>159 (36)</td>
</tr>
<tr>
<td>Improved security</td>
<td>151 (34)</td>
</tr>
<tr>
<td>Increased staffing &amp; decreased waiting times</td>
<td>115 (26)</td>
</tr>
<tr>
<td>Training in aggression minimisation skills and cue recognition</td>
<td>78 (18)</td>
</tr>
<tr>
<td>Improved communication skills for nurses</td>
<td>67 (15)</td>
</tr>
<tr>
<td>Improved management of mental health patient</td>
<td>50 (11)</td>
</tr>
<tr>
<td>Improved management of drug &amp; alcohol patients</td>
<td>33 (7)</td>
</tr>
<tr>
<td>The use of isolation rooms</td>
<td>26 (6)</td>
</tr>
<tr>
<td>Too hard to prevent</td>
<td>13 (3)</td>
</tr>
<tr>
<td>Other</td>
<td>24 (5)</td>
</tr>
<tr>
<td>Total</td>
<td>716</td>
</tr>
</tbody>
</table>

\(\Omega\) Please note more than one category could be assigned to one answer.

The strict enforcement of Zero Tolerance policies was the most common recommendation from participants and closely aligned with the need for improved security: “…we need a strict zero tolerance policy state wide and some way to enforce this i.e. police…” (p206). Participants recommended that hospital security guards be rostered on to all shifts: “…have security guards located in the department 24 hours…” (p207) and be based in the hospital or preferably in the ED at triage where they would serve as a visible presence to the public, especially those in the waiting room. Their location should be such that they are able to respond quickly to episodes of violence “…security personnel on-site able to be seen by patients/relatives. WE WORK ALONE IN OUR ED!” (p37). The use of security devices such as the use of duress alarms to facilitate this response was also discussed: “…security in department at all times, duress pendant at all times (own one not shared)…” (p67). Some participants felt that this
did not go far enough and cited the need for police involvement, through a physical presence in the ED: “…police ‘walk-throughs’ at intervals…” (p99); or through mandatory reporting of all episodes of violence to the police to enable charges to be laid against the perpetrators: “…the right to refuse care to those that are violent towards staff…” (p170); “…arrest patients who are violent towards staff and lay criminal charges. Zero tolerance seems to just be a catch phrase…” (p234).

The need to reduce waiting times and prevent bed block through the provision of adequate staffing levels, and provision of resources and education of the public about the realities of a modern ED were acknowledged by participants as necessary to minimise levels of violence. “…Decrease patient waiting times and additional support at triage…” (p75); “…minimising the long waiting times for admitted mental health patients to find mental health beds, e.g. at times they can be admitted to the ED for 1-2 days before a bed has become available…” (p432); “…I feel that the most common reason for patient related violence is waiting times and patient’s distress at not knowing when they will be seen. I feel that an increase in staff so as to decrease waiting times. This would also necessitate the need for opening more beds…” (p113).

However it was acknowledged that these waiting times were inevitable in the present system therefore strategies were necessary to manage patients accordingly: “…good communication about waiting times, delays and explain how triage works. Also to provide pain relief in the waiting room/at triage…” (p469). Improved communication and training were recommended to enable nurses to identify patients at risk of violent behaviour and manage them accordingly to deescalate and contain the episodes. This training should be regular and mandatory in nature: “…ongoing regular minimisation training involving all staff, frequently enough to cover even staff on short rotations that are unfamiliar with basic concepts…” (p247).

Two groups of patients were identified as being at risk of violent behaviour and therefore in need of targeted management: mental health patients and those under
the influence of drugs and/or alcohol. The participants recommended that mental health patients be processed quickly: “…prompt mental health review…” (p200); “…allow MH patients prompt assessment and movement to inpatient unit…” (p274). Æ

4.9.1.1 Measures to manage episodes

Participants were asked what measures they felt could be used more effectively to manage violent patients/episodes and these responses are summarised in Table 101. The main categories identified were staff, organisational, ED-specific factors and patient-specific factors. The staff-specific factors identified included training in de-escalation techniques: “…education for doctors and nurses such as Professional Assault Response Training (P.A.R.T)…” (p460); “…staff education to awareness of precipitating factors…” (p474); “…more effective teaching on de-escalation skills…” (p439) and communication: “…more communication…” (p503). The main organisational specific measure identified by nurses was the need for security services; this included an increased presence in the ED and improved responses: “…have security present at all times…” (p505); “…on-site security staff - we have none…” (p492) Other measures included Zero Tolerance: “…real zero tolerance…” (525); “…clear expectations of Zero Tolerance…” (p506); “…message of intolerance to violent behaviour (ZERO)…” (p481) and staffing levels: “…more effective staffing at busy times…” (p441); “…more staff to decrease patient anxiety/patient stress…” (p436).

ED specific measures nominated by nurses included ED design: “…Safer ED departments - ability to isolate patient when escalating…” (p445); “…these patients need to be in a low stimulus environment that enables them to have some privacy, but where they can be medically cleared at the same time…” (p366) and decreasing waiting times: “…90% of

Æ These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.
incidents relate to prolonged waiting times!” (p463). Patient-specific factors were discussed such as education of the public to ensure that they had realistic expectations about the ED and its operation: “…community based education about the purpose and use of the ED…” (p485); “…better education of the public i.e. appropriate use of ED…” (p456); “…need TV promotion of what EDs are meant to be used for and acceptable behaviour…” (p360). Patient management plans, specifically the management of mental health patients were perceived to be a strategy that could be used more effectively to manage the problem of patient-related violence: “…more Mental Health professionals in the department and more resources for these mentally ill patients…” (p495); “…mental health patients not staying for days in the ED…” (p476).

Police involvement was discussed by participants, with comments including a visible police presence in the ED to act as a deterrent to potential offenders and the punishment of violent patients: “…police involvement - charges being laid…” (p533); “…charge violent incidents (including verbal threats)…” (p439).

These data were free-text responses that were subsequently categorised by two independent researchers who achieved consensus about the final categories and content of these data items.

“p” refers to participants.
### Table 101: Measures to more effectively manage violent patients/episodes (n = 433)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total responses Ω (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff-specific</strong></td>
<td></td>
</tr>
<tr>
<td>Training in de-escalation techniques</td>
<td>117 (27)</td>
</tr>
<tr>
<td>Communication</td>
<td>147 (34)</td>
</tr>
<tr>
<td></td>
<td><strong>264 (61)</strong></td>
</tr>
<tr>
<td><strong>Organisation-specific</strong></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>103 (24)</td>
</tr>
<tr>
<td>Zero Tolerance</td>
<td>70 (16)</td>
</tr>
<tr>
<td>Staffing</td>
<td>43 (10)</td>
</tr>
<tr>
<td>Policies</td>
<td>7 (2)</td>
</tr>
<tr>
<td></td>
<td><strong>223 (52)</strong></td>
</tr>
<tr>
<td><strong>ED specific</strong></td>
<td></td>
</tr>
<tr>
<td>ED design</td>
<td>34 (8)</td>
</tr>
<tr>
<td>Decrease waiting times</td>
<td>32 (7)</td>
</tr>
<tr>
<td></td>
<td><strong>66 (15)</strong></td>
</tr>
<tr>
<td><strong>Patient-specific</strong></td>
<td></td>
</tr>
<tr>
<td>Education of public</td>
<td>40 (9)</td>
</tr>
<tr>
<td>Management of mental health patients</td>
<td>35 (8)</td>
</tr>
<tr>
<td>Patient management plans</td>
<td>16 (4)</td>
</tr>
<tr>
<td>Seclusion</td>
<td>15 (3)</td>
</tr>
<tr>
<td>Restraint</td>
<td>11 (3)</td>
</tr>
<tr>
<td></td>
<td><strong>117 (27)</strong></td>
</tr>
<tr>
<td><strong>Police</strong></td>
<td>46 (11)</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>15 (3)</td>
</tr>
<tr>
<td><strong>Total responses</strong></td>
<td>731</td>
</tr>
</tbody>
</table>

Ω More than 1 category could be allocated to each participant
Chapter 5  Results from interview data: Part II

This chapter reports the results of Part II of the study, data that were collected through semi-structured interviews. These results have been published in the International Emergency Nursing Journal and a copy has been attached as Appendix V.

NB: The abbreviation “p” refers to participant in this chapter.

5.1 Introduction

The issue of patient-related violence, both verbal and physical, has emerged as a priority for the nursing profession internationally. A position statement from the International Council of Nurses has condemned “all forms of abuse and violence against nursing personnel” (International Council of Nurses, 2006). Emergency Department (ED) nurses have been identified as especially vulnerable to patient-related violence (Crilly et al., 2004), with rates up to four-times that of other specialities (Gerberich et al., 2004). The literature reports that episodes of patient-related violence are increasing in both prevalence and severity (Estryn-Behar et al., 2008) and that aggression and violence are now regarded as common occurrences in the modern ED (Ryan & Maguire, 2006).

5.2 Background/Literature

Violence in the health sector has emerged as a significant issue and one that is reportedly increasing in both severity and prevalence (Wand, White, Patching, & Dixon, 2010). Violence can be perpetrated by patients or clients, relatives or visitors or can be horizontal in nature and be directed at health care workers by others in the profession (Ryan & Maguire, 2006). Patient-related violence is the most common source of violence (Ryan & Maguire, 2006), with patients responsible for up to 89% of all cases (McKinnon & Cross, 2008) and recent evidence has identified
parent(s)/carer(s) of paediatric patients as a potentially significant group (Pich, Hazelton, & Kable, 2013). This paper reports results from a study that focused specifically on patient-initiated violence and other types are beyond the scope of this paper.

The nature of nursing leaves those in the profession especially vulnerable to violence, and the evidence confirms that nurses are the professional group at greatest risk of such violence (Estryn-Behar et al., 2008), with their rates of exposure higher than any occupational group in the health sector or indeed in any other work environment (Perrone, 1999). The ED has been identified as one of the highest risk settings for violence, and within this clinical environment (Taylor & Rew, 2011), the majority of nurses, between 60 and 90%, report exposure to verbal and/or physical violence (Lau et al., 2004). For some nurses such violence is a daily occurrence (Hegney et al., 2006; Pich et al., 2011); which can lead to a dangerous and volatile clinical environment (Taylor & Rew, 2011).

For the purpose of this study a definition of violence was provided to ensure consistency of understanding and was modified from one used in Mayhew and Chappell (2005). Violence was defined as any act, explicit or implicit, that is intended to threaten or challenge the safety, well-being or health of another (Mayhew & Chappell, 2005). This includes a spectrum of behaviours from overt acts of physical violence to non-physical forms of violence such as verbal abuse and sexual harassment (Gerberich et al., 2004).

5.3 Methods

5.3.1 Aim

The aim of this study was to describe the experiences of Australian (ED) nurses with episodes of patient-related violence from young adults (16 - 25 years of age) and episodes of parent-related violence from those accompanying paediatric patients.
This paper reports selective results of the qualitative part (Part II) of the Violence in Emergency Nursing and Triage (VENT) Study.

5.3.2 Design

This was a qualitative descriptive study and data were collected by interviewing participants using a semi-structured interview schedule.

5.3.3 Participants/Sample

In Part I of the VENT Study a survey was distributed to all members of the College of Emergency Nursing Australasia (CENA) nationally (n = 1150) (these data will be published separately). An Expression of Interest for participating in Part II of the study was included at the end of the survey. This invited interested nurses to take part in interviews to discuss their experiences with patient-related violence, specifically involving parents of paediatric patients and young adults (16-25 years of age).

Eleven Registered Nurses volunteered and were recruited as a result of this purposive recruitment strategy. The participants included, seven female and four male participants, with a median age of 44 and an average of fifteen years clinical experience working in the ED environment. The sample was drawn from metropolitan and regional locations across New South Wales, Queensland and Victoria, Australia.

5.3.4 Inclusion criteria

All participants were Registered Nurses who had worked clinically in an Australian ED in the preceding 6 months, and were members of CENA in 2010.
5.3.5 Data collection

Eleven participants took part in semi-structured interviews in 2010. These included both face-to-face and phone interviews and all were audio-taped and subsequently transcribed. Two interview schedules were used tailored to the group of interest being discussed (parents of paediatric patients or young adults) and participants were asked to describe a typical encounter and the feelings such an encounter caused. They also were asked about their ability to resolve a difficult situation and the level of support received from their colleagues and management at their place of work. These data were augmented with field notes taken by the researcher. Interview transcripts were sent to participants to verify their accuracy.

5.3.6 Ethical considerations

Ethical approval was obtained from The University of Newcastle Human Research Ethics Committee. Methods employed to ensure that the confidentiality of participants was maintained included cautioning participants not to name any third parties during data collection, de-identifying transcripts and coding of data.

5.3.7 Data analysis

Transcripts of digital recordings were analysed using a qualitative descriptive framework utilising the strategy of content analysis (Neergaard et al., 2009). The aim was to let the data speak for itself and limit the influence of the researcher on the results (Sandelowski, 2000b). Qualitative description is recommended as the method of choice where a description of a phenomenon is sought and is especially relevant where the aim is to gain firsthand knowledge of health professionals’ experience with a particular topic (Neergaard et al., 2009). Whilst it is true that no description or analysis is free of interpretation, a qualitative descriptive methodology involves low-inference interpretation that is likely to result in consensus of meaning amongst researchers or peers (Sandelowski, 2000b). Consequently, data were analysed to
identify and extract relevant themes while maintaining an uncritical perspective to produce a descriptive summary of the data (Neergaard et al., 2009).

5.3.8 Validity/Reliability/Rigour

Strategies to enhance rigour and credibility included those proposed by Milne and Oberle (Milne & Oberle, 2005). Transcripts were verified with participants (member checking) to ensure accuracy. Peer review of emergent themes was provided by an experienced qualitative researcher (MH) to confirm consistency with the data and to reduce subjective interpretation (Milne & Oberle, 2005). An audit trail of the decisions made during analysis was documented and reviewed by the peer reviewer (Appendix U).

5.4 Results

Data analysis led to the identification of antecedents to episodes of violence and behaviours specific to the two groups of interest: parents of paediatric patients and young adults aged 16 to 25 years of age. Although the behaviours and antecedents differed for these two groups, participants perceived that they shared a common goal: to be seen and treated by an ED doctor as quickly as possible.

The behaviours identified include:

- “Performing” and attention-seeking behaviours;
- Violent behaviours: Verbal Abuse and Physical Violence.

Antecedents discussed by participants included:

- Parental emotions;
- Alcohol and substance abuse.

Overall the results contribute to an overarching theme of feeling unsafe at work.
5.4.1 Behaviours: “Performing” and attention-seeking behaviours by patients

Participants reported that patients from these groups of interest often displayed attention-seeking behaviours such as being noisy, intimidating, disruptive, and demanding. These behaviours were reported to be “performed” to friends of the perpetrator who had accompanied them: “...there’s usually a group of them and they continually yoo-haa and that out in the waiting room...” (p2). This extended to patients waiting to be seen, with perpetrators using those in the waiting room as an ad hoc audience: “…they...draw attention to themselves...” (p3). Comments about the participants and other nurses were often made directly to the waiting room with the perpetrators looking for a reaction, be it positive or negative: “...she’s a bitch...” (p1). These behaviours were considered to be exacerbated by long waiting times, both actual and perceived.

Participants perceived that such patients often displayed these behaviours as a direct ploy to gain access to the department “…a lot of its attitude and expectation...so they expect to be seen here and now…” (p7). This strategy appears to be effective with participants reporting that these types of patients were usually “fast-tracked” to maintain the safety of others in the waiting room: “…usually try to fast track them...” (p7); “…they end up getting seen quicker just to get rid of them and stop the ruckus going on...” (p2); “…they get the attention purely because it’s unsafe for them to be out in the waiting room...” (p10).

This reaction by participants was acknowledged to be a type of positive reinforcement that perpetuated a negative cycle, leading to a situation where such patients present repeatedly with the expectation that nurses will reward their “poor” behaviour. Participants expressed uneasiness about the unpredictability of subsequent presentations and the potential for violence of these patients, many of whom have a history of aggression: “…you’ll see different ones come and...here we
In addition participants described a domino effect amongst those left in the waiting room “…it’s like Chinese whispers… the domino effect…” (p7). Once the disruptive patient has been removed, those remaining are left feeling frustrated that the perpetrator has in effect jumped the queue and been seen before them: “…everyone starts to get anxious and…usually become worse...” (p7).

5.4.2 Episodes of violence: Verbal abuse and physical violence

All participants had experienced verbal abuse including swearing and personal threats, and reported that it was a regular occurrence: “…verbal...every shift...” (p9). They noted that this abuse was more frequent than it had been in the past and that the nature of threatening statements had become more sinister: “…the threats are more serious now…” (p7); “…saying that they are going to rape me...” (p3); “…he was threatening to kill me...” (p7); “…I’m going to kill you he said to me...” (p9); “…I’m going to follow you to your car...find out where you live, I’m going to kill you. I’m going to hurt your family...” (p3).

Physical abuse was reported by seven out of the eleven participants: “…’cos I’ve been physically assaulted...I make sure I don’t get too close to get physically abused...” (p3); “…people going to hurt you...having a go at you...at least every week to a couple of times every week...” (p9).

The participants discussed the use of both traditional weapons and opportunistic items as weapons to intimidate and threaten staff: “…chairs pushed across the floor...” (p10); “…whipped out a knife and started slashing the air...” (p6); “…threat of a gun a couple of weeks ago...” (p2); “…grabbed a pole and came back and smashed the window down trying to kill her...” (p7); “…grabbed a bed...smashed the doors open and broke all the locks and electronic system...” (p1).
Physical injuries sustained by participants included: - a broken nose: “...turned around and just got a full smack in the nose...” (p3); wrist injury; ligament damage to thumb: “...ended up almost breaking my thumb...” (p2); scratches; bruises; and injury to finger (squashed between trolley and patient). In addition participants reported psychological injuries and many expressed fears about the consequences of future episodes which concerned them greatly: “...nurses are going to be killed in the future...” (p7).

5.4.3 Antecedents: Alcohol and substance abuse

Many of the patients exhibiting the attention-seeking behaviours described above were reported by participants to be under the influence of alcohol and/or illicit drugs. Participants reported that such patients were more likely to be males aged 16 to 25 years of age: “...more young kids are coming into hospital when they’ve had alcohol...” (p8), however females were increasingly presenting in this state: “...more girls coming in with alcohol...there’s more aggression than in the past...” (p9).

Participants felt that the behaviours of this “generation y” group were linked to the desire for instant gratification “…the internet age…they want it faster and they don’t want to wait…and unfortunately our system at the moment is not designed around rapid delivery...” (p7). They concluded that this decreased tolerance in terms of waiting times exacerbated attention-seeking behaviours and again resulted in fast-tracking through the department: “…with alcohol-related things, because of how they act, they get seen straight away...are seen to...jump the queue...” (p2).

Participants also reported a lack of insight from young adults who often failed to recognise that their substance abuse could have been the cause of their presenting symptoms, and were aggressive when that possibility was raised: “…that wouldn’t have anything to do with it...” (p9); “Cos they’re coming in ‘oh, someone’s put something in their drink and inevitably, they’re got a high blood alcohol, no drugs...” (p5).
5.4.4 Parental emotions: fear, anxiety, impatience and lack of understanding/knowledge

Participants discussed their experiences of parent-initiated violence from those accompanying paediatric patients to the ED. These episodes were typically preceded by aggressive and demanding behaviours that went beyond what participants considered reasonable. There were a number of emotions associated with these behaviours including fear and anxiety over the condition of their child: “…why is my child not being seen?” (p1); and frustration and impatience with the system, for example with waiting times: “…It really has to do with the parent’s ability to cope with this situation which they’re not used to…” (p3). This was especially evident amongst young parents: “…kids having kids…” (p6) and what was referred to as “professional males”. They were described as well-presented men who acted in a condescending manner to the nurses, particularly the female nurses. There was a lack of understanding of the triage scale: “…disconnect between parent’s expectations…what’s possibly wrong with their child…low triage category…” (p1). Conflict also developed where parents were unhappy with a medical course of action and sometimes drew on their previous experiences with the system regarding their expectations: for example “…the last doctor put her on a drip…” (p6). Participants reported that these issues created the potential for conflict if parents perceived their needs, or those of their child, were not being met: “…a father picked up a phone and threw it on the desk…” (p8).

Participants reported that these episodes typically revolved around young children: “…toddler to barely school age…” (p1). Paediatric patients at the centre of episodes of parent-related violence varied in terms of their presenting problems varied, however the triage category assigned was consistently reported as being of low priority: “…quite often the child is not necessarily as sick as many others in the department
but the parent’s perception is really what you are managing... most of those children in my memory, actually end up going home as opposed to being admitted” (p6).

Parents often used information gained from the media or the internet to pre-diagnose their child, for example participants reported that some parents believed that any rash was meningococcal and so “...every rash is deadly...” (p1). If this information was at odds with that given by the triage nurse and their child was given a low priority in terms of triage, there was a potential for conflict. “...4 or 5 year old daughter to the window and virtually screamed in at me that the child needed an ECG now! ...child was probably experiencing was some fever and tachycardia...” (p3). Parents may react by refusing to accept the triage nurse’s directions and demanding to see someone more senior in the department, usually a doctor who they think will validate their concerns about their child: “...demanding...insistence on the most senior person in the department seeing the child” (p6).

The nurses interviewed reported that following such episodes perpetrators would often offer an apology for their behaviour: “I’m really sorry I was like that...It wasn’t personal...I wouldn’t normally be like that...” (p3). Participants who identified themselves as parents acknowledged that they accepted such apologies and empathised with the perpetrators: “...having been a parent yourself... knowing that there are times where you do lose the plot...you are sleep deprived...you are living on a knife-edge...” (p6). However others believed that such apologies were not genuine or were offered as asides after the perpetrator had got their own way;”...got a slight apology from him later...” (p1).

5.4.5 Feeling unsafe at work

The central emergent theme from this analysis was that nurses frequently felt unsafe at work: “...I just feel so unsafe...” (p2); “....I feel less safe here than I did in the military...” (p9). This fear was not just for the individual nurse’s well-being but was extended to others in the department, including other patients: “...concerns for our...
safety...the safety of people in the waiting room” (p4). There was also concern at the impact violent behaviour from parents had on the children accompanying them in terms of acceptability: “...I’m scared not just for myself but for the other people around me and I’m scared of the impression the child is getting...about what might be normal...” (p6).

Underlying this sentiment was the issue of police involvement in dealing with episodes of violence. While such episodes are not regular occurrences they cause great concern for staff and can be very violent: “...in the last 12 months...two incidents where I’ve had to call the police....genuine concern that it’s going to get well and truly out of hand...” (p2); “...One guy actually assaulted a policeman in the waiting room...” (p3). However this did not extend to actual charges being laid by police punishment: “...they’re allowed to get away with it...I think that’s one of the frustrations of where we work...” (p10); “...people can swear at us, spit at us, bite at us...try to hurt us and nobody puts an incident report in...” (p11). Participants appeared resigned to feeling this way: “…I think it’s a healthy fear most days when you’re in triage...” with many expressing the view that it is something to be expected: “…sadly I put it down as part of the job...” (p2).

5.5 Discussion

The levels of violence experienced by the participants in this study is reflective of those experienced by ED nurses globally and this has created a culture where such violence is expected and accepted as “part of the job” by many nurses who see themselves as “legitimate targets” (International Council of Nurses, 2006). All participants had experienced verbal abuse and threats, while seven out of the eleven had been physically abused and as a result many felt unsafe at work, at least part of the time. A review of the literature reveals that upwards of 50% of ED nurses have experienced physical violence from patients on the job (Gacki-Smith et al., 2009), while a majority has been verbally abused (Pinar & Ucmak, 2011). The International
Council of Nurses has reported that the majority of nurses (72%) globally do not feel safe at work, while a survey of American nurses put this figure at upwards of 80% (American Nurses’ Association, 2001; International Council of Nurses, 2009). An Irish researcher found that 91% of nurses were worried about being physically assaulted while at work (Rose, 1997). This is especially significant when considering that Occupational Health and Safety legislation and guidelines exist in most countries to protect the health, safety and welfare of workers.

While participants expressed concern and often distress at the levels of violence they were exposed to, they felt that these were an expected part of their job, one that was beyond their control to change. This resignation to violence is documented throughout the literature (Erickson & Williams-Evans, 2000; Ray, 2007), and is thought to be responsible in part for the endemic under-reporting of episodes of violence (Gacki-Smith et al., 2009). In addition it is evident from participants that these concerns have forced them to practice in a defensive way which has implications for their ability to effectively engage with their patients.

The issues of alcohol and substance abuse were cited as significant antecedents for episodes of violence, especially where the perpetrators were young adults accompanied by a group. Haberkern et al (2010) found that rates of alcohol intoxication in the 16-25 year old age group had increased over an eight-year period (Haberkern, Exadaktylos, & Marty, 2010). Alcohol is known to provoke or increase aggressive behaviour (National Committee on Violence, 1989) and this effect can be magnified where a group is involved. The groups accompanying these patients were often used as an *ad hoc* audience for them as they indulged in disruptive attention-seeking behaviours in an attempt to “fast-track” their way through the department. In addition to those people accompanying the perpetrator, those sitting in the waiting room also were often drawn in to the “performance”, with negative comments about nurses made directly to them. This phenomenon has previously
been reported in the literature, with ED nurses describing the waiting room as being “thick with hatred” (Hislop & Melby, 2003).

Aggressive and disruptive patients were often “fast-tracked” through the department by participants, in an attempt to manage their behaviour and safeguard those in the waiting room. As a result many have come to associate their disruptive behaviour with being seen more quickly and thus repeated these behaviours on subsequent visits. Patients who presented frequently to the ED were referred to as “frequent flyers” by participants, and they were repeatedly able to manipulate the system. The term “frequent flyers” is a nuanced term with a variety of meanings. It is typically used to refer to patients who present to the ED on multiple occasions (Markham & Graudins, 2011). There was a strong perception amongst the participants that while some of these patients were genuinely seeking care, others were often seeking a confrontation, and their aggressive behaviours were offensive with the intent to cause harm (Gibson, 1997). This notion of repeat offenders has been discussed in the literature, and is linked to the fact that a previous history of violence is an important predictor of future violence (Ferns, 2005b). These types of behaviours are often found in the stereotypical “recreational fighter”, a term coined to describe predominantly young males who enjoy physical confrontations (Graham & Wells, 2003).

Participants consistently linked these behaviours to young adults, specifically those in “generation y”: the 16-25 year old age group. The broad definition of “generation y” encompasses those born in the 1980s and 1990s ("Concise Oxford English Dictionary.," 2012) Young males are identified in the literature as being the most likely perpetrators of patient-related violence (Duxbury & Whittington, 2005). According to the Garling Report into Acute Care Services in New South Wales, Australia (Garling, 2008), this age group are over-represented in terms of ED presentations and often has co-morbidities of drug and alcohol dependence. This has
been linked to a sense of entitlement and a reluctance to have to “wait” for any part of their care in the ED (Pich et al., 2011).

The increased noise and activity of these demanding patients has an impact on other patients in the department. It can lead to increased levels of anxiety in certain types of patients, for example mental health patients and dementia patients (Kable et al., 2012b). According to the literature, the environment of the ED can be counter-productive in dealing with mental health patients (Ferns, 2005b), and the business, noise and overcrowding that are commonplace can provoke aggression in these patients (Jones & Lyneham, 2000). Recognition of this has prompted the exploration of new models of care: for example dedicated mental health services located either in the ED or as discrete units and consultant mental health nurses, nurse practitioners and psychiatrists (Wand, White, Patching, Dixon, & Green, 2012). In addition many universities, including the University of Newcastle, have implemented Mental Health First Aid training in their undergraduate program to equip nurses with the skills to deal with mental health patients (Kitchener, Jorm, & Kelly, 2010).

Similarly the ED can be a stressful place for the parents of paediatric patients and this can lead to violent behaviour toward nurses. Parent-related violence was reported by Gillespie et al (2010) who found that mothers and/or fathers typically became violent during medical and trauma care situations (Gillespie et al., 2010). Similarly paediatric residents are often exposed to verbal abuse and/or physical assaults from patients and patients’ families during the course of their training (Judy & Veselik, 2009).

Parents in these situations can experience a range of emotions, from fear and anxiety over their child’s condition to impatience and frustration at the delays and waiting times common in the ED. These emotions can increase the potential for aggressive behaviour if the parent feels their child’s needs are not being met, and are often associated with a lack of understanding and knowledge about the organisation of an ED, something which is more evident in younger parents (Pich et al., 2011). These
factors are consistent with the literature on the topic with Gillespie et al (2010) reporting that certain situations increase the likelihood for violence in a paediatric ED. These included disagreement over a care plan, the denial of a service or request, perceived long waiting times, perceived rudeness and uncaring attitude from a healthcare worker and grief over the loss of a child (Gillespie et al., 2010).

The concern expressed by participants that someone may ultimately be killed sadly became a reality in Australia in 2011, further underlining the seriousness of the issue. Two mental health nurses were stabbed by a patient in regional Australia resulting in the death of one (Smith, 2011), and this was followed later in the same year by the stabbing of an ED nurse by a patient in a metropolitan Australian ED (Kwek, 2011). These events confirm that the fear expressed by participants and the perception that they are working in an unsafe environment are not misplaced.

The issues of lack of understanding of the operations and layout of the modern ED have recently been addressed by the UK Design Council, which used a holistic approach to tackling the issue of violence and aggression in this setting (Design Council, 2011). The project identified four key areas of concern: the “arrival” and “waiting” experiences, guidance and the people or stakeholders (Design Council, 2011). This approach offers potential solutions for other health care systems to adopt these measures and improve the safety of the ED for both the people who work there and those who seek to use its services.

5.6 Limitations

The approach used in this study reports data that may be affected by recall bias as participants were asked about their past experiences with episodes of violence. However an attempt was made to minimise this by asking participants to limit their responses to episodes that had occurred in the preceding six months. Data were collected from four different states and territories in Australia suggesting that the
issues are potentially transferable to other ED contexts in spread across Australian EDs. However the results may not be transferable to nurses in other countries. The authors acknowledge that the small sample size of eleven is a limitation; however data saturation was achieved in this qualitative descriptive study.

5.7 Conclusion

The fast-tracking of aggressive patients who exhibit attention-seeking behaviours is a practical strategy to manage the potential for escalation of violent behaviour and to minimise the risk for other patients and staff, however it also rewards patients for their “poor” behaviour. However this can lead to a situation where such patients are able to use this knowledge to manipulate the system on future presentations. The implications for nurses practicing in the ED are about decision-making to maintain safety in their working environment. Communication with those remaining in the waiting room about the necessity of moving such patients may be beneficial in terms of reducing any lingering hostility or resentment.

The role played by distinct groups such as young adults (16-25 year olds) and the parents of paediatric patients must be considered together with other known risk factors to help identify patients at risk of potential violence. This knowledge should be added to existing training programs on aggression minimisation to inform and better equip nurses to deal with these groups.

The behaviours of these two groups are at times so distracting and time-consuming for nurses that resources are diverted away from other patients leading to a situation where care can be compromised. There is a bitter irony here for nurses, who are motivated by a “helping” and empathetic ethic, to be exposed to aggression and violence and often palpable hatred. The professional and personal impact that these episodes of patient-related violence have on nurses can affect their subsequent interactions with patients. If ED nurses are forced to practice in a defensive manner
due to feeling unsafe at work their ability to forge effective therapeutic relationships and engage with their patients and other members of the ED team will be hampered and patient care may be further compromised.
Chapter 6  Discussion

This chapter will discuss the results of Part I and II of the study with reference to the body of literature on the topic. Similarities and differences between geographic locations will be discussed and similarities between the two parts of the study identified. The limitations of the study will be presented and finally conclusions and recommendations for future research, policy, workplace management and workplace education will be detailed.

This chapter is structured using the study aims and will demonstrate that the aims of the study as detailed below have been achieved. The six aims of the study described in Chapter 3, were: -

1. To measure the frequency of individual emergency nurses’ reported exposure to patient-related workplace violence and associated outcomes in the preceding six months;
2. To identify the types of violent behaviours experienced by emergency nurses;
3. To identify emergency nurses’ perceptions of risk prevention measures and risk management strategies adopted by their employers;
4. To identify factors associated with patient-related workplace violence that precipitate, escalate or de-escalate episodes of violence;
5. To investigate the issue of violence with respect to young adults (16-25 years of age) and the parents of paediatric patients;
6. To develop recommendations for employers about patient-related workplace violence and safety in the workplace for emergency nurses.

6.1 Representativeness of the sample

The demographic profile of sample is consistent with workforce statistics for nurses in Australia with an average age of 44.2 years overall and 39.1 for the speciality of critical and emergency nursing, compared to an average age of 42.4 years in Part I,
and a median age of 44 years in Part II of the study (Health Workforce Australia, 2013). More than half of the participants in Part I of the study were aged 40 and older (n = 318, 60%), with three percent (n = 18) over the age of 60. The age distribution for the nursing workforce in Australia has changed over the past decade and reflects an ageing workforce. This ageing workforce is reflected in both the increasing average age of nurses and the increasing percentage of those aged 55 and over. The average age of all nurses increased by approximately one year from 43.1 in 2003 to 44.3 in 2009, and the percentage of RNs aged over 55 increased by 5% for the same period. The median age of nurses, increased from 42 years in 2001 to 45 years in 2011, and was 43 years in this study sample. Australian Bureau of Statistics figures for 2011 reported that nurses aged 50-54 years of age made up the largest age group, and that nurses aged 55 and older had increased from 11% of the total nursing workforce in 2001 to 21% in 2011 (Australian Bureau of Statistics, 2013). The most current data reported that employed registered nurses aged 55 make up 22% of the national nursing workforce (Health Workforce Australia, 2013).

Data for gender were not collected in Part I of the study, however in Part II, the majority of participants were female (n = 7/11). This is consistent with workforce statistics which show that in 2013, 90% (n = 313,829/350,301) of practising nurses and midwives registered in Australia were female (Nursing & Midwifery Board of Australia, 2014).

The majority of participants in Part I of the study and all participants in Part II were registered nurses, which is consistent with nursing workforce statistics. In 2001, 94% (n = 7050/7532) of clinical nurses employed in Australian EDs were registered nurses (Australian Health Workforce Advisory Committee, 2006). In 2013, 81% of all nurses registered with the Nursing and Midwifery Board of Australia were Registered Nurses (259 924/319 922) (Nursing & Midwifery Board of Australia, 2014).
The mean number of hours spent in patient care per week for participants in this study was 32 hours. This is consistent with the average number of hours worked per week for Registered Nurses in Australia which was reported at 33 hours in the week in the last census (ABS, 2013). Participants in this study had a mean of 19.2 years of nursing experience, compared to a national figure for 2011 of 17.3 years (Health Workforce Australia, 2013).

The geographic distribution of the sample was consistent with population data for Australia, with nurses from the most populated states of NSW (n =135, 28%), Victoria (n = 123, 26%) and Queensland (n = 103, 22%) making up more than three quarters of the survey sample. The majority of the 11 nurses who participated in Part II of the study also were drawn from these three states, NSW (n = 6), Victoria (n = 2) and Queensland (n = 2). This is consistent with the national distribution of nurses, with almost three-quarters of nurses registered with the Nursing and Midwifery Board of Australia coming from these three states: NSW (n = 97,824, 28%), Victoria (n = 94,438, 27%) and Queensland (n = 67,891, 19%) (Nursing & Midwifery Board of Australia, 2014). All classifications of RNs were represented in the study. For example Nurse Practitioners took part in both parts of the study, with 36 in Part I and 2 in Part II of the study, which is significant as Nursing and Midwifery Board of Australia figures for the year ending 2013 report that there were 1,004 Nurse Practitioners registered in the country (Nursing & Midwifery Board of Australia, 2014).

In this study the survey sample contained a similar number of participants from metropolitan (n = 233) and regional areas (n = 218) with 21 participants from regions labelled “other”, which included remote areas. Area data were not collected for the interview participants. Results from the latest census reported that the per capita ratio of nurses to population in remote areas (915.4 per 100,000) was lower than in metropolitan areas (1,175.8 per 100,000) and regional areas (1,272.9 per 100,000) (Australian Bureau of Statistics, 2013).
6.2 Frequency of exposure to patient-related violence

The first aim of the study was to measure the frequency of individual emergency nurses reported exposure to patient-related workplace violence and associated outcomes in the preceding six months.

6.2.1 Point prevalence: nurse involvement in episodes of patient-related violence

The majority of nurses (n = 455/521, 87%) in Part I of the study had experienced violence in the six months prior to the study, and for many this had occurred as recently as the week preceding the survey (n = 211/523, 40%). Participants reported experiencing between one and 100 episodes in the six months prior to completing the survey and while most nurses (n = 285/452, 63%) reported between one and 10 episodes, more than a third (n = 167, 37%) reported experiencing more than 10 episodes. These results were consistent across metropolitan and regional/remote areas.

The types of episodes reported included both verbal and physical violence as per the definition of violence provided to participants. Verbal abuse was the most common form of violence experienced, reported by 95% of participants (n = 427/448) with an average of 12 episodes per month per nurse reported. Rates of verbal abuse reported were higher than physical violence in this study and this is consistent with previous studies, which confirm that the majority of ED nurses have encountered high rates of verbal abuse in the workplace (Gacki-Smith et al., 2009; Lau et al., 2012a). All participants in Part II of the study had experienced verbal abuse, and they described such abuse as a regular occurrence, experienced typically every shift.

These findings are consistent with the literature where reported rates for verbal abuse against nurses as high as 98% (Gates et al., 2006) and 100% have been reported (Catlette, 2005; May & Grubbs, 2002). These high levels of verbal abuse are not
isolated to the Australian context, but are consistently reported in studies from around the world (Atawneh et al., 2003; Crilly et al., 2004; Fernandes et al., 1999; Lyneham, 2000; Winstanley & Whittington, 2004).

There were on average eight episodes per month for physical violence reported by participants in Part I of this study, either in conjunction with verbal abuse or on its own. In addition physical abuse from young adults was reported by most participants (n = 7/11) in Part II of the study. Seven episodes per month were reported to involve patients in police custody in Part I of the study. Patients in police custody have been identified as a group at risk for violence, with a US study reporting that escape attempts from police custody were linked to 11% (n = 17) of shooting events in hospitals for the period 2000-2011 (Kelen et al., 2012).

The Garling Report in NSW reported that more than one-third of nurses (39%) had experienced recent emotional abuse and one in five nurses (21%) had reported threats of physical harm during their last five shifts. In addition more than one in 10 (14%) reported actual physical abuse in the same time period (Garling, 2008). A US study of 7,169 emergency nurses reported that 12% had experienced physical violence and 43% verbal abuse, during a seven-day period (Emergency Nurses' Association, 2011). A large study of 6,300 US nurses found that rates of violence were a concern with over 13 per 100 nurses reporting at least one episode of physical assault in the past year, and at least 38 per 100 nurses reporting at least one episode of threat, sexual harassment or verbal abuse (Nachreiner et al., 2007). A study of Tasmanian nurses reported that 64% (n = 1540) of respondents had experienced some form of aggression at work in the preceding four weeks (Farrell et al., 2006).

Although these studies collected data over a variety of time periods, all of them report unacceptably high rates of episodes of violence towards nurses.
6.2.2 Inevitability and frequency of episodes of violence

The majority of nurses (n = 473/511, 93%) in Part I of the study perceived patient-related violence to be an inevitable or a somewhat inevitable part of their job as an ED nurse and reported that the frequency of patient-related violence had increased over the course of their careers. This was consistent with the results from Part II of the study and with the literature on the topic (Lau et al., 2012b). Violence was contextual in its nature, for example what was tolerated and accepted as part of the job in the ED was understood not to be acceptable in other work environments. Participants perceived that such violence was increasing in frequency and becoming more common: “…it’s getting very common now” (p1) and “…4 code greys in 1X6-hour shift – including a police officer assaulted in waiting room…” The consensus in the literature is that workplace violence is increasing in both severity and frequency (Fernandes et al., 1999; Gates et al., 2011a; Pich et al., 2011). British research has found a year-on-year increase in reported incidents of violence and aggression between 1998 to 1999, 2000 to 2001, and 2001 to 2002. The National Audit Office estimates that violence and aggression have a direct cost to the National Health Service in England of at least £69 million per year (Royal College of Nursing, 2006).

6.3 The types of violent behaviours experienced by emergency nurses

The second aim of the study was to identify the types of violent behaviours experienced by ED nurses.

6.3.1 Verbal abuse and non-physical behaviours

All categories of verbal abuse in Part I of the study, except “rumour mongering”, were found to be highly significant, which confirms the prevalence of this type of violence. Please see Table 22 for a list of all significant types of verbal abuse.
identified. This included swearing, which was the common form of verbal abuse reported by nearly all participants in Part I of the study (n = 504, 99%). It was also reported by all participants in Part II of the study, in relation to both interactions with young adults and the parents of paediatric patients. These results are consistent with the body of literature on the topic with swearing or “being cursed at” typically reported as the most common type of behaviour in verbal abuse (Crilly et al., 2004; Emergency Nurses’ Association, 2011). Swearing is an aspect of language used in situations of intense emotions, as might be expected in an ED, and is thought by some researchers to represent the most violent form of verbal aggression (Buss, 1961, cited in (Stone & Hazelton, 2008). A defining feature of swearing is its capacity to shock due to its association with tabooed subjects (Stone & Hazelton, 2008).

Negative comments about a nurse’s competence and appearance were reported in both parts of the study. This type of abuse was typically conducted in front of others in public spaces such as waiting rooms and triggered when nurses did not satisfy patients’ demands. Nurses in Part II of the study reported that female patients tended to exhibit passive aggressive behaviour, which included derogatory comments about their appearance, for example the use of terms like “fat” and “ugly” within earshot of female nurses, rather than exhibiting overtly aggressive behaviour like males. This is consistent with the literature on the topic where males were identified as more likely to commit physical violence than females (Farrell et al., 2006). These types of behaviours are seen as an attempt to assert dominance or control over a situation and erode the self-worth and self-confidence of the nurses (Jackson et al., 2013). Statistically significant behaviours identified in Part I of the study that correlated with these findings include “insulting/questioning professional ability”, for example calling into question a nurse’s professional competence and nursing capabilities; sexual innuendo; shouting and rudeness.

Significant differences were identified between metropolitan and regional/remote areas for a number of types of verbal abuse including “threatening comments – to
Jackson et al (2013) identified three categorises of verbal abuse: gendered abuse that was largely sexual in nature; insults, ridicule and unreasonable demands and hostility, threats and menacing language (Jackson et al., 2013). Gendered abuse involves the use of sexualised insults, judgements, threats or suggestions that target nurses through stereotypical gendered assumptions about females in general and nurses in particular. This includes the use of words such as “bitch” and “slut” and such insults may also seek to question the intelligence and professional competence of nurses. The use of gendered swear words, for example “bitch” and “slut” was reported by participants in Part II of this study. A study of 3,465 US ED nurses reported that 70% had been harassed with sexual language and innuendo (Gacki-Smith et al., 2009). Nursing is a female dominated profession with women comprising approximately 90% of the nursing workforce overall in Australia, and 85% in the critical care and emergency specialty. This trend is likely to continue with females also heavily represented in university enrolments for the Bachelor of Nursing degree, making up almost 90% of all students (Health Workforce Australia, 2013).

Insults, ridicule and making unreasonable demands also were reported in this study and Jackson et al (2013) reports that these behaviours are often conducted in front of an audience to draw negative attention to those targeted. Long waiting times and the issue of “bed block” meant that at times nurses were subject to abuse from a patient over the course of many hours and even days. The repetition of such verbal abuse has been reported to increase its menacing nature (Jackson et al., 2013). Participants in this study reported that people in the waiting room were often engaged and encouraged to “become rowdy” (p332) by perpetrators engaged in “attention seeking” behaviours. The notion of the waiting room as an ad hoc audience for perpetrators
engaged in such behaviours has been reported in the literature (Pich et al., 2011; Saines, 1999).

The final category espoused by Jackson et al (2013) of hostility, threats and menacing language included non-verbal hostility expressed by patients such as crossing of arms, glaring, pacing, eye rolling and shaking of heads and served to sustain the hostility in a situation. Name calling, berating and gesturing were all found to be statistically significant verbal behaviours in Part I of the study. Threatening comments also were reported in both parts of the study and participants were of the view that the comments made were becoming more sinister and violent in nature. Threatening comments, including threats to self, family or property were found to be statistically significant in Part I of the study and included having staff fired, reporting them to the media (in one case by recording an episode on a mobile phone: “…videoing in department and waiting room, photographing staff…” (p178)). In addition threats of a more personal nature were reported, with patients threatening violence to the individual nurse and/or their family. This included threats to kill and rape nurses and/or their families, for example quotes from interview participants included: “…saying that they are going to rape me…”; “…he was threatening to kill me…” and “…I’m going to kill you. I’m going to hurt your family…”

Threatening behaviours were found to be more common in metropolitan areas compared to regional areas in a finding that was statistically significant. The participants reported that such threats often lead to fear that extended outside of working hours: “you don’t know...if they are nuts enough they could find you”.

Non-physical violence has been identified in the literature as a risk factor or predictor for physical violence (Lanza, Zeiss, & Rierdan, 2006; Lau et al., 2012b). A US study (n = 603) found that workers who had experienced non-physical violence were 7.17 times more likely to experience physical violence than those who had not (Lanza et al., 2006), and researchers in an Australian study reported that three
quarters of physical violence happened with concurrent verbal abuse (Lau et al., 2012b). Therefore it is important to manage and reduce the incidence of non-physical violence to protect workers from physical violence.

### 6.3.2 Physical behaviours

Highly significant types of physical behaviours identified in Part I of the study included destructive behaviours, such as hitting or punching the safety glass at triage; spitting; kicking; hitting; punching; pushing; grabbing; scratching; use of hospital equipment as weapons; biting and grabbing and twisting a body part. Physical violence was reported from young adults by participants in Part II of the study; however physical violence from the parents of paediatric patients was not reported. Scratching was found to be more common in metropolitan areas, however all other physical behaviours were reported consistently between metropolitan and regional/remote areas.

These findings are consistent with physical behaviours reported in the literature which include being pushed/shoved, punched, kicked, scratched, slapped, hit, spat on, head butted and having hair pulled (Cembrowicz & Shepherd, 1992; Crilly et al., 2004; Ferns, 2005b; Gacki-Smith et al., 2009); being grabbed and pulled (Emergency Nurses’ Association, 2011). Thirteen participants (3%) in Part I of the study reported that they had been sexually assaulted during the study period, while a significant number also reported that they had been subjected to “sexual innuendo” (n = 144, 28%). No definition of sexual assault was provided in the survey however Irish researchers reported that 20% of nursing staff had experienced intimidation, harassment or assault of a sexual nature within the previous month (Ryan & Maguire, 2006).

The use of traditional and opportunistic weapons was reported by participants in both parts of the study. For example participants in Part II of the study reported the use of a knife, and the opportunistic use of hospital equipment, for example chairs
thrown and a bed wheeled and smashed through closed doors. The use of weapons is discussed in the literature, but varies across studies and countries. For example Kuwaiti researchers reported no episodes of nurses being threatened with weapons (Atawneh et al., 2003); researchers in Australian study reported 92 incidents involving weapons (Lyneham, 2000); while a number of US researchers have reported the use of automatic weapons, guns and knives (Doody, 1995; Erickson & Williams-Evans, 2000; Lavoie et al., 1988). Researchers in one US study on hospital shootings for the period 2000 to 2011 reported 154 shootings, across 40 states resulting in 235 injured or deceased victims. The ED was the most common location for shootings and 5% of victims were identified as nurses (Kelen et al., 2012). This may be due in part to the risk of gang related violence being transferred into EDs as injured gang members are brought in for treatment (McAdams, Russell, & Walukewicz, 2004).

The opportunistic use of hospital equipment as weapons found to be significant in Part I of the study and was more common than the use of traditional weapons. This was consistent with the findings in Part II of the study where items reported included scissors, a blood filled syringe, and a Stanley knife. This finding is reflected in the literature and hospital equipment reported here included furniture and fittings, scissors, needles and syringes, wheelchairs, stretcher poles, and a fire extinguisher (Arthur & Bain, 2002; Cembrowicz & Shepherd, 1992; Ferns, 2005b; Jones & Lyneham, 2000).

6.3.3 “Performing” and attention-seeking behaviours

As previously discussed, nurses in Part II of the study reported that young adults aged 16-25 years of age engaged in “performing” and “attention-seeking” behaviours, such as being noisy, intimidating, disruptive and demanding. Demanding and attention-seeking behaviours have been identified in the literature as high risk behaviours for potential violence (Crilly et al., 2004). These were
performed to an audience, including other young people who had accompanied the patient and those waiting to be seen in the waiting room. Those accompanying patients to the ED, in particular groups of intoxicated males, are reported to add to the risk of violence in the literature (Cembrowicz & Shepherd, 1992; Kinkle, 1993). Abuse conducted in front of others in public spaces such as waiting rooms can be viewed as an attempt to assert dominance or control over a situation and erode the self-worth and self-confidence of the nurses (Jackson et al., 2013). Such behaviour could also be viewed as a reaction to the use of barriers at triage as previously discussed. It may represent ill-considered attempts to redress power imbalances and/or deliberate attempts to provoke or draw staff out from behind these protective screens and barriers. Barriers have been reported to increase anxiety and levels of frustration in patients as they feel isolated and reliant on triage nurses in particular for access to the department and information (Lau et al., 2012a).

Such behaviour was exacerbated by long waiting times and was seen as a deliberate ploy to gain access to the ED and be seen more quickly. Despite this many nurses reported that they “fast-tracked” such patients, essentially giving them what they wanted. A conflict was recognised between being seen to “reward” patients with fast track access due to their behaviour and the desire to keep the waiting room safe and provide the best care for all patients. Thus the strategy of “fast-tracking” was used to manage such patients effectively and improve the safety and experience of other patients, especially those in the waiting room. This strategy has been reported in the literature, especially with regards to high risk groups of patients, for example those with a mental health diagnosis (Benveniste et al., 2005). However it can have negative consequences and lead to feelings of unpredictability for nurses on subsequent presentations of such patients.

The behaviour of such patients was reported to increase levels of anxiety of those in the waiting room. There was a domino effect as patients reacted to feeling threatened and intimidated, and discussed the perpetrator amongst themselves: “...
whispers...everyone starts to get anxious...” (p1). Mental health patients were reported to be especially vulnerable to the effects of this increased noise and some reported that patients complained of physical symptoms as a result, for example the onset of chest pain. Typically the environment of the ED is not conducive to the successful management of mental health patients: it is open; busy; fast-paced and designed for maximum observation of the greatest number of patients. The heightened stimulation exacerbates the risk of violence from these patients (Jones & Lyneham, 2000).

The solution of fast-tracking such patients to remove this source of anxiety was not without consequences however as others became frustrated at their fast passage through the ED, leading to the risk of this type of behaviour being copied by other patients. A number of participants (6%) in one US study (n = 7,169) reported that patients who had engaged in verbal abuse were treated sooner than other patients (Emergency Nurses’ Association, 2011).

The Social Learning Theory proposed by Bandura (1973) differentiates aggression as either instrumental or hostile, with the former described as a goal oriented behaviour. With respect to healthcare the goal is to receive attention or treatment, and immediacy or fast tracking can be perceived as a positive reward for attention seeking behaviour (Bandura, 1977). The behaviours exhibited by patients during this process however are not easily distinguishable from other forms of violence; it is the outcome or end result that is theoretically differentiated. (Bandura, 1973).

Nurses spoke of “frequent fliers” a pejorative term used to describe patients with multiple presentations who engaged in this negative behaviour repeatedly. It is acknowledged that the use of terms such as “frequent flyer” might suggest an attitudinal orientation on the part of staff that may “feed into” episodes of violent behaviour in patients so labelled. While such patients may present in an aggressive
way, nurses with this attitude may unwittingly exacerbate such episodes in the way that they regard, or disregard, and interact with them.

### 6.3.4 Consequences of patient-related violence

The consequences of patient-related violence are far reaching (Chapman & Styles, 2006) and include both physical and psychological harm to nurses as well as a financial cost to the health care sector and a negative impact on the quality of patient care (Howerton Child & Mentes, 2010).

#### 6.3.4.1 Injuries

In the six months prior to the study 95/449 (21%) of nurses in Part I of the study had suffered a physical or psychological injury as a result of patient-related violence, in a finding that was consistent across geographic locations. A number of physical injuries also were reported by nurses in Part II of the study, including a broken nose, wrist injury, ligament damage, scratches and bruises. The injuries for one participant were so severe that the perpetrator had been charged and a subsequent court case had added to the stress and anxiety for the victim. This participant expressed concern at the potential for greater harm in future episodes including their own personal safety and that of their colleagues: “…nurses are going to be killed…” These results are consistent with figures found in the literature, for example a US study of 7,169 emergency nurses reported that 12% had experienced physical violence during a seven-day period (Emergency Nurses’ Association, 2011). Researchers in a US study reported that health care support occupations had an injury rate of 20.4 per 10,000 workers due to assaults, and health care practitioners had a rate of 6.1 per 10,000; compared with the general sector rate of only 2.1 per 10,000 (Gates et al., 2011b).

The most common type of physical injury reported in this study was bruising. Other injuries were reported less frequently and included exposure to hazardous or
infectious substances; abrasions and grazes; muscle damage; fractures and lacerations. Researchers in the same US study identified bruises, contusions and blunt trauma as the most common type of injuries sustained by ED nurses (Emergency Nurses' Association, 2011). Similarly the British Crime Survey into violence at work for the period 2011-2012 reported that minor bruising or a black eye accounted for the majority of injuries recorded (Buckley, 2013). The majority of physical injuries reported in the literature were superficial in nature and include bruises, bites, abrasions, soft tissue injuries and lacerations however more serious injuries also were recorded such as fractures, stab wounds and attempted strangulations (Ferns, 2005b; Gates et al., 2006; Jenkins et al., 1998).

Death is an extreme consequence of patient-related violence: and each year one Australian health worker is murdered at work (Mayhew & Chappell, 2005). For example in 2011, an Australian ED nurse was stabbed several times by a patient with a butter knife (Kwek, 2011), and a mental health nurse was stabbed to death by a patient (Ralston, Prisk, & Cox, 2011). The National Crime Victimization Survey (1993-1999) found that the average annual rate for non-fatal violent crime was 21.9 per 1000 workers for nurses compared with only 12.6 per 1000 workers for all other occupations (Duhart, 2001). Sixty-nine homicides in healthcare were reported in the US for the period from 1996 to 2000 (Phillips, 2007).

There were 18 nurses (4%) in Part I of the study who reported that they had taken time off work as a consequence of an episode of violence, while five participants (1%) had suffered a permanent disability necessitating a change in work duties or an inability to work. These findings were consistent across geographic regions. The time taken off work following an injury reported in the literature ranged from not completing the shift to one month, with an average of 1-2 days reported (Ferns, 2005b). Researchers in a US study found that 4% of ED nurses had one or more sick days per year due to an assault in the workplace (Jansen, Dassen, & Groot Jebbink, 2005).
6.3.4.2 Emotional response

Psychological injuries were reported by 55% of participants (65/118) in Part I of the study who had suffered an injury at work. In Part I of the study “anger” was the most common emotion reported, which is consistent with the findings in a large US study (Emergency Nurses’ Association, 2011). Other emotional responses reported by participants in Part I of the study included unhappiness; a feeling of powerlessness, shock and surprise, anxiety and emotional blunting. Some of the emotional responses reported constituted long-term issues including depression, chronic pain or disability, altered sleep patterns, an increase in the use of alcohol and/or other substances and Post Traumatic Stress Disorder. On average participants reported three emotions and there were no significant differences between geographic regions.

These findings are consistent with other studies. Emotional reactions reported in the literature included antipathy towards the perpetrators, shame, fear, astonishment, powerlessness, unhappiness, degradation, a sense of resignation, indifference and guilt (Astrom et al., 2004); anger, frustration and intrusive thoughts about the episode (Gillespie et al., 2010); self-doubt, feelings of professional incompetence (Arnetz & Arnetz, 2001); and sleeplessness (Jackson et al., 2002). Long-term effects such as Post Traumatic Stress Disorder and burnout have also been reported (Bonner & McLaughlin, 2007; Camerino et al., 2008).

Verbal abuse is reported to have more negative and longer lasting ramifications for nurses, with both short and long term effects reported in the literature (Howerton Child & Mentes, 2010). Even in the absence of physical injury, nurses have been found to experience moderate to severe psychological reactions for up to 12 months following an episode of patient-related violence (Gerberich et al., 2004).
6.3.4.3 Professional impact

The majority of participants in Part I of the study (n = 276, 76%) reported that their experiences with patient-related violence had directly impacted on their interactions with patients and led to changes in their nursing practice. This included feeling less empathy towards patients, a decline in the quality of care afforded patients and avoidance of patients. Other responses also indicated an impact on nursing practice, for example diminished capacity to perform in a professional role (reduced morale, burnout/stress, and conflict with co-workers); and a perceived loss of competence/coping ability (diminishing/minimising the event, depersonalising the event and feelings of professional incompetence and self-doubt). These findings were consistent across geographic locations.

The long-term emotional effects reported above have the potential to impact on nurses and consequently on their professional practice for up to 12 months after the actual episode of violence (Gerberich et al., 2004). Furthermore if nurses are exposed to more violence during this period the effects will be exacerbated.

Nurses who “burn out” suffer from emotional and physical symptoms, lose joy in providing care, distance themselves from others and can go on to view their patients as objects and spend less time with patients who they perceive as abusive (Gates et al., 2006). Nurses have reported feelings of professional incompetence, feeling more cautious and deriving less satisfaction from their patient-related care as well as being fearful at work (Arnetz & Arnetz, 2001). This fear can lead to avoidance of patients perceived as at high-risk of violence and this has a direct impact on professional practice (Gillespie et al., 2010).

Turkish researchers in one study reported that 84% of nurses were of the perception that nurses would be less productive after experiencing verbal and/or physical violence (Senzun Ergun & Karadakovan, 2005). Thus patient-related violence has significant implications for patient safety, the quality of care that is provided and can
indirectly lead to a deterioration in the care provided, not just for the patient involved but for all subsequent patients cared for by the affected nurse (Lau et al., 2004). This can take the form of increased medication, and the use of seclusion and restraints (Astrom et al., 2004). A link has also been proposed between abuse from patients and care-giving errors, further suggesting that nurses’ role may be compromised as a consequence of abuse (Shields & Wilkins, 2009). A link to patient safety was reported in an Australian study, that found that over two-thirds of nurses who had experienced aggression reported that it “frequently” or “occasionally” contributed to their potential to make errors or affect their productivity (Farrell et al., 2006).

Almost a third of nurses surveyed in Part I of the study had either left ED nursing or considered doing so as a consequence of patient-related violence. This is consistent with evidence on the topic: work-related violence has been cited as one reason nurses choose to leave the profession (Nachreiner et al., 2007). Aggression was identified as the second most stressful aspect of working in the ED in a British study of 103 ED nurses and doctors (Healy & Tyrell, 2011), while an Australian study ranked violence against staff as the top work stressor (Ross-Adjie et al., 2007). The effects of stress in the workplace have been associated with the risk of burnout (Potter, 2006). Burnout is a maladaptive response to stress, characterised by emotional exhaustion, detachment and a reduced sense of accomplishment and can have negative consequences for nurses and their subsequent practice, and can also lead to a desire to leave the speciality of ED nursing or the nursing profession (MacKusick & Minick, 2010; Potter, 2006).

Thus the negative effects of patient-related violence extend to the workplace and can lead to difficulties with the recruitment and retention of nurses, decreased productivity and efficiency, increased absenteeism and fewer resources for nurses (Howerton Child & Mentes, 2010). In addition these issues have a flow on effect to increased costs related to the recruitment of additional nurses and through workers
compensation claims. A US study estimated that the monetary cost of non-fatal assaults to employers in Minnesota was an estimated $31,643USD for registered nurses and $17,585USD for licensed practical nurses. This included medical expenditures, lost wages, legal fees, insurance administrative costs, lost fringe benefits, and household production costs (McGovern et al., 2000).

6.4 Risk prevention and risk management strategies

The third study aim was to identify ED nurses’ perceptions of risk prevention and risk management strategies adopted by their employer. The term risk prevention refers to strategies designed to prevent episodes of aggression and violence, and risk management is about strategies used to respond to episodes of aggression and violence.

6.4.1 Risk Management following episodes of aggression and violence

6.4.1.1 Reporting of episodes of patient-related violence at work

Participants in part I of the study reported episodes of violence selectively to their organisations, with more than three-quarters admitting that they only reported “some” and not “all” episodes of patient-related violence. Significant differences were identified between metropolitan and regional areas, with regional nurses more likely to report “some” episodes. Selective reporting was also acknowledged by participants in Part II of the study due to time management issues and the lack of response from management after reports were lodged.

This is consistent with the literature on the topic where patient-related violence is said to be inadequately documented, under-reported and poorly managed when it is reported (Howerton Child & Mentes, 2010; Sato, Wakabayashi, Kiyoshi-Teo, & Fukahori, 2013). Under-reporting of violent events occurs when an individual is victimised and does not report the event to an employer, police or through other
means (Findorff, McGovern, Wall, & Gerberich, 2005). Under-reporting of episodes of patient-related violence is acknowledged consistently in the literature to the point where it is referred to as a “global phenomenon” (Ferns, 2005b). Estimations of under-reporting range from 20% (Lyneham, 2000) to 90% (Mayhew & Chappell, 2005) and it has been referred to as the “dark figure” of workplace violence (Farrell et al., 2006).

The consequences of under-reporting are far-reaching. Accurate and consistent reporting is important to measure the true scope of the phenomenon and to inform and facilitate the development of policies and programs to adequately address violent behaviour. Voluntary incident reporting is an integral part of clinical governance programs, designed to increase the safety of patients, visitors and staff and consequently to improve the quality of care (Knight, 2004). In addition failure to report can have a negative effect on victims, adding to stress and interfering with successful workers’ compensation claims (Doherty, 2007).

The majority of participants who reported episodes of patient-related violence did so due to mandatory reporting requirements in their facility, including the process followed after a Code Black/Grey or to have a record of the incident. In addition safety issues and feelings of fearfulness due to the severity of the abuse and/or potential for escalation also caused participants to report.

6.4.1.2 Barriers to reporting

The most frequent barriers to reporting episodes of patient-related violence reported in this study included time constraints and the volume of episodes/workload of the nurses which caused them to be “too busy to report”. These findings were consistent across metropolitan and regional/remote areas and are also consistent with the literature on the topic. Barriers reported included time pressures, lack of actual injury and fear of being blamed or the consequences of reporting (Ferns, 2005b). The volume of episodes or cumulative nature of multiple episodes has been proposed as
a barrier as it has made it difficult for nurses to discern discrete episodes (Jackson et al., 2013). This can lead to a phenomenon called habituation, where nurses become numbed to the effects of violence after repeated exposure (Pinar & Ucmak, 2011).

More than one third of participants in this study reported that deficiencies in the actions of management, both directly or indirectly, were barriers to reporting episodes of violence and they also perceived that reports lodged were not followed up adequately by management. This is consistent with the literature on the topic where reporting is often seen as an empty gesture (Rose, 1997) due to the perceived lack of action by those responsible (Chapman, Styles, Perry, & Combs, 2010; Gallant-Roman, 2008; Gates et al., 2006; Mayhew & Chappell, 2005). Other barriers reported included a perception that nothing would change and that violence was an accepted and expected part of the job. This correlates with the existing research on the topic where violence is viewed by some in the profession as “part of the job” and therefore accepted and expected by nurses who consequently think it is not necessary to report (Chapman et al., 2010; Jackson et al., 2002), especially if no injury occurred (Gallant-Roman, 2008).

The hierarchy of the reporting process means that incident reports are often directed to those outside the profession who are often unfamiliar with the experiences of front line nurses (Ferns, 2006). The challenge for nurses is to alter the culture and attitudes surrounding the reporting of violence and aggression so that it becomes the norm, rather than the exception (Ferns, 2012). It is important for nurses to take a leadership role amongst health professionals as it is nurses who are consistently identified as being the most vulnerable to episodes of violence (Ferns, 2006).

It has been suggested that organisational norms about tolerable or acceptable levels of violence or aggression have become ingrained via management attitudes and practices (Perrone, 1999). By contextualising violence in this manner, and normalising it as a permissible and systemic work-related risk, the true nature of this
behaviour as unnecessarily violent and harmful is overlooked. In addition, it can have the effect of deflecting attention away from possibly negligent working environments and practices (Perrone, 1999).

Jackson et al (2013) theorised that the sexualised gender component of violence against female nurses may also play a role in under-reporting as many women view sexual harassment and unwanted sexual advances as a fact of life (Jackson et al., 2013). Some researchers suggest that females are expected to use more covert measures to respond to violence, and not initiate violence or they may be seen as “whistle blowers” (Ferns, 2006; Luck et al., 2007; Pawlin, 2008; Phillips, 2007). Ferns (2006) surmised that gender and childhood socialisation may help to explain why nurses do not report episodes of aggression and violence (Ferns, 2006). Personal experiences may also play a key role in willingness to report episodes of violence (Ferns, 2006). Violence against women is a global public health issue (World Health Organization, 2012), therefore female nurses’ personal experiences with domestic violence have the potential to impact on their professional lives and to influence their decisions about reporting episodes of aggression and violence (Ferns, 2006). Nursing is a female dominated profession and females are often socialised from birth to manage aggression in a covert fashion, and so may be reluctant to report incidents, preferring to deal with them informally themselves (Ferns, 2006). While the issue of gender was not addressed in this study, Australian figures from 2011 show that 90% of nurses were female, a slight decrease from 2001 (91%) (Australian Bureau of Statistics, 2013).

Participants in the study also cited the diminished responsibility of some patients due to their physical or cognitive state as a reason for not reporting episodes. Nurses may be reluctant to pass judgement on some types of patients as this is seen as counterintuitive to nursing (Howerton Child & Mentes, 2010; Sato et al., 2013). According to one study, reporting of episodes of violence was found to be increased if the victim was male, if the perpetrator was a non-patient and if the level of
violence experienced was significantly physical and violent (Findorff et al., 2005). This finding is reflected in an audit of a West Australian hospital’s incident forms, which found that 96% of reporting nurses had suffered one or more injuries as a result of an episode of violence (Chapman et al., 2010).

Research has found that nurses are selective about the blame they attribute to patients: the actions of patients with diminished capacity were perceived to be unintentional and episodes of violence are typically not reported out of concern for the perpetrator (Jones & Lyneham, 2000; van der Zwan et al., 2011). Nurses often ascribe meanings and judgements to episodes of violence to inform their actions and responses using three factors: perceived personalisation of the violence; the presence of mitigating factors and the reason for the presentation (Luck et al., 2008). The perceived degree of self-responsibility and capacity during violent episodes are considered by nurses, and episodes of violence where nurses believe there is no intent or where the patients involved have impaired cognition are classified as resistance to care (Kable et al., 2012b). Thus under-reporting may reflect the nursing ethic of putting patients first with nurses failing to recognise some incidents as violence due to a perceived lack of intent. This reaction to aggression is influenced by social construct, however regardless of the intent, nurses are still being injured (Ferns, 2006).

6.4.1.3 Reporting methods

Informal reporting methods were favoured over formal reporting in the data from Part I of study with documentation in patient notes the most common form used. These findings were consistent between metropolitan and regional/remote areas. Other informal methods included verbal reporting to managers and/or team leaders or at handover. Formal reports of episodes were completed using electronic and paper methods. Studies that have compared violence reported through formal incident reports with other forms of reporting have identified vast under-reporting,
for example a cross sectional study in the US found that oral reports were the most common reporting method used by participants (86%, n = 1506/1751) (Findorff et al., 2005). A study of 4,738 Minnesota nurses reported that 69% of episodes of physical violence and 71% of non-physical violence were reported orally to a supervisor or other management personnel rather than through official means (Gerberich et al., 2004).

A recent American study (n = 7,169) found that the majority of ED nurses who were victims of workplace violence did not file a formal report for physical violence (66%) or verbal abuse (86%) experienced. Most nurses who reported physical violence did so to security personnel, an immediate supervisor and colleagues, with 8% not reporting to anyone. The majority of nurses who had experienced verbal abuse reported this to other nurses, while 17% did not report the incident to anyone (Emergency Nurses’ Association, 2011)

6.4.1.4 Actions following episodes of patient-related violence: Coping methods and support

While 186 of the respondents indicated that they had received immediate support from management and/or counselling or debriefing; a further 165 nurses stated that they had received no response from management. This is consistent with the data on barriers to reporting discussed earlier and with the literature on the topic. For example a US study (n = 7,169) reported that 47% of nurses who were the victims of physical violence reported that no action was taken with regards to the perpetrator while 72% stated that they received no action or acknowledgment of having been a victim of physical violence. Furthermore 11% of nurses were blamed for the incident with three nurses receiving a punitive response (Emergency Nurses’ Association, 2011). In this study 11 nurses cited fear of being blamed as a barrier to reporting episodes of violence. Results were similar for episodes of verbal abuse with 81% of nurses failing to receive a response from their hospital to their report. British
researchers found that in approximately half of the cases employers offered immediate support, however in 91% of cases there was no outcome or any intervention from the employer or the individual (Royal College of Nursing, 2006).

More than one-third of nurses reported that they had not been provided with adequate information, support and follow up following a violent incident and more than half had not been provided with access to recognised counselling services.

A lack of support following episodes of patient-related violence was identified in regional areas. The reasons for this lack of support included a lack of follow up or response from management; that no support was required by the nurses or that they had decided not to report the episode of violence; or that violence was perceived by themselves and management as just part of the job of ED nursing. Where support was offered or available in the department, it included formal counselling, for example through the Employee Assistance Program and informal debriefing with colleagues. Informal debriefing was reported as the most common form of dealing with the aftermath of violent episodes by nurses in Part II of the study: “…we all vent at work…”

Statistically significant differences between regions were identified for risk management follow-up strategies. Three strategies: “investigating reported episodes – prompt follow-up and feedback”; “staff counselling services” and “rotating staff in high risk areas, for example triage” were all found to be more common in metropolitan areas. This suggests that nurses in regional locations are less supported than their metropolitan counterparts following exposure to episodes of patient-related violence.

A lack of attention to the emotional effects of violence can contribute to PTSD symptoms which has a negative impact on the productivity of nurses. Immediate intervention, during the first hours or days following exposure to a traumatic event, can prevent such serious, long-term complications (Gates et al., 2011b; Schnieden &
Marren-Bell, 1995). National Institute for Health and Clinical Excellence guidelines in the UK suggest a review should take place within 72 hours for all parties involved in a violent incident (Bonner & McLaughlin, 2007). Immediate interventions, during the first hours or days after a trauma, can prevent the more serious, long-term complications associated with exposure to traumatic events (Flannery & Everly, 2000) and have a positive effect in terms of improved productivity (Gates et al., 2011b).

Researchers in one US study reported that while management and employee participants supported the use of debriefing after violent incidents, it was rarely done, and when it did occur it was informal in nature. Barriers to debriefing included lack of time and a workplace culture that tolerated violence as “part of the job” (Gates et al., 2011a)

### 6.4.1.5 Management response

The majority of nurses in the study reported that no changes were introduced following incidents of patient-related violence, in a finding that was consistent across geographic locations. However the research recommends that violence be dealt with promptly and positively (Winterbottom, 1979). Of those who reported that changes had been implemented, these measures centred on risk prevention strategies such as increased security presence, the use of duress alarms, restricted access to the department and the use of Closed Circuit Television and signage.

More than half of the nurses surveyed reported that episodes of patient-related violence were investigated by management with prompt follow up and feedback provided. However 15 nurses reported that there were no risk management follow-up strategies available at their place of employment while 12 stated that whilst they existed there was a lack of feedback and action on the part of their employer.
Barriers to changes being implemented included the perception that there was no solution to the problem of violence or that it was too hard or not possible to implement changes due to the volume of episodes and/or costs involved, all set within a workplace culture where violence was viewed as an expected part of ED nursing. Another barrier to change was an unsupportive and apathetic attitude on the part of management and a tendency to therefore ignore episodes of violence.

More than half those surveyed (63%) reported that upper management staff were only “somewhat supportive” or “not at all supportive” following an episode of patient-related violence, and more than a third reported the same for immediate managers. American researchers found that nurses whose hospital administration (OR = 0.81) and/or ED management (OR = 0.77) were committed to workplace violence control were less likely to experience workplace violence (Emergency Nurses’ Association, 2011). A national survey of 3,465 ED nurses found violence prevention was dependent on commitment from hospital administrators, ED managers, and hospital security (Gacki-Smith et al., 2009).

6.4.2 Risk prevention strategies

The most common risk prevention strategies identified by ED nurses were security guards, based in or near the department; duress alarms; restricted access to the department, for example through the use of swipe cards; access to training such as aggression minimisation training; referral to the police if a situation deteriorated; the use of safety glass at triage and increased security measures after hours.

To be successful, risk prevention strategies must have a commitment from administration and involvement of staff. Hospital administrators should collaborate with employees, hospital managers, and risk managers for the adoption and use of personal protective measures in the workplace (Gillespie & Fisher, 2014). The organisation must promote a workplace culture that values their employee’s well-being and safety in the workplace (Forster, Petty, Schleiger, & Walters, 2005).
Security features recommended in the literature include duress alarms, separate ambulatory and ambulance entrances, triage counter with sufficient height to prevent being jumped/reached over; controlled access from waiting rooms, electronic surveillance systems, electronic locks on external doors, surveillance systems monitored, unobstructed view of the entire waiting room from triage and/or reception, controlled access from the rest of the hospital, security officers based within or adjacent to ED, reception level elevated to staff at eye level while seated (Merfield, 2003). The Australasian College for Emergency Medicine issued recommendations for Australian ED security and based on these recommendations, an audit concluded that Australian EDs have inadequate levels of security with the majority of ED directors unhappy with the security in their departments (Merfield, 2003).

Significant differences in the availability of risk prevention/minimisation measures were found between metropolitan and regional/remote areas. Nurses in metropolitan areas reported greater “access to training, for example Aggression Minimisation”; “the availability of restraints and policies for their use”; “security personnel based in the department” and “clear policies for the management of aggression. These findings suggest that ED nurses in metropolitan areas may have better risk prevention strategies provided in their organisations.

Security provisions in countries where gun crime is an issue such as the US cite the use of metal detectors and Tasers in EDs (Kansagra et al., 2008; Keep & Gilbert, 1997; Rankins & Hendey, 1999). A study in the US found that while the implementation of an ED security system including metal detectors, cameras, limited access and a manned security booth at the entrance to the ED, increased the number of weapons confiscated from patients, it did not decrease the number of assaults on staff (Rankins & Hendey, 1999).
6.4.3 Policies and procedures

The majority of nurses in Part I of the study perceived that their organisation’s policies and procedures concerned with the management of patient-related violence were either ineffective or only “somewhat” effective. In a result that was statistically significant, nurses in regional areas were more likely to perceive policies as ineffective compared to their colleagues in metropolitan areas.

Overall participants perceived that no clear policies existed and the policies and procedures in place were outdated, ineffective or not enforced. For example the strict enforcement of Zero Tolerance policies was identified as the most common recommendation from participants in this study to reduce the incidence of patient-related violence.

Policy and practice interventions may mitigate the risk of violence and aggression while concomitantly addressing staff dissatisfaction with the status quo (Anderson et al., 2009). The policy of Zero Tolerance towards violence has been adopted in health services internationally including the United Kingdom and Australia. The origins of the policy date back to the zero tolerance approach used in New York in the 1970s to manage and reduce crime in the city (Bond, Paniagua, & Thompson, 2009). Many participants in the study commented on an apparent disconnect between the policy ideal and its implementation in the workplace. A study from the United States reported that the presence of reporting policies (especially zero tolerance policies) and a commitment from management to enforce them were associated with a decreased risk of physical violence (Emergency Nurses’ Association, 2011).

Much of the literature on the topic of zero tolerance in a health care setting speaks to the feasibility and challenges of adopting the policy while establishing and maintaining a therapeutic relationship with patients (Bond et al., 2009; Wand & Coulson, 2006). Therapeutic engagement and the establishment of rapport are essential components of nursing practice, and are crucial in the high pressure
environment of the ED (Wand & Coulson, 2006). Therefore policies should be
designed with the flexibility to deal with the variety of events encountered at triage
and in the ED (Keep & Gilbert, 1997).

6.4.4 Aggression minimisation training

Almost a quarter of participants in Part I of the study had never completed
aggression minimisation training (n = 114/467, 24%) and the majority had not
completed regular refresher programs (n = 334/454, 74%). Training was more
commonly available in metropolitan locations compared to regional/remote, in a
finding that was significant. In addition nurses in regional areas were more likely to
view such training an effective risk prevention strategy. The lack of refresher
programs was consistent across all regions. NSW Health policy states that it is a
mandatory requirement that such training be completed annually and management
are responsible for ensuring that a minimum of 90% staff compliance is maintained
at all times (NSW Health, 2012).

Aggression minimisation or de-escalation training involves the gradual resolution of
potentially violent situations through the use of communication techniques and skills
and the recognition of cues of potential violence and the stages of conflict (Rew &
Ferns, 2005). Violence prevention training for staff has been recognised as essential to
the prevention of violent incidents in the health care setting. Access to training has
been consistently identified in the literature as being an effective violence prevention
strategy and is regarded as important by nurses (Oostrom & van Mierlo, 2008).
Nurses at EDs with violence training programs have reported feeling safer than staff
in EDs without such programs (Kansagra et al., 2008). Training has been shown to
have many positive outcomes which enhance the ability of nurses to manage violent
and potentially violent situations and its effect has been estimated to reduce the
incidence of aggression in the workplace by 50% (Deans, 2004). Training should not
only include early recognition of the warning signs of potential violence, but also
guidance on documentation; legal rights and post-incident support for staff and patients (Dimond, 1994; Wand & Coulson, 2006).

However the results of this study found that almost 20% of nurses did not have access to training at their workplace and three-quarters had not completed regular refresher programs as required. Forty nine nurses had not had access to training for five years or more, this is despite the existence of mandatory training requirements compelling employers to provide such training (NSW Health, 2012). This is consistent with the literature on the topic: for example researchers in a US study found that only 36% of respondents reported mandatory violence prevention training for ED staff (Martindell, 2011); an Iranian study of ED nurses reported that 96% had received no training in managing episodes of violence (Hasani et al., 2010), while a study of US ED nurses reported that 64% had not received any training in the preceding 12 months (Gates et al., 2006). A US study of 69 EDs reported that less than half had some type of violence training program for staff (Kansagra et al., 2008).

All public health facilities in NSW are legally obligated by NSW Health to ensure that staff have appropriate access to training so that they can develop the necessary skills and knowledge to prevent and respond to violence (NSW Health, 2012). This is to ensure that they are able to recognise, respond to and report incidents of aggressive, intimidating, threatening or violent behaviour (NSW Health, 2012). This is not the case in other countries around the world. For example in the US violence prevention programs are not mandated under federal law, and currently only nine states have enacted laws requiring violence protection programs in health care facilities (Martindell, 2012).

Despite the evidence on the effectiveness of training there appears to be a disconnect between theory and practice: between the legal requirements and policy directives and the reality for nurses working in the ED. Training should be extended to include nursing students as they have been identified as a risk group amongst nurses for
patient-related violence and have been reported to experience threats to kill them, racial abuse and sexually oriented verbal abuse (Ferns & Meerabeau, 2008). In addition a US researcher reported that nurses were of the opinion that their undergraduate training and subsequent orientation to the ED workplace left them ill-equipped to deal with violence from patients (Catlette, 2005). There is an obligation on the part of nurse educators to prepare students to deal with violence in the health care setting (Whitley, Jacobson, & Gawrys, 1996). A European study into the effectiveness of such a training program concluded that they resulted in increased levels of confidence for students in managing aggressive incidents (Needham et al., 2005).

6.4.5 Safety at work

The majority of nurses surveyed reported that they did not feel safe or felt safe only some of the time: “…nobody should have to be scared at work…” (p. 153), often feeling the need to qualify why they felt safe, for example “...I have martial arts background - so feel quite safe.” (p. 464). Nurses in regional areas reported feeling “not safe” more than their metropolitan counterparts, in a finding that was statistically significant. The results of a logistic regression analysis found that participants who felt “moderately safe”; “sometimes don’t feel safe” and “don’t feel safe” as a result of experiencing an episode of violence in the preceding six months, were more than twice as likely to experience an episode of violence compared to those who felt “mostly safe”. This suggests that their fears were well founded.

Overall the results of the interview data contributed to an overarching theme of feeling unsafe at work. This involved fear for the individual as well as fear for the safety of others, staff and patients. The language used typified this: “…I just feel so unsafe…”; “…I feel less safe than I did in the military…”; “…I think it’s a healthy fear most days when you’re in triage…”; “…people can swear at us, spit at us, bite at us, and try to
hurt us...” This was accompanied by a sense of resignation that such violence was to be expected: “…sadly I put it down as part of the job…”

Feelings of vulnerability and of feeling unsafe at work are reported in the literature (Catlette, 2005). Researchers in one US study reported that 18% of nurses “never” or “seldom felt safe”, and 21% “occasionally felt safe”, while only 7% reported that they “always felt safe” (Gates et al., 2006). They identified a link between feelings of safety and job satisfaction, with feeling unsafe much of the time linked to increased stress and a desire to leave the profession (Gates et al., 2006). In one study 72% of nurses reported they did not feel safe on the job and 19% indicated they were leaving the emergency nursing profession because of violence (Tavernero, 2009).

Researchers in another US study reported that only 4% of nurses surveyed felt safe from the possibility of patient assault at work (Erickson & Williams-Evans, 2000). Nurses consistently reported fear when going about their working day, for example an Irish study in 1997 reported that 91% of nurses indicated that they were worried about being assaulted at work (Rose, 1997) while a study of Kuwaiti nurses found that 78% of nurses were worried about violence (Atawneh et al., 2003). In an Iranian study 87% of ED nurses reported a moderate or lower degree of security while performing their jobs (Hasani et al., 2010). Researchers in an American study reported that 26% of ED nurses never or seldom felt safe while working and that only 1% felt safe (Gates et al., 2006). Researchers in a multi-disciplinary study reported that nurses were five times less likely to feel safe “most of the time” or “always” compared to attendings, residents, nurse practitioners and physician assistants (Kansagra et al., 2008). These findings have also been reported in other professional groups working in the ED. For example researchers in a study of ED physicians in the US found that 81% of participants surveyed were occasionally fearful of workplace violence (Kowalenko, Walters, Khare, & Compton, 2005).
Feelings of safety are directly related to job satisfaction and has implications for staff retention: feeling unsafe is likely to increase stress and influence a nurse’s decision to leave the workforce (Gates et al., 2006). The results of consistent and endemic violence can lead to an overall destabilisation of the workplace and lead to a working environment that is unsustainable for many health professionals. (Whelan, 2008). In response to this many Nurses’ Associations from around the world, including Australia, Canada, the United Kingdom and the United States, have issued position statements and campaigned about workplace violence and nurses’ safety. However, the impact of these campaigns has to date failed to have a significant impact on the problem.

6.5 Precipitants and antecedents

The fourth study aim was to identify factors associated with patient-related workplace violence that precipitate, escalate or de-escalate episodes of violence. Indicators of violence encompass a variety of indirect (for example long waiting times), and direct factors (for example warning signs and antecedents) (Lau et al., 2012b).

6.5.1 Nurse characteristics

6.5.1.1 Age and years of experience

Part I of the study identified a statistically significant relationship between the age of nurses and the odds of having experienced a violent episode in the preceding six months. The majority of participants in both age groups (23-39 and 40-65 years of age) had experienced an episode of violence in the preceding year; however the odds were decreased by approximately 60% for nurses aged 40 years and older. For every additional year of age there was a four percent reduction in the odds of experiencing a violent episode and this corresponded to an 18% reduction for every five years
increase in age. Similar results were identified with years of experience with a three percent reduction in the odds of experiencing an episode of violence for every year of nursing experience, and a four percent reduction where this experience was ED-related. The independent effects of age and years of experience could not be determined in this study.

Participants in Part II of the study discussed a difference in attitude between experienced nurses and those new to the profession, and more experienced nurses tended to put up with violent behaviours: “…that is the way it has always been and nothing happens if you report and anyway it could be worse…” This attitude of resignation to patient-related violence is also reflected in the literature on the topic. Workplace violence is regarded by many in the nursing workforce as an occupational hazard, and an unavoidable part of working life (Benveniste et al., 2005; McKinnon & Cross, 2008; Ray, 2007). The fact that this was more apparent in nurses with greater experience may reflect desensitisation to violence due to continued exposure over the course of their careers. The result is that violence has become an expected and accepted part of the job for these nurses (Benveniste et al., 2005).

These findings are consistent with the literature on the topic which consistently reported that younger, less experienced nursing staff were at higher risk of verbal and physical violence (Chapman & Styles, 2006; Emergency Nurses’ Association, 2011; Gates et al., 2006; Gillespie et al., 2010; Rodriguez-Acosta et al., 2010; van der Zwan et al., 2011).

Some researchers theorise that this may be due to the fact that older more experienced nurses occupy management positions and so have less patient contact (Gallant-Roman, 2008). However in this study only 11% of the sample (n = 60) identified as managers and the inclusion criteria required all participants to have worked clinically in the ED in the preceding 6 months. Lesser trained nursing
assistants and student nurses are also reported to be at a higher risk of violence than more qualified members of staff (Ferns & Meerabeau, 2008; Tyrell, 1999).

Garling reported that the proportion of nurses on a ward with a bachelor’s degree or higher decreased the perception of physical violence and the threat of violence. He surmised that this may indicate that the better educated staff are, the better they communicate with patients and families, and thus the greater the feeling of control nurses have which in turn lowers their perception of violence (Garling, 2008). Similar findings have been reported in other areas, for example the medical profession (Hills, Joyce, & Humphreys, 2012).

6.5.1.2 Work fraction

Hours of work were categorised as part-time (1-19 hours), full-time (20-38) and over-time (39 hours or more). The number of episodes of patient-related violence experienced in the preceding six months were similar for full and over-time staff with an average of 16 episodes in the last six months reported, however part-time staff only reported an average of 11 episodes. For every additional shift worked (eight hours) there was a 22% increase in the odds of experiencing an episode of violence. It is interesting to note that the mean hours worked per week for part-time employees was 28 hours, which is almost three-quarters of a fulltime workload of 38 hours, and some part-time and casual employees reported working up to 70 hours in this period, therefore it is important to focus on hours worked rather than work fraction when assessing risk.

6.5.2 Nursing-related factors

More than half (n = 311/509, 61%) of nurses surveyed in Part I of the study were of the opinion that some nurses had a certain manner or approach that made them more likely to experience episodes of patient-related violence, or were not sure. This finding was consistent in all geographic locations. This included a lack of confidence
or experience of nurses as well as poor communication skills; a dismissive or hostile demeanour or attitude and a lack of empathy. The inability to recognise the cues or warning signs associated with a potential for violence or to be able to de-escalate situations also were perceived to be significant by nurses in Part II of the study. The communication skills of individual nurses were recognised as a vital tool in the prevention of escalation of episodes of violence. Many episodes could be traced back to a breakdown in communication and poor skills were linked to escalation of episodes. The triage area was singled out as especially important in this regard: “the failure to recognise ...amongst the triage and CIN nurses...how to help...deescalate that scenario...that often makes the situation worse” (p2); “…enhancing communication with the waiting room to help reduce incidences” (p2). Effective communication strategies included the use of a calm tone and manner and not raising ones’ voice; walking away from the situation if needed; being “engaged”: like you are interested and doing something for the patient.

These findings are consistent with the body of literature on the topic. For example Australian researchers reported that some nurses were able to recognise cues and warning signs in potentially violent patients, and use this knowledge to prevent escalation to violence by modifying their approach (Pich et al., 2011). The attitude and behaviour of individual nurses, for example a condescending attitude, has been recognised as a contributing factor to episodes of patient-related violence in the literature on the topic (Chapman & Styles, 2006; Pich et al., 2011). Other negative behaviours discussed included a rigid, controlling approach from staff; being overtly authoritative, judgemental and confrontational (Hodge & Marshall, 2007). Such behaviours can lead to a cycle of action and reaction and escalate potentially violent patients (Lau et al., 2012b). Conversely empathetic behaviours or communication such as acknowledging patients’ arrival or lengthy wait, using friendly body language, using personal greetings and thanking patients for their cooperation result
in positive interpersonal relationships and have a constructive effect on the subsequent behaviour of patients (Lau et al., 2012b).

A study from the United Kingdom found that patients identified poor communication from nursing staff as a significant precursor to aggressive behaviour (Duxbury & Whittington, 2005). This may be linked to a lack of training, inadequate resources and/or the absence of clear policies. Negative staff-patient interactions have been identified as an antecedent for failure to develop a therapeutic relationship and this may be exacerbated in cases where staff distances themselves after violent episodes. This can then have a negative effect, by increasing their risk of future assaults (Duxbury & Whittington, 2005).

### 6.5.3 Patient-related factors

#### 6.5.3.1 Age

While Part II of the study specifically focused on younger patients aged 16-25 years of age, the majority of nurses in Part I of the study also identified younger patients as a high risk group for violence. Patients aged 35 years and younger were reported to be the highest risk group (n = 417, 82%) for potential violence, a finding that was consistent with the free-text answers where participants identified the younger age group as the one of particular concern. Violence from patients aged less than 16 years of age was found to be more common in metropolitan areas, compared with regional areas. This is likely to be related to population figures and to the increased presence of paediatric hospitals in those areas.

Youth or younger patients, under the age of 30 have been identified as a risk group for potential violent acts in the literature (Kinkle, 1993; Sands, 2007; van der Zwan et al., 2011). A British study that investigated the characteristics of aggression and violence towards staff in an urban UK ED, identified young males as being predominantly responsible for such episodes (James, Madeley, & Dove, 2006). An
Australian study using two independent sources of information (ED presentations and assaults reported to police) identified an association between alcohol intoxication and assaults at the population level, and the strength of this association increased for those aged 15–24 years (Descallar, Muscatello, Weatherburn, Chu, & Moffatt, 2012). This link is discussed further in the section on alcohol intoxication as a risk factor for violence.

6.5.3.2 Gender

Data from Part II of the study identified males to be the perpetrators of violence more often than females; however the participants noted that there had been an increase in female violence and aggression. This is consistent with the research where traditionally male patients have been responsible for the majority of violent episodes, however a shift has been reported with increasing numbers of females exhibiting violent behaviour (Farrell et al., 2006; James et al., 2006; Oster et al., 2001). It has been theorised that this reflects changing patterns of behaviour in society and an acceptance of such behaviour (Oster et al., 2001).

6.5.3.3 Triage category

Patients in Australia are triaged according to the urgency with which they need to be seen (NSW Health, 2013). In this study the most common triage categories of patients responsible for episodes of violence in the study were reported to be three and four, which is consistent with the results from another Australian study (Crilly et al., 2004). A triage category of three refers to a potentially life threatening condition, for example a major fracture or severe blood loss and the recommended wait time for such patients is 30 minutes. Category four patients are described as having potentially serious conditions, for example sprained ankles or migraines and should be seen within one hour (NSW Health, 2013). A lack of understanding of the triage system has been proposed as a possible precipitant for episodes of violence (Lyneham, 2000).
Data were further analysed according to region and a statistically significant difference was identified for Triage Category 2, with more perpetrators reported in this category in metropolitan locations. A triage category 2 refers to patients who require treatment within 10 minutes of arrival and who are classified as having an imminently life-threatening condition, for example serious chest pain, difficulty breathing and severe fractures (NSW Health, 2013). This may be explained by the fact that more tertiary hospitals are located in metropolitan areas and would be expected to see more serious cases and population levels are higher in these areas meaning there is an increased likelihood of patients presenting with serious conditions.

6.5.3.4 Clinical presentation

Alcohol intoxication, mental health issues and substance misuse were identified as the three most significant clinical diagnoses for patient-related violence. In addition anxiety and agitation and delirium also were found to be significant. The clinical diagnoses of delirium, cognitive dysfunction and paediatric emergency were found to be more common in metropolitan areas, which may be linked to the increased presentations overall of these types of patients.

i. Alcohol intoxication and illicit substance misuse

Alcohol intoxication and substance misuse were reported by the majority of nurses in Part I of the study as risk factors for patient-related violence. This was true where the patient presented with a specific diagnosis of alcohol intoxication and/or substance misuse, and also where this was identified as a secondary patient-specific factor. In both areas they were found to be statistically significant in relation to episodes of violence. This is especially true in the case of alcohol intoxication, where the odds of a violent episode were three times higher when patients presented with a specific diagnosis of alcohol intoxication. In the case of substance abuse the risk increased by 2.5 times.
Alcohol and substance misuse also were consistently identified as antecedents for episodes of violence, particularly with regards to young males aged 16-25 years of age, in Part II of the study. The effects of alcohol in particular were linked to a decreased tolerance of the ED environment, particularly with regards to waiting times. This was thought to be exacerbated as the age group 16-25 (often referred to as Generation Y) are often described in terms of a generation demanding instant gratification and used to having their needs met quickly through the advent of the internet age of technology. Alcohol and substance misuse were strongly linked to patients exhibiting “attention seeking” behaviours. These factors have been consistently reported as risk factors, for example a UK study of violent episodes in an urban ED found that more than half (n = 114/218, 52%) of violent episodes reported involved patients under the influence of alcohol (James et al., 2006).

These factors are consistently reported in the literature as being causative factors in patient-related violence (Gates et al., 2006). Crime statistics for hospital assaults in NSW for the year 2006 listed the top three antecedents as mental health related (32% of incidents), alcohol-related incidents (31%) and drug-related (17%) (Hilliar, 2008). In addition for the period 1996-2006 the proportion of assaults classified as mental health-related increased significantly: from 19% to 32% (Hilliar, 2008). American researchers reported a significant correlation between incidents of violence during the past year and the number of perpetrators perceived to be under the influence of alcohol (Mayer, Smith, & King, 1999). Alcohol is consistently referred to as a risk factor in the literature, with 25% (Crilly et al., 2004) to 98% (Ferns, 2005a) of all violent episodes being attributed in some way to alcohol misuse.

The consumption of alcohol is a generally accepted part of Australian culture (Poynton, Donnelly, Fulde, & Scott, 2005) and expectations on how people should behave in social settings (especially young people) often involve the consumption of large quantities of alcohol (Lloyd, Matthews, Livingston, & Jayasekara, 2011). Increasing media and public interest has focused on dangerous alcohol consumption,
particularly binge drinking and the link with violence, usually assaults (Lloyd et al., 2011). A recent Australian report highlighted the magnitude of alcohol misuse in Australia. According to the report one in five Australians consume alcohol at levels that put them at risk of lifetime harm from injury or disease; two in five at levels that put them at risk of short-term harm at least once a year and over one-third (36%) of drinkers say their primary purpose when drinking is ‘to get drunk’ (Australian Institute of Health and Welfare, 2011). The result is that up to 60% of all police attendances, including 90% of late-night calls, involve alcohol-related disturbances (Doherty & Roche, 2003).

Alcohol leads to impaired judgement and decreased tolerance levels in frustrating situations (Lyneham, 2000). It has a disinhibiting effect on behaviour which may lead to exaggerated or inappropriate responses such as violence (Crilly et al., 2004). A recent trend reported is the use of amphetamine-type stimulants and alcoholic energy drinks to mask the effects of alcohol and enable users to drink more for longer periods exacerbating these effects (National Preventative Health Taskforce, 2010).

The problem of alcohol misuse and violence is especially significant with younger people. The evidence shows that young people are more likely to consume alcohol at dangerous levels, to drink specifically to become intoxicated; and to experience acute alcohol-related harms which bring them into contact with EDs. For example up to 22% of hospitalisations are alcohol-attributable and 32% of alcohol-related hospital admissions for injuries from violence involve patients aged 15–24 years old (Anonymous, 2012; Chikritzhs & Pascal, 2004). A study of patient presentations to an inner-city ED in Sydney, Australia reported that one-third of intoxicated patients were aged less than 25 years of age and two-thirds were male with 65% of all presentations occurring between 6pm on Friday and 6am on Monday (Poynton et al., 2005).
ii. Mental health diagnoses/issues

Patients with mental health diagnoses also were identified as a high risk group for patient-related violence, with the odds of a violent episode occurring more than three times higher where a patient presented with a mental health diagnosis. This finding is reflected in the literature however some researchers suggest that stereotyping of such patients and the counter-productive environment of the ED can facilitate this violent behaviour (Tyrell, 1999).

The ED environment can provide heightened stimulation to such patients as it is noisy and fast-paced and is not conducive to quietness, safety and calmness necessary for the effective management of patients with mental health issues (Jones & Lyneham, 2000). In addition many ED nurses lack the skills and resources to adequately manage such patients and prevent escalation of aggressive behaviours (Jones & Lyneham, 2000; van der Zwan et al., 2011). The use of dedicated specialist mental health nurses, fast-tracking and the use of isolation rooms to remove patients from the negative stimuli in the ED were proposed as strategies to manage such patient by participants in Part II of the study. The fast tracking of patients with a mental health diagnosis has been recommended as a preventive strategy in managing patient-related violence (Benveniste et al., 2005). In addition training of nurses in Mental Health First Aid has been proposed so that all nurses possess the knowledge to deal with patients with mental health diagnoses. This has been implemented into the undergraduate curricula at the University of Newcastle in Australia (Pich et al., 2011).

iii. Altered cognitive function

Other diagnoses reported as risk factors which were found to be statistically significant for violence included those related to altered cognitive function, for example delirium; disorientation/confusion; cognitive dysfunction and anxiety and agitation. For example the odds of a violent episode occurring were more than one
and half times higher where a patient presented with a diagnosis of disorientation/confusion, and more than one and half times higher where a patient presented with a diagnosis of cognitive dysfunction. Significant differences were found between geographic regions for delirium and cognitive dysfunction, which were both more common in metropolitan locations.

This is consistent with the literature on the topic with temporary organic cognitive disturbances such as hypoglycaemia and intracranial trauma reported as risk factors for potential violence (Chapman & Styles, 2006; Gates et al., 2006; May & Grubbs, 2002). The literature on resistance to care reports on unintentional violence from patients, with reference to the following significant clinical presentations: dementia, agitation, anxiety, substance and mood disorders (Kable et al., 2012b). Anxiety and agitation were reported by participants as being a significant factor along with pain, and this is also reflected in the existing evidence (Chapman & Styles, 2006; Ferns, 2005b).

6.5.4 Patient-specific factors

Participants in Part I of the study identified a number of patient-specific factors as contributing/precipitating factors for patient-related violence, and their answers were consistent with data collected for clinical diagnoses. Significant factors identified included alcohol intoxication, illicit substance misuse, patients with mental health diagnoses and cognitive dysfunction. Please see section 6.5.3 for a discussion of these findings.

6.5.4.1 Other patient-specific factors

A history of violence was identified by more than three-quarters of those surveyed as a risk factor for patient-related violence in a result that was found to be statistically significant. This is consistent with the literature on the topic and a history of violent behaviour has been identified as one of the most reliable indicators of future
violence, however this fact is not always apparent to the treating nurses (Ferns, 2005a; Kinkle, 1993).

Other statistically significant factors included patients’ unrealistic expectations of staff and the health system; acute pain and cultural issues. A statistically significant difference was identified for “cultural issues” which was greater in metropolitan areas compared to regional/remote. Unrealistic expectations of the public about waiting times and the triage system can lead to frustration where instant gratification is expected but not forthcoming (Tyrell, 1999). In some cases, cultural insensitivities or racial tension can precipitate patient-related violence (May & Grubbs, 2002).

Stress, frustration and anxiety (Chapman & Styles, 2006) and the emotional impact of admission (Tyrell, 1999) are also reported to be significant precipitants for patients. Personal stressors such as feelings of vulnerability, fear, hopelessness, loss of control, and lack of knowledge can add to feelings of frustration and increase the likelihood of patient-related violence occurring (Luck et al., 2006).

More than two thirds of participants in this study believed that socio-economic indicators played a significant role in episodes of patient-related violence. This is consistent with the literature on the topic that reports that socioeconomic and psychosocial factors such as homelessness, financial burdens, criminal background and domestic violence are linked to increased intolerance to frustration and can put such people at risk of potential violence in the ED health care setting (Luck et al., 2006; Lyneham, 2000). Researchers in a British study found that patients responsible for episodes of violence tended to live in areas ranked as more deprived when compared with other patients (James et al., 2006).

### 6.5.5 Patient-specific behaviours

A number of patient-specific behaviours were found to be significant in Part I of the study as warning signs for impending violence by nurses. These included agitation; tone of voice; attitude; pacing; menacing and staring and no differences were found
between geographic regions. This was consistent with the findings in Part II of the study with warning signs identified by participants as predictors of potential violence. It was stressed however that sometimes episodes escalated without the presence of such warning signs and therefore it was dangerous to rely on them as a prevention strategy. Behavioural and verbal cues were discussed and included: anxiety and agitation; pacing; patients acting in a distracted manner and communicating with a frustrated tone interspersed with “tutting and sighing”.

The warning signs identified are consistent with those discussed in an Australian study that proposed that five interconnected elements of observable behaviour were suggestive of a potential for violence in patients. These were labelled the STAMP behaviours and identified as: Staring and eye contact; Tone and volume of voice; Anxiety, Menacing and Pacing (Luck et al., 2007). These were subsequently expanded on to include another four elements: Emotions, Disease process, Assertive/non-assertive behaviours and Resources (Chapman et al., 2009). Other patient behaviours identified as indicators of impending violence in the literature include verbal and physical cues associated with anger or agitation such as rapid speech, angry tone of voice, fidgeting, demanding attention, paranoid delusional comments, aggressive statements or threats, clenched fists, tense posture, tightened jaw, increased activity such as pacing and a tense posture (Kinkle, 1993; Presley & Robinson, 2002). Demanding behaviour and requesting attention also were listed as high risk behaviours (Crilly et al., 2004).

This knowledge has been utilised by a number of researchers to develop violence assessment tools to allow nurses to identify those at risk of potential violence (Luck et al., 2007; Sands, 2007; Wilkes, Mohan, Luck, & Jackson, 2010). This information needs to be incorporated into continuing training and education programs (Wand & Coulson, 2006).
6.5.6 Environmental factors

6.5.6.1 Time

The afternoon shift, between 1500 and 2300 hours, was identified as the time period where the majority of violent episodes occurred by 41% of participants (n = 202) in Part I of the study. However a similar number, (n = 196, 39%) reported that more than one time period was significant in this regard.

The afternoon/evening shift has been reported as having the highest risk for patient-related violence in a number of studies, as opposed to the day shift which was reported to be the lowest risk shift (Brookes & Dunn, 1997; Crilly et al., 2004; Dalphond et al., 2000; Hilliar, 2008; Pich et al., 2011). The night shift has also been reported in the literature to be a higher risk time period compared to the day shift (Gacki-Smith et al., 2009; Senuzun Ergun & Karadakovan, 2005). However, the definition of night shift varied between these studies and was defined in one as 1600-0800, which encompasses both the evening and night shift (Senuzun Ergun & Karadakovan, 2005).

The majority of participants in this study nominated the weekend or public holidays as the highest risk period for violence. Weekends have been identified in some studies as periods of higher risk for patient-related violence (Gacki-Smith et al., 2009). Weekends and evenings tend to show a higher prevalence of alcohol-related issues. An Australian study that looked at day-of-week trends with regards to alcohol-related ED presentations identified Fridays and Saturdays as peak times for presentations due to acute alcohol intoxication (Lloyd, Matthews, Livingston, Jayasekara, & Smith, 2013). A study from an inner-city Sydney ED reported that 65% of all alcohol-related presentations occurred between 6pm on Friday and 6am on Monday (Poynton et al., 2005). Crime statistics on hospital assaults in NSW for the year 2006 identified Sunday as the most common day of the week for violent incidents (Hilliar, 2008).
Seasons perceived to be high-risk for potential violence included holiday periods, for example Christmas and Easter. Summer was also reported to a high-risk period and it is important to note that Christmas in Australia occurs in summer and summer is a holiday period for university students. Alcohol-related ambulance attendances, ED presentations and hospital admissions for male and female patients peaked in the warmer months of the year, with February, November and December being the months with the highest numbers of cases recorded (Lloyd et al., 2011). A time–series analysis conducted in Melbourne, Australia between 2000 and 2009 to explore trends in alcohol intoxication in the context of major events concluded that acute alcohol intoxication cases requiring ambulance, ED and hospital in-patient treatment increased substantially on the day preceding public holidays and specific public holidays including, New Years’ Day and Anzac Day. In addition major sporting events such as the AFL Grand Final, Melbourne Cup and Grand Prix were associated with an increased number of alcohol intoxication presentations to the ED (Lloyd et al., 2013).

6.5.7 Nursing activities

Participants in Part I of the study identified a number of nursing activities associated with the first point of contact with patients that were found to be statistically significant with regards to the frequency of episodes of patient-related violence. They included: “triaging”; “communicating with patients”; “managing patients’ reactions to delays”; “restraining patients” and “assisting patients in the waiting room”. Statistically significant differences were identified between geographic locations for two nursing activities: “giving oral medications” and “restraining patients”.

The results of a logistic regression analysis found that the odds of experiencing a violent episode were almost three times higher for nurses engaged in triaging patients. Triaging is consistently identified as a high risk nursing activity (Emergency Nurses’ Association, 2011). As the first point of contact and a visible presence to the
waiting room, the triage nurse often bears the brunt of patient frustrations over waiting times and the triage priority system of care. As a result they are often verbally abused both face-to-face and over the phone, in full view of a waiting room full of people (Jones & Lyneham, 2000).

Participants in Part I of the study were asked to nominate three high risk nursing activities and the results for this question closely align with information discussed previously. More than half of those surveyed (n = 252/482, 52%) nominated triaging as the highest risk nursing activity. Other activities reported included: managing reactions to delays, managing patients in the waiting room; and dealing with patients with a mental health diagnosis and those affected by alcohol and illicit substances.

The initial interaction between triage nurse and patient at triage can provide important cues for the direction of the subsequent interaction. For example patients who responded to a nurse’s greeting or who initiated the greeting appear to show a lower propensity for violence (Lau et al., 2012b). Immediate and direct personal verbal and not-verbal behaviours such as being unfriendly, inattentive and uncooperative served as predictors of potential violence in the ED (Lau et al., 2012b).

6.5.8 Staffing issues

Staffing issues found to be statistically significant in this study as contributing or precipitating factors for patient-related violence included “workload and time management issues”; “poor skills mix” and “time/day of shift”. The results of a logistic regression analysis found that if a “poor skills mix” or “workload and time management issues” existed, nurses were more than twice as likely to experience patient-related violence. These results were consistent between geographic locations.

A national Canadian study also identified a link between staffing and resource adequacy, co-worker support and supervisor support and the incidence of patient-related workplace violence (Shields & Wilkins, 2009).
Empathetic communication skills, for example acknowledging patients’ arrival/waiting or emotions/concerns, calling patients by their first name and thanking patients after they answer questions have been identified as important in the ED setting and can prevent episodes of potential violence from occurring (Lau et al., 2012b). It can serve to mitigate known triggers for violence, for example the use of empathetic communication can make long waiting times more tolerable (Lau et al., 2012b).

6.5.9 ED specific issues

6.5.9.1 Area of the department

A number of departmental areas were found to be statistically significant with regards to patient-related violence. These included the triage area; patient cubicles; the waiting room, resuscitation rooms and ambulance bays. The odds of experiencing an episode of patient-related violence was almost four times greater for nurses working in the triage area; more than three times greater for those working in patient cubicles; almost twice as high for those working in the waiting room; more than four times greater in the ambulance bay and doubled for nurses working in resuscitation rooms.

Statistically significant differences across geographic locations were found for “resuscitation room” and “corridors” which were both more commonly reported by nurses in metropolitan areas compared to those in regional areas. It seems reasonable to assume the presence of more tertiary hospitals in metropolitan areas and therefore a greater number of resuscitation rooms, which explain this result.

The triage area was also identified in Part II of the study as a high risk area in the ED for patient-related violence. In some cases the environmental design of the area was perceived to exacerbate situations. For example the use of a barrier or screen at triage created a power imbalance from the first interaction with patients, and this has been
shown to amplify frustration in patients who are already feeling vulnerable. It can be viewed as harsh, alienating and divisive and may increase the risk of violent behaviour from such patients (Design Council, 2014). Workplace design has been identified as a major factor that could potentially promote the safety of ED nurses or increase their risk of being victimised, particularly with regards to the triage area (Gillespie, Gates, & Berry, 2013).

Triage has been consistently identified as a high risk area for patient-related violence in the literature (Crilly et al., 2004; Jones & Lyneham, 2000; Keep & Gilbert, 1997). A number of studies have reported that more than half of all violent incidents occur at triage or within the first hour of the patient being in the ED (Brookes & Dunn, 1997; Crilly et al., 2004; Lau et al., 2012b). Triage nurses can be consistently verbally abused, both face-to-face and over the phone, in full view of a waiting room throughout their shifts. As the first point of contact in the ED the triage nurse often bears the brunt of frustration related to waiting times and the triage system of prioritising care (Jones & Lyneham, 2000). Accurate information on waiting times is often only available from triage nurses and this can lead to dissatisfaction from those waiting and the perception that the triage nurse is the “gatekeeper” to the ED (Keep & Gilbert, 1997; Lau et al., 2012b). A possible solution could be the use of signage in the waiting room, however its effectiveness would be dependent on the ability of triage nurses or ED clerks to update it regularly (Lau et al., 2012b).

### 6.5.9.2 ED-specific precipitants

Almost all nurses surveyed (n = 501, 99%) reported that long waiting times and delays were the main ED specific precipitants for patient-related violence. This result was found to be significant and logistic regression analysis found that the odds of experiencing an episode of patient-related violence increased by more than five times where long waiting times and delays were present. “Lack of Privacy” was also found to be a significant ED-specific precipitant, which almost doubled the odds of
experiencing an episode of violence. Other factors such as over-crowding; noise levels; and personal space issues also were consistently identified by nurses as factors of concern. Patient specific reactions to the environment including the ability to manipulate the waiting system using past knowledge, the negative impact of the environment on mental health patients, and security concerns also were discussed. A statistically significant difference was identified across regions with “over-crowding” more common in metropolitan areas compared to regional/remote. This result is likely to reflect the greater number of patient presentations to EDs in metropolitan areas due to denser population figures.

Crowded waiting rooms, limited space for privacy, increased levels of noise and activity have been identified in the literature as risk factors for violence (Bond et al., 2009; Ogundipe et al., 2010). This environment is reported to be counter-productive to the treatment of patients with a mental health diagnosis: it is open, busy and fast-paced, which further increases the risk of violence from such patients (Jones & Lyneham, 2000). Therefore the presence of staff trained in mental health is proposed as a strategy to identify and defuse potentially violent situations (Pich et al., 2011). Many ED nurses have only received minimal training in mental health, often dating back to their university education (Jones & Lyneham, 2000), therefore the use of Mental Health First Aid Training has been suggested as a means of keeping ED nurses current in this regard (Pich et al., 2011). Other measures include staffing strategies to address the needs of mental health patients by specifically rostering staff trained in mental health, specific mental health assessment areas and mental health EDs (Morphet et al., 2012).

Dissatisfaction with waiting times has been reported as a crucial trigger for violence (Crilly et al., 2004; Gates et al., 2006; Jones & Lyneham, 2000; Lau et al., 2012b; Saines, 1999). Patients’ negative responses to waiting times are not exclusively dependent on the actual duration of waiting, as individual tolerance levels are varied (Lau et al., 2012b). For example Lau et al (2012) reported that some patients became frustrated
after waiting for less than five minutes, whilst others reached this level after three hours (Lau et al., 2012b). Therefore it may be that the perception of waiting times are more likely to influence patient satisfaction in the ED than actual waiting times (Lau et al., 2012b).

Waiting times were not restricted to wait times to be admitted to the ED and seen by a doctor. This was essentially the first in a series of “waiting times” that included specialists, x-rays, and pathology results, a situation described as “handballing around”. Diagnostic testing, pathology reports, specialist consultations, transfer to the ward or to another facility can all add to the duration of time spent by patients in the department and to their frustration levels (Robinson et al., 2004). In addition in NSW hospitals “bed block” can lead to patients spending hours on ambulance trolleys in a holding area before they are admitted to the ED. A lack of communication on the part of nurses in the ED was reported to exacerbate the impact of waiting times, and patients who were not informed were at increased risk of violent behaviour.

One strategy suggested to mitigate this risk was to provide targeted treatment while patients were still in the waiting room through the use of Clinical Initiatives Nurses (CIN). This role was performed by two participants in Part II of the study. The CIN role was originally introduced into major NSW EDs in 2002, with their primary purpose to provide nursing care to patients in ED waiting rooms. The care delivered is prioritised in the following way: maintenance of an ED nursing presence in the waiting room to facilitate a safe clinical environment; communication regarding ED processes, waiting times and provision of relevant education on their health issues; and assessment of patients following triage with a view to:

- Initiation of diagnostics or treatment;
- Escalation of care, where required;
- Appropriate referral of patients (Emergency Care Institute NSW, 2013).
Initiatives to improve waiting times in public hospital EDs using a clinical initiatives nurse (whose priority would be ED patients waiting for care, and their families/carers) has been recommended as a strategy to reduce patient-related violence in the ED (Benveniste et al., 2005). The Garling Report into acute care services in NSW recommended the use of CINs in EDs with an excess of 25,000 presentations. The report noted that the role of the CIN was critical in busy periods where they were able to provide close observation of patients in the waiting room and initiation of treatment where required (Garling, 2008).

Long waiting times are consistently referred to in the literature as being a primary contributing factor in patient-related workplace violence (Ferns, 2005b). In fact over half of all types of violence reported in one study involved patients who had protracted waiting times in excess of those recommended (Crilly et al., 2004).

The unpredictable nature of the ED, both on quantity of patients and severity of presenting problems, makes it impossible to eliminate waiting times and the subsequent frustration to patients. However methods should be employed to keep them to a minimum and to keep patients apprised of the situation at regular intervals (Saines, 1999). The Garling Report noted that the number of people utilising the public health system has surged since 2006, especially with regards to elderly patients and young adults (Garling, 2008).

6.6 Violence from the parents of paediatric patients

The fifth study aim was to investigate the issue of violence with respect to younger adults (16-25 years of age) and the parents of paediatric patients.

In Part I of the study, two hundred and twelve participants (43%) reported experiencing violence from the parents of their paediatric patients, with the majority of these parents aged between 26 and 35 years of age. Paediatric emergencies also were listed as clinical diagnoses of concern and parents were identified as being a
group at risk of displaying violent behaviour in the free-text answers in Part I of the study. This group has previously been recognised as a risk group for potential violence (Gillespie et al., 2010; Pich et al., 2011).

6.6.1 Parental emotions

One of the themes identified in Part II of the study centred on parental emotions. Parent-initiated violence was reported to be preceded by aggressive and demanding behaviours that became increasingly unreasonable in nature. Fear and anxiety over the condition of their child: “…why is my child not being seen?” was reported to be a key stressor for parents often leading to a perception that their child’s needs were not being met. This was often exacerbated by frustration and impatience with the health system, particularly regarding waiting times. The coping mechanisms of parents were tested with some not being able to cope with the stress of an unfamiliar situation and responding with violence; “…It really has to do with the parent’s ability to cope with this situation which they’re not used to…”(p.8). Other parents used prior experiences and information gained from the internet and media to form a pre-conceived idea of how their child’s care should unfold.

Heightened states of emotion in patients and/or their families has been identified as a risk factor for violence (Fernandes et al., 1999; Luck et al., 2008) and was identified with regards to the parents of paediatric patients in this study. A UK study of parent satisfaction in the ED found that the most important factors were a clear explanation of the child’s diagnosis and treatment plan; the ability of a parent to stay with their child at all times; rapid and adequate pain relief and staff attitudes (Pagnamenta & Benger, 2008).

The types of parents involved in these episodes varied, however participants discussed two groups of concern: young parents and “well presented men”/”business men”. The latter were reported to act in a condescending manner, particularly towards female nurses. These parents typically refused to accept
directions and or the advice of nurses, who were often seen as an impediment to seeing a doctor, which was the ultimate aim of the parents. The violent behaviour was viewed as a means to this end with many parents apologising to the nurses after the fact: “…it wasn’t personal…I wouldn’t normally be like that...” The nurses in the study did not feel that the apology excused the behaviour and it did not ease their negative feelings about the episode.

6.6.1.1 Paediatric patients

Paediatric emergency was reported as clinical diagnoses of concern for potential violence in Part I of the study: the risk-group for potential violence identified were the parents accompanying these patients to the ED. This information was reinforced by free-text answers in the “other” category for this question: “…it’s always the parents…” (p.510). These findings add to the data from Part II of the study that focused on parents of paediatric patients as one of two groups of interest for potential violence.

The age range of the children accompanied by these parents was described as being “young”, from toddler to barely school aged by participants in Part II of the study. The triage categories assigned to these paediatric patients were typically low, with categories four and five the most common: “…most of those children…actually ended up going home…” This illustrated a disconnect between the parents’ perceptions of the severity of the presenting problem and the actual presentation.

There was a duality in the impact on the nurses as they sought to balance their response to the abuse from the parents with their nursing care of the paediatric patients. The personal and professional impact and risks to the nurse were often secondary to their concern for the health needs of these patients. There was also concern at the impact such behaviour was having on the child in terms of normalising violence towards nurses for subsequent interactions: “bred into them...that’s how you treat the staff...and get away with it”.

359
6.7 Participants recommendations to minimise/prevent the occurrence of patient-related violence

The final study aim was to develop recommendations for employers about patient-related violence and safety in the workplace for ED nurses.

The strict enforcement of Zero Tolerance policies was the most common recommendation from participants and closely aligned with the need for improved security. Participants recommended that hospital security guards be rostered on to all shifts and be based in the hospital or preferably in the ED at triage where they would serve as a visible presence to the public, especially those in the waiting room. Some nurses felt that police should have a visible presence in the department and that perpetrators should be charged.

The need to reduce waiting times and prevent bed block through the provision of adequate staffing levels, resources and education of the public about the realities of a modern ED also were reported. However since waiting times are inevitable in the present system strategies were recommended to manage patients accordingly, for example improved communication and training. One such strategy discussed was the fast tracking of high risk groups of patients, for example those with a mental health diagnosis (Benveniste et al., 2005).
6.8 Similarities and difference between regions

The comparison of findings from Part I of the study across geographic regions identified similarities in the experiences of ED nurses with patient-related violence between metropolitan and regional areas across many areas. At the same time differences also were identified that demonstrated that while nurses in both geographic locations had similar experiences in terms of the frequency and types of violence encountered; the support mechanisms in place to deal with and/or prevent such violence from occurring were often lacking.

6.8.1 Similarities

A number of similarities were identified in the experiences of regional and metropolitan ED nurses with patient-related violence, as shown below.

- Point prevalence of violence;
- Increasing frequency of episodes;
- Types of violence encountered: verbal and physical;
- Types of verbal abuse (with the exception of threatening comments and unjustified criticism)
- Types of physical violence (with the exception of scratching);
- Sustained a physical and/or psychological injuries;
- Time taken off work following an episode of violence;
- Emotional impact;
- Professional impact;
- No changes implemented after an episode of violence;
- Nursing manner/attitude as a contributing factor;
- Types of barriers to reporting;
- Informal reporting methods favoured;
- Lack of refresher programs for AM training;
- Types of significant patient-specific behaviours as antecedents;
- Types of significant staffing issues as antecedents.
6.8.2 Differences

A number of differences were identified between metropolitan and regional areas, and many related to the availability and perceived effectiveness of risk prevention/management strategies to prevent episodes of patient-related violence from occurring.

- Two types of verbal abuse more common in metropolitan areas, including
  - Threatening comments;
  - Unjustified criticism.
- One type of physical behaviour: scratching, more common in metropolitan areas.
- The availability of risk prevention/minimisation measures: nurses in metropolitan areas reported greater:
  - Access to training;
  - Availability of restraints and policies for their use;
  - Security personnel based in the department;
  - Clear policies for the management of aggression.
- Nurses in regional areas were more likely to perceive policies as ineffective.
- AM training was more commonly available in metropolitan locations.
- Risk management follow-up strategies: three strategies more common in metropolitan areas:
  - Investigating reported episodes – prompt follow-up and feedback;
  - Staff counselling services;
  - Rotating staff in high risk areas, for example triage.
- Violence from patients aged less than 16 years of age was found to be more common in metropolitan areas.
- More perpetrators from Triage Category 2, in metropolitan areas.
- The clinical diagnoses of delirium, cognitive dysfunction and paediatric emergency as antecedents were found to be more common in metropolitan areas.
- The patient-specific factor: “cultural issues” as an antecedent was more common in metropolitan areas.
- Two nursing activities more common in metropolitan areas as antecedents:
  - Giving oral medications;
  - Restraining patients.
- Two areas of the ED more common in metropolitan areas as antecedents:
  - Resuscitation room;
  - Corridors.
- ED-specific precipitant: over-crowding more common in metropolitan.
- Nurses in regional areas more likely to report feeling “not safe”.
These findings suggest that while ED nurses in regional areas experienced the same levels of violence, they felt less supported than their metropolitan counterparts by risk prevention/management strategies. As a result regional nurses were more likely to report feeling unsafe at work compared to their colleagues in metropolitan areas.

6.9 Similarities between Part I and Part II of the study

There were a number of similarities identified between the two parts of the study that serve to underscore the impact and importance of these findings.

- High rates of verbal abuse experienced.
- Types of violence: verbal abuse and physical violence.
- Perception that patient-related violence was an inevitable or a somewhat inevitable part of the job.
- Perception that the frequency of patient-related violence had increased over the course of their careers.
- Antecedents of:
  - Parental emotions;
  - Alcohol and substance abuse.
- Opportunistic use of hospital equipment as weapons - more common than the use of traditional weapons.
- Feeling unsafe at work.
- Patient-specific behaviours as warning signs for impending violence.
- Parents of paediatric patients as a risk group for violence.
- Performing and attention seeking behaviours.
- Fast tracking of patients.

No significant differences were identified between Part I and Part II of this study.

6.10 Study limitations

This study had a large sample size that was representative of ED nurses in Australia, in terms of age, years of experience and work fraction. While the response rate of 51% was higher than for many similar studies, the results may not be generalisable to the ED nursing profession in Australia. In addition there is a potential for non-
response bias and self-selection bias. Under-reporting may be an issue which is consistent with previously reported studies, however is expected to be better than the reporting rates based on routine monitoring and voluntary reporting of violent episodes in healthcare organisations. A retrospective approach was utilised in the study and involved respondents reporting data for a period of six months prior to completing the questionnaire. This approach might be subject to recall bias and associated under-reporting however it is considered to be unlikely to substantially affect the results and is a limitation of many similar studies with which the current study has been compared.

Due to the large number of statistical computations performed the study was at significant risk of a type I error. A type I error occurs when an effect is detected erroneously where one is not present. In this study a 95% confidence level was used, which corresponds to an alpha value of 0.05. This means that there was a 5% probability that an erroneous effect was detected. (Antonius, 2003).
Conclusion

Patient-related violence against ED nurses is a significant workplace hazard. Within this context, this study has identified triaging as the highest risk activity and the triage area itself as the highest risk location for patient-related violence. While a number of antecedents have been discussed in the literature, alcohol intoxication and substance misuse emerged as the most significant risk factors in this study. The impact of patient-related violence on nurses was multi-factorial, and extended beyond the nurses themselves, to their employers and the patients in their care.

There are similarities and differences evident in the experiences of nurses working in metropolitan and regional EDs. While the experiences of ED nurses with violence appear to be similar across geographic locations, these findings suggest that regional nurses are less supported by both risk prevention and subsequent risk management strategies. This was compounded by the fact that regional nurses were more likely to feel unsafe at work compared to those working in metropolitan areas.

Training should be viewed as a valuable violence prevention strategy. However, despite the mandatory requirements in state-based policies for routine aggression minimisation training, availability of and access to training was inconsistent. For example, almost a quarter of nurses had never completed training and the majority had not completed regular refresher programs.

The findings of this study demonstrate that violence is a significant workplace concern for Australian ED nurses that is being dealt with inadequately by existing violence prevention and management strategies. In addition, inequities that exist between metropolitan and regional areas should be addressed to ensure that all ED nurses are supported and protected against the impact of patient-related violence in the workplace. Violence should no longer be shrugged off as either an expected or
accepted part of ED nursing, but recognised as the legitimate and very serious workplace hazard that it is.
Recommendations

Future research

- Inequities have been identified between ED nurses working in metropolitan and regional areas and strategies should be developed to rectify these;
- Research to evaluate the effectiveness of violence prevention strategies and aggression minimisation training programs;
- Research to determine the impact of violence on other patients.

Policy

- Mandatory requirements embedded in policies should be enforced;
- Policies surrounding violence should be readily available and their contents widely disseminated;
- Zero Tolerance policies should be re-visited to assess their feasibility in the ED environment;
- There should be explicit consequences for those who perpetrate violence against ED nurses and these should be enforced. For example staff should be supported to pursue legal avenues where offenders would be charged with assault/battery; and adoption of client management plans for frequent offenders;
- Inequities between metropolitan and regional areas should be addressed.

Workplace management

- All layers of management should be available and accessible to ED nurses to discuss issues associated with patient-related violence;
- ED nurses should be actively supported following exposure to episodes of patient-related violence. For example support should include help completing the report, quick and easy access to debriefing and counselling services,
treatment of any physical or psychological injury sustained and encouraged to take time off work if it is considered desirable;

- Reporting of episodes of violence should be encouraged to enable an accurate record of patient-related violence to emerge;

- Barriers to reporting should be removed to facilitate the reporting of all episodes of violence. For example the reporting process should be streamlined to be quicker and easier for staff to use and staff should be allocated time to complete reports, and not be asked to do this on their own time;

- Priority should be given to reporting more serious/higher level episodes of violence, for example where nurses perceive a threat or person to be dangerous to themselves or others (including but not limited to persons using weapons), or where an injury has been sustained;

- Feedback following episodes of violence should be prompt and exist in a no-blame/non-punitive culture;

- ED nurses should be consulted about violence prevention and management strategies;

- Fast-tracking should be viewed as a potential strategy in the management of patients at risk of violence. While this is not an ideal situation and can be seen as “rewarding” violent behaviour, it can be used in some situations to protect patients and staff from potentially violent patients, where their presence in the waiting room is likely to result in escalation of violent behaviours. This approach should be considered for use in combination with other strategies such as isolation and subsequent limited access to the ED;

- Limited access policies should be used for known perpetrators of aggression and violence towards ED staff, for example refusal of care at the discretion of triage nurse;

- Limits should be placed on the number of people accompanying patients to the ED to prevent attention-seeking behaviours from high-risk patients. Two
Visitors are recommended however this could be reduced to one, or even a ban on visitors where violent behaviour is being exhibited and/or the accompanying people are under the influence of alcohol or illicit drugs. However for people presenting with associated dementia who may display resistance to care behaviours, the presence of a carer can significantly relieve their distress and confusion; and they can often contribute useful information about the person’s behaviour and how to interpret it;

- Where possible the use of single or isolation rooms should be used to remove at-risk patients, for example those with alcohol intoxication, from the busy environment of the ED. This means not only removal from the waiting room but also from the main area of the ED. Use of, and provision of, seclusion rooms in ED is recommended for this purpose;

- Patients with mental health diagnoses should be prioritised and receive rapid triage and transfer to a designated mental health area with specialist staff.

**Workplace education**

- Aggression minimisation training should be made accessible to all ED nurses regardless of their geographic location;

- Training should be viewed as a valuable violence prevention strategy as demonstrated by the evidence on the topic;

- Recognition of cues and warning signs of escalating violence should be embedded in the training. For example patients exhibiting STAMPEDAR behaviours should be allocated to more experienced staff and de-escalation techniques employed to manage their behaviours, or use of fast-tracking or seclusion rooms as described above;

- The ability to manage patients who present with alcohol intoxication and/or substance misuse should be prioritised;

- The ability to manage patients who present with mental health issues should be addressed through the provision of Mental Health First Aid Training;
• Mandatory requirements with regards to training should be enforced;
• Training programs should emphasise de-escalation strategies to prevent and minimise episodes. This should be viewed as a proactive approach to avoid the need for seclusion and restraint and physical or coercive responses to aggression and violence. They should also emphasise safe egress and safety for others, including patients and those accompanying them, in the ED waiting room.
Reference list


NHS Foundation Trust. (2012). *Witholding Treatment Procedure (procedure for manageing patients/public who are violent and/or abusive) - "Yellow and Red card procedures".*


Sandelowski, M., & Leeman, J. (2012). Writing usable qualitative health research findings. *Qualitative Health Research, 22*(10), 1404-1413.


Appendices
## Appendix A: Search Strategy

### CINAHL

<table>
<thead>
<tr>
<th>Search terms</th>
<th>Number of articles retrieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency department or ED or emergency service</td>
<td>35335</td>
</tr>
<tr>
<td>Accident &amp; emergency or A &amp; E or triage</td>
<td>12038</td>
</tr>
<tr>
<td>S1 Or S2</td>
<td>43067</td>
</tr>
<tr>
<td>Violence or aggression or assault</td>
<td>29147</td>
</tr>
<tr>
<td>Abuse</td>
<td>53092</td>
</tr>
<tr>
<td>S4 or S5</td>
<td>74711</td>
</tr>
<tr>
<td>Patient or patient-related or client</td>
<td>411153</td>
</tr>
<tr>
<td>Nurs*</td>
<td>581827</td>
</tr>
<tr>
<td>S3 and S6 and S7 and S8</td>
<td>311</td>
</tr>
<tr>
<td>Retrieved for further analysis based on title and abstract</td>
<td>18</td>
</tr>
</tbody>
</table>

### MEDLINE

<table>
<thead>
<tr>
<th>Search terms</th>
<th>Number of articles retrieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency department or ED or emergency service</td>
<td>80276</td>
</tr>
<tr>
<td>Accident &amp; emergency or A &amp; E or triage</td>
<td>14268</td>
</tr>
<tr>
<td>Search terms</td>
<td>Number of articles retrieved</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>S1 OR S2</td>
<td>91063</td>
</tr>
<tr>
<td>Violence or aggression or assault</td>
<td>63806</td>
</tr>
<tr>
<td>Abuse</td>
<td>103991</td>
</tr>
<tr>
<td>S4 OR S5</td>
<td>156785</td>
</tr>
<tr>
<td>Patient or patient-related or client</td>
<td>1533172</td>
</tr>
<tr>
<td>Nurs*</td>
<td>497611</td>
</tr>
<tr>
<td>S3 AND S6 AND S7 AND S8</td>
<td>175</td>
</tr>
<tr>
<td>Retrieved for further analysis based on title and abstract</td>
<td>12</td>
</tr>
</tbody>
</table>

Mosby's Index

<table>
<thead>
<tr>
<th>Search terms</th>
<th>Number of articles retrieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Emergency department’ OR ‘ED’ OR ‘Emergency service’</td>
<td>40485</td>
</tr>
<tr>
<td>‘Accident &amp; emergency’ or ‘A &amp; E’ or ‘Triage’</td>
<td>28716</td>
</tr>
<tr>
<td>S1 or S2</td>
<td>41687</td>
</tr>
<tr>
<td>‘Violence’ OR ‘Aggression’ OR ‘Assault’</td>
<td>68783</td>
</tr>
<tr>
<td>Abuse</td>
<td>92430</td>
</tr>
<tr>
<td>S4 or S5</td>
<td>135134</td>
</tr>
<tr>
<td>‘Patient’ OR ‘Patient-related’ or ‘Client’</td>
<td>1134527</td>
</tr>
<tr>
<td>Nurs*</td>
<td>5058842</td>
</tr>
<tr>
<td>S3 AND S6 AND S7 AND S8</td>
<td>1157</td>
</tr>
<tr>
<td>Retrieved for further analysis based on title and abstract</td>
<td>4</td>
</tr>
<tr>
<td>Search terms</td>
<td>Number of articles retrieved</td>
</tr>
<tr>
<td>--------------------------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>'Emergency department' OR 'ED' OR 'Emergency service'</td>
<td>100592</td>
</tr>
<tr>
<td>'Accident &amp; emergency' OR 'A &amp; E' OR triage</td>
<td>44065</td>
</tr>
<tr>
<td>S1 OR S2</td>
<td>141431</td>
</tr>
<tr>
<td>Violence OR aggression OR assault</td>
<td>125466</td>
</tr>
<tr>
<td>Abuse</td>
<td>186361</td>
</tr>
<tr>
<td>S4 OR S5</td>
<td>290154</td>
</tr>
<tr>
<td>Patient OR 'patient-related' OR client</td>
<td>5138289</td>
</tr>
<tr>
<td>Nurs*</td>
<td>601308</td>
</tr>
<tr>
<td>S3 AND S6 AND S7 AND S8</td>
<td>425</td>
</tr>
<tr>
<td>Retrieved for further analysis based on title and abstract</td>
<td>0</td>
</tr>
</tbody>
</table>
### Cochrane Central Register of Controlled Trials (CENTRAL)

<table>
<thead>
<tr>
<th>Search terms</th>
<th>Number of articles retrieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Emergency department' OR 'ED' OR 'Emergency service'</td>
<td>82</td>
</tr>
<tr>
<td>'Accident &amp; emergency' OR 'A &amp; E' OR triage</td>
<td>35</td>
</tr>
<tr>
<td>S1 OR S2</td>
<td>115</td>
</tr>
<tr>
<td>Violence OR aggression OR assault</td>
<td>47</td>
</tr>
<tr>
<td>Abuse</td>
<td>115</td>
</tr>
<tr>
<td>S4 OR S5</td>
<td>115</td>
</tr>
<tr>
<td>Patient OR 'patient-related' OR client</td>
<td>3345</td>
</tr>
<tr>
<td>Nurs*</td>
<td>195</td>
</tr>
<tr>
<td>S3 AND S6 AND S7 AND S8</td>
<td>1</td>
</tr>
<tr>
<td>Retrieved for further analysis based on title and abstract</td>
<td>0</td>
</tr>
</tbody>
</table>

### Google Scholar

<table>
<thead>
<tr>
<th>Search terms</th>
<th>Number of articles retrieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Department; Emergency Service; Accident and Emergency; Violence; Aggression; Assault; Abuse</td>
<td>334</td>
</tr>
<tr>
<td>Retrieved for further analysis based on title and abstract</td>
<td>9</td>
</tr>
<tr>
<td>Search terms</td>
<td>Number of articles retrieved</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>('Emergency Department' OR 'Emergency Service' OR 'Accident and Emergency')</td>
<td>1,291</td>
</tr>
<tr>
<td>(Violence OR aggression OR assault OR Abuse)</td>
<td>2,484</td>
</tr>
<tr>
<td>S1 AND S2</td>
<td>879</td>
</tr>
<tr>
<td>Retrieved for further analysis based on title and abstract</td>
<td>12</td>
</tr>
</tbody>
</table>
## Appendix B - Appraisal instruments

**QARI Appraisal instrument**

### Assessment for: Name of Assessment

<table>
<thead>
<tr>
<th>Type: Primary</th>
<th>User: qari</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
<td></td>
</tr>
<tr>
<td>1) There is congruity between the stated philosophical perspective and the research methodology.</td>
<td>○ ○ ○</td>
</tr>
<tr>
<td>2) There is congruity between the research methodology and the research question or objectives.</td>
<td>○ ○ ○</td>
</tr>
<tr>
<td>3) There is congruity between the research methodology and the methods used to collect data.</td>
<td>○ ○ ○</td>
</tr>
<tr>
<td>4) There is congruity between the research methodology and the representation and analysis of data.</td>
<td>○ ○ ○</td>
</tr>
<tr>
<td>5) There is congruity between the research methodology and the interpretation of results.</td>
<td>○ ○ ○</td>
</tr>
<tr>
<td>6) There is a statement locating the researcher culturally or theoretically.</td>
<td>○ ○ ○</td>
</tr>
<tr>
<td>7) The influence of the researcher on the research, and vice-versa, is addressed.</td>
<td>○ ○ ○</td>
</tr>
<tr>
<td>8) Participants, and their voices, are adequately represented.</td>
<td>○ ○ ○</td>
</tr>
<tr>
<td>9) The research is ethical according to current criteria or, for recent studies, there is evidence of ethical approval by an appropriate body.</td>
<td>○ ○ ○</td>
</tr>
<tr>
<td>10) Conclusions drawn in the research report do appear to flow from the analysis, or interpretation, of the data.</td>
<td>○ ○ ○</td>
</tr>
</tbody>
</table>

**Include:** Yes

**Reason:**

[Update] [Cancel]
**MAStARI Appraisal Instruments**

**Assessment for: Name of Assessment**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Yes</th>
<th>No</th>
<th>Unclear</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Is sample representative of patients in the population as a whole?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2) Are the patients at a similar point in the course of their condition/illness?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3) Has bias been minimised in relation to selection of cases and of controls?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4) Are confounding factors identified and strategies to deal with them stated?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5) Are outcomes assessed using objective criteria?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6) Was follow up carried out over a sufficient time period?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7) Were the outcomes of people who withdrew described and included in the analysis?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8) Were outcomes measured in a reliable way?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9) Was appropriate statistical analysis used?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Include: Yes

Reason: 

[Update] [Cancel]
### Assessment for: Name of Assessment

**Type:** Primary  
**User:** Default  
**Design:** Descriptive / Case Series Studies

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Yes</th>
<th>No</th>
<th>Unclear</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Was study based on a random or pseudo-random sample?</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>2) Were the criteria for inclusion in the sample clearly defined?</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>3) Were confounding factors identified and strategies to deal with them stated?</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>4) Were outcomes assessed using objective criteria?</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>5) If comparisons are being made, were there sufficient descriptions of the groups?</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>6) Was follow up carried out over a sufficient time period?</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>7) Were the outcomes of people who withdrew described and included in the analysis?</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>8) Were outcomes measured in a reliable way?</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>9) Was appropriate statistical analysis used?</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

**Include:** Yes  
**Reason:**

[Update] [Cancel]
Appendix C: Excluded papers and reasons for exclusion

Excluded quantitative studies

<table>
<thead>
<tr>
<th>Author, Year &amp; country</th>
<th>Type of study</th>
<th>Sample size</th>
<th>Reason for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Erickson &amp; Williams-Evans, 2000) United States</td>
<td>Questionnaire</td>
<td>n = 55</td>
<td>Small sample size; potential for variation between sites; minimal descriptive statistics reported &amp; instrument used not directly relevant to key outcomes of this review</td>
</tr>
</tbody>
</table>

Excluded qualitative studies

<table>
<thead>
<tr>
<th>Author, year &amp; country</th>
<th>Type of study</th>
<th>Sample size</th>
<th>Reason for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Hislop &amp; Melby, 2003) Northern Ireland</td>
<td>Phenomenological</td>
<td>n = 5</td>
<td>Audit trail unclear, interview approach unknown, rigour including trustworthiness poorly addressed. Participants known to researcher – potential for bias.</td>
</tr>
<tr>
<td>Author Year Country</td>
<td>Design, data collection and analysis methods</td>
<td>Sample</td>
<td>Recall period</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------</td>
<td>--------</td>
<td>---------------</td>
</tr>
<tr>
<td>1. Catlette (2005) United States</td>
<td>Descriptive Interviews Thematic analysis</td>
<td>n = 8</td>
<td>Not defined</td>
</tr>
<tr>
<td>2. Early &amp; Hubbert, (2006) United States</td>
<td>Phenomenological Semi-structured interviews Thematic analysis</td>
<td>n = 12</td>
<td>Not defined</td>
</tr>
<tr>
<td>3. Gates, et al., (2011a) United States</td>
<td>Action research Focus groups Thematic analysis</td>
<td>n = 97</td>
<td>Not defined</td>
</tr>
<tr>
<td>4. (Pich et al., 2011) Australia</td>
<td>Qualitative descriptive methodology Semi-structured interviews Thematic analysis</td>
<td>n = 6 ED nurses</td>
<td>1 month</td>
</tr>
</tbody>
</table>
shouting, making unreasonable demands; intimidation
Impact: Emotional & professional
Risk management strategies: Reactive rather than preventative e.g. security, duress alarms & workplace design
Training – lacking
Reporting: Under-reporting common due to time constraints, “non-user friendly” system & high frequency of episodes
Ability to recognise cues & warning signs
Coping mechanisms: Informal debriefing
Appendix E: Summary table of quantitative studies (included in review)

<table>
<thead>
<tr>
<th>Design</th>
<th>Author/year/country</th>
<th>Recall period</th>
<th>Sample</th>
<th>Setting</th>
<th>Findings</th>
</tr>
</thead>
</table>
| Questionnaire                   | 1. (Atawneh et al., 2003)    | 1 year        | n=81 ED nurses          | 1 study site ED in a general hospital        | 70/81 nurses experienced verbal abuse  
13/81 physically assaulted  
Nurses suffer more from the after-effects of violence at work than doctors  
Effects of violence included: - flashbacks, depression, sleep disturbances, fear & time off work  
Males statistically more likely to experience an episode of violence & more fearful at work than females  
63/81 worried about violence at work  
Training – 15/81 had received aggression minimisation training |
| Questionnaire                   | 2. (Ayranci, 2005) Turkey    | 1 year        | n=195                   | 18 study sites in west Turkey (5 urban & 13 rural Emergency Departments) | 53% verbally abused  
70% physical threats  
Verbal/emotional most common form of violence |
| Descriptive longitudinal cohort study – incorporating a questionnaire | 3. (Crilly et al., 2004) Australia | 5 months      | n = 71                  | ED 2 study sites                             | Violence most common on evening shift  
Nurses’ perceived perpetrators were under influence of drugs & alcohol & displayed behaviours |
<table>
<thead>
<tr>
<th>Study Type</th>
<th>Authors and Year</th>
<th>Country</th>
<th>Duration</th>
<th>Sample Size</th>
<th>Method</th>
<th>Data Collection</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-sectional study</td>
<td>4. (Esmaeilpour et al., Iran)</td>
<td>1 year</td>
<td>n = 178</td>
<td>Emergency Department 11 study sites</td>
<td>19.7% had faced physical violence. 91.6% had experienced verbal abuse during last year. Patients' relatives most common source of violence. Dissatisfaction on way incidents were handled.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-sectional study</td>
<td>5. (Gacki-Smith et al., 2009) United States</td>
<td>3 years</td>
<td>n = 3465</td>
<td>Survey of members of Emergency Nurses' Association</td>
<td>25% had experienced physical violence more than 20 times in the past 3 years. Fear of retaliation &amp; lack of support from Emergency Department management barriers to reporting.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-sectional study</td>
<td>6. (Gates et al., 2011b) United States</td>
<td>Not defined – 7 days after a traumatic event – but no limit to when event occurred</td>
<td>n = 264</td>
<td>Survey of members of Emergency Nurses' Association</td>
<td>94% of nurses experienced at least one PTSD symptom after a violent event. Significant indirect relationships between stress symptoms &amp; work productivity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire</td>
<td>7. (Gates et al., 2006) United States</td>
<td>6 months</td>
<td>n = 242</td>
<td>Emergency Department 5 study sites</td>
<td>ED workers at higher risk of violence. Significant relationship between violent experiences, feelings of safety &amp; job satisfaction. 64% had not had violence prevention training during the previous 12 months. Low reporting rates: 65% of those who were involved in an assault from a patient did not report &amp; 45% of those involved.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire</td>
<td>Study Details</td>
<td>Duration</td>
<td>Sample Size</td>
<td>Setting</td>
<td>Key Findings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>----------</td>
<td>-------------</td>
<td>---------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. (Kansagra et al., 2008) United States</td>
<td>5 years</td>
<td>n = 3518</td>
<td>65 study sites</td>
<td>Emergency Department</td>
<td>Violence &amp; weapons in Emergency Department common. Nurses less likely to feel safe in Emergency Department than other Emergency Department staff.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. (Lee, 2001) New Zealand</td>
<td>3 months</td>
<td>n = 76</td>
<td>2 study sites</td>
<td>Emergency Department</td>
<td>Violence common occurrence. Greater self-efficacy in managing aggressive behaviour observed in higher grades of staff &amp; in staff who had experienced higher levels of verbal aggression.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. (Pinar &amp; Ucmak, 2011) Turkey</td>
<td>1 year</td>
<td>n = 255</td>
<td>11 study sites</td>
<td>Emergency Department</td>
<td>91% reported verbal violence. 75% physical violence during last 12 months. 80% did not report violent episodes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. (Senzun Ergun &amp; Karadakovan, 2005) Turkey</td>
<td>Not defined: “…experienced throughout the career in the ED…” (p156)</td>
<td>n = 66</td>
<td>4 study sites</td>
<td>Emergency Department</td>
<td>94% of nurses did not report episodes - did not believe anything would result. 99% - experienced verbal abuse &amp; 20% physical violence.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix F: Summary table of mixed methods studies (included in review)

<table>
<thead>
<tr>
<th>Author/year/country</th>
<th>Design</th>
<th>Recall period</th>
<th>Sample/setting</th>
<th>Phenomenon of Interest/definition of violence provided?</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gillespie, et al., (2010) United States</td>
<td>Qualitative inquiry Multiple case study approach Interviews Non-participant observation Digital photographs Archival records</td>
<td>6 months</td>
<td>n = 31 (Nurse: n = 12) Paediatric Emergency Department Large, urban paediatric teaching hospital</td>
<td>Worst experience Outcome measures: - Perpetrators Types of violence Precipitants Personal &amp; professional effects</td>
<td>Verbal abuse - family members most common source (82%), patients (8%) Physical abuse – patients the most common source (76%) &amp; family members (24%) PRECIPITANTS Workers: Decreased worker experience High risk patients: Those not permitted to leave &amp; being admitted for MH reasons. High risk family members: lack of respect for women or persons in positions of authority identified; under influence of substance abuse or alcohol intoxication; not addressing &amp; meeting the family member’s needs for the patient’s care Workplace design: access; multiple visitors; crowded waiting room; long waiting times; noise levels EFFECTS ON WORKERS: Hyper-arousal; Stress response; Fear; Anger; Frustration; Avoidance of perpetrators; Intrusive &amp; thoughts re the event; Decrease in worker productivity; Perceived poor</td>
</tr>
<tr>
<td>Study</td>
<td>Description</td>
<td>Methodology</td>
<td>Sample Size</td>
<td>Setting</td>
<td>Findings</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td>2. (Luck et al., 2007) Australia</td>
<td>STAMP behaviours identified as predictors of potential violence in patients</td>
<td>Mixed method case study; 13 informal field interviews; 16 semi-structured interviews; 290 hours of participant observation</td>
<td>n = 20; RR = 37%</td>
<td>1 Australian ED</td>
<td>Staring, Tone, Anxiety, Mumbling, Pacing</td>
</tr>
</tbody>
</table>
| 3. (Luck et al., 2008) Australia | ED nurses made judgements about meanings of violent events according to 3 factors: Perceived personalisation of violence; Presence of mitigating factors; Reason for presentation. | Mixed method case study; 13 informal field interviews; 16 semi-structured interviews; 290 hours of participant observation | n = 20; RR = 37% | 1 Australian ED | }
Appendix G: Ethical approval

HUMAN RESEARCH ETHICS COMMITTEE

Notification of Expedited Approval

To Chief Investigator or Project Supervisor:  Professor Michael Hazelton

Cc Co-investigators / Research Students:
  Doctor Ashley Kable
  Doctor Deborah Sundin
  Ms Jacqueline Pich

Re Protocol:  The VENT study: Violence in Emergency Nursing and Triage

Date:  18-May-2010

Reference No:  H-2010-1013

Date of Initial Approval:  18-May-2010

Thank you for your Response to Conditional Approval submission to the Human Research Ethics Committee (HREC) seeking approval in relation to the above protocol.

Your submission was considered under Expedited review by the Chair/Deputy Chair.

I am pleased to advise that the decision on your submission is Approved effective 18-May-2010.

For noting: The additional amendments to the protocol as detailed in your response letter are also approved.

In approving this protocol, the Human Research Ethics Committee (HREC) is of the opinion that the project complies with the provisions contained in the National Statement on Ethical Conduct in Human Research, 2007, and the requirements...
within this University relating to human research.

Approval will remain valid subject to the submission, and satisfactory assessment, of annual progress reports. If the approval of an External HREC has been "noted" the approval period is as determined by that HREC.

The full Committee will be asked to ratify this decision at its next scheduled meeting. A formal Certificate of Approval will be available upon request. Your approval number is H-2010-1013.

If the research requires the use of an Information Statement, ensure this number is inserted at the relevant point in the Complaints paragraph prior to distribution to potential participants You may then proceed with the research.

Conditions of Approval

This approval has been granted subject to you complying with the requirements for Monitoring of Progress, Reporting of Adverse Events, and Variations to the Approved Protocol as detailed below.

PLEASE NOTE:
In the case where the HREC has "noted" the approval of an External HREC, progress reports and reports of adverse events are to be submitted to the External HREC only. In the case of Variations to the approved protocol, or a Renewal of approval, you will apply to the External HREC for approval in the first instance and then Register that approval with the University's HREC.

- Monitoring of Progress

Other than above, the University is obliged to monitor the progress of research projects involving human participants to ensure that they are conducted according to the protocol as approved by the HREC. A progress report is required on an annual basis. Continuation of your HREC approval for this project is conditional upon receipt, and satisfactory assessment, of annual progress reports. You will be advised when a report is due.

- Reporting of Adverse Events

1. It is the responsibility of the person first named on this Approval Advice to report adverse events.
2. Adverse events, however minor, must be recorded by the investigator as observed by the investigator or as volunteered by a participant in the research. Full details are to be documented, whether or not the investigator, or his/her deputies, consider the event to be related to the research substance or procedure.
3. Serious or unforeseen adverse events that occur during the research or within six (6) months of completion of the research, must be reported by the person first named on the Approval Advice to the (HREC) by way of the Adverse Event Report form within 72 hours of the occurrence of the event or the investigator receiving advice of the event.

4. Serious adverse events are defined as:
   - Causing death, life threatening or serious disability.
   - Causing or prolonging hospitalisation.
   - Overdoses, cancers, congenital abnormalities, tissue damage, whether or not they are judged to be caused by the investigational agent or procedure.
   - Causing psycho-social and/or financial harm. This covers everything from perceived invasion of privacy, breach of confidentiality, or the diminution of social reputation, to the creation of psychological fears and trauma.
   - Any other event which might affect the continued ethical acceptability of the project.

5. Reports of adverse events must include:
   - Participant's study identification number;
   - date of birth;
   - date of entry into the study;
   - treatment arm (if applicable);
   - date of event;
   - details of event;
   - the investigator's opinion as to whether the event is related to the research procedures; and
   - action taken in response to the event.

6. Adverse events which do not fall within the definition of serious or unexpected, including those reported from other sites involved in the research, are to be reported in detail at the time of the annual progress report to the HREC.

- Variations to approved protocol

If you wish to change, or deviate from, the approved protocol, you will need to submit an Application for Variation to Approved Human Research. Variations may include, but are not limited to, changes or additions to investigators, study design, study population, number of participants, methods of recruitment, or participant information/consent documentation. Variations must be approved by the (HREC) before they are implemented except when Registering an approval of a variation from an external HREC which has been designated the lead HREC,
in which case you may proceed as soon as you receive an acknowledgement of your Registration.

**Linkage of ethics approval to a new Grant**

HREC approvals cannot be assigned to a new grant or award (i.e. those that were not identified on the application for ethics approval) without confirmation of the approval from the Human Research Ethics Officer on behalf of the HREC.

Best wishes for a successful project.

Associate Professor Alison Ferguson

**Chair, Human Research Ethics Committee**

*For communications and enquiries:*

**Human Research Ethics Administration**

Research Services
Research Office
The University of Newcastle
Callaghan NSW 2308
T +61 2 492 18999
F +61 2 492 17164
Human-Ethics@newcastle.edu.au

**Linked University of Newcastle administered funding:**

<table>
<thead>
<tr>
<th>Funding body</th>
<th>Funding project title</th>
<th>First named investigator</th>
<th>Grant Ref</th>
</tr>
</thead>
</table>
Appendix H: Survey

The VENT Study: Violence in Emergency Nursing and Triage

1. STUDY ELIGIBILITY

1. Have you worked as a nurse in an Emergency Department in the last 6 months?
   If No - you do not have to answer any more questions.
   Thank you for your interest.
   - Yes
   - No

2. GENERAL INFORMATION

* 2. Number of years of nursing experience?

   Please select from the drop-down menu.

   * 3. Number of years of Emergency Department nursing?

   Please select from the drop-down menu.

   * 4. Average number of hours per week of patient care during the last month?

   Please select from the drop-down menu.

   * 5. Is your main nursing job?
   (Select only ONE option)

   - Full time
   - Part time
   - Casual

   6. What is your age?

   Please select from the drop-down menu.
The VENT Study: Violence in Emergency Nursing and Triage

7. What is your main nursing position/role?
   (Select only ONE option)
   - Enrolled Nurse
   - Enrolled Enrolled Nurse
   - Registered Nurse
   - Clinical Nurse Consultant
   - Clinical Nurse Specialist
   - Clinical Nurse Educator
   - Nurse Manager
   - Nurse Practitioner
   Other (please elaborate) ___________

8. What is the postcode of your main place of work?

3. PATIENT-RELATED VIOLENCE EXPERIENCED BY YOU.

Please read this definition of violence and answer the questions that follow:

For the purposes of this study, the term "violence" refers to verbal abuse and threats, sexual harassment as well as physical assaults. It can involve both an explicit and implicit challenge to your well-being, safety or health at work (Mayhew & Chappell, 2005).

The term "patients" also includes the parents/guardians or carers accompanying paediatric patients.

NB: The questions in this section relate to episodes of patient-related violence in which you were directly involved.

9. Have you been directly involved in one or more episodes of patient-related violence in the last week?
   - Yes
   - No

10. Have you been directly involved in one or more episodes of patient-related violence in the last 6 months?
    IF NO please go to Question 27.
    - Yes
    - No
The VENT Study: Violence in Emergency Nursing and Triage

11. If YES please estimate how many episodes you were involved in during the last 6 months.

<table>
<thead>
<tr>
<th>Number of episodes.</th>
<th>Please select from the drop-down menu.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Thinking of the episodes that occurred during the last 6 months - how many involved:

<table>
<thead>
<tr>
<th>Verbal abuse and non-physical behaviours?</th>
<th>Verbal abuse and non-physical behaviours that progressed to physical contact?</th>
<th>ONLY physical contact with people or objects?</th>
<th>Patients accompanied by police?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Please select from the drop-down menu.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Did you report these episodes?

- Yes
- No

14. If you reported episodes - Did you report (Select ONE option)

- All episodes?
- Only some episodes?

15. Why did you decide to report these episodes?

- [ ]

16. If YES - How did you report these episodes? (Select ALL that apply)

- [ ] Completed a paper report form
- [ ] Completed an electronic report e.g. IMS
- [ ] Verbally to my manager/team leader
- [ ] Documented in patient notes
- [ ] Informally at handover
- [ ] Other (please elaborate)

[ ]
The VENT Study: Violence in Emergency Nursing and Triage

17. If NO - Why did you decide not to report these episodes? (Select ALL that apply)

☐ Not sure how to report
☐ Time constraints
☐ Process too complicated
☐ Lack of follow up/response from management
☐ Don’t expect anything to change in the long-term
☐ Fear of lack of support from colleagues
☐ Fear of being blamed for the episode
☐ Too many episodes/too busy to report
☐ It is an accepted/expected part of the job
☐ Feel you can manage these episodes effectively
☐ Feel patient was not responsible for their actions or had a diminished responsibility e.g. cognitively impaired, substance abuse, mental health issues, emotional distress

Other (please elaborate):

---

18. For the most significant episode directed at you during the previous 6 months, how did your employer initially respond? (Select ALL that apply)

☐ Offered immediate support
☐ Offered counselling/debriefing
☐ Verbal warning given to offender
☐ Written warning to offender
☐ Involved police
☐ Blamed you
☐ No response

19. Were you satisfied with your employer’s initial response to this episode?

☐ Yes
☐ No
The VENT Study: Violence in Emergency Nursing and Triage

20. Did any of these episodes of patient-related violence directed at you in the last 6 months result in a physical or psychological injury/illness to you?
If No please go to Question 23

☐ Yes
☐ No

21. Your most serious injury/illness affected which of the following? (Select ALL that apply)

☐ Face – including eyes and ears
☐ Head (other than eye, ear and face)
☐ Neck
☐ Back
☐ Chest
☐ Abdomen
☐ Shoulders and arms
☐ Hands and fingers
☐ Hips and legs
☐ Feet and toes
☐ Psychological state

Other (please elaborate)
The VENT Study: Violence in Emergency Nursing and Triage

22. If applicable please choose the type of injury you suffered, from the following list (Select ALL that apply)

- [ ] Exposure to hazardous/infectious substance
- [ ] Abrasion/graze
- [ ] Laceration/cut
- [ ] Nerve damage
- [ ] Tendon damage
- [ ] Bruising
- [ ] Muscle damage
- [ ] Dislocation
- [ ] Fracture
- [ ] Burn
- [ ] Head injury
- [ ] Internal injury

Other trauma (please elaborate):

---
The VENT Study: Violence in Emergency Nursing and Triage

23. Following these episodes – did you experience any of the following EMOTIONAL responses? (Select ALL that apply)

☐ Guilt
☐ Anger
☐ Powerlessness
☐ Unhappiness
☐ Degradation
☐ Shame
☐ Fear/anxiety re future episodes
☐ Shock/surprise
☐ Anxiety
☐ Depression/low mood
☐ Chronic pain/disability
☐ Nightmares/flashbacks
☐ Increase in use of alcohol or other substances/medications
☐ Relationship issues
☐ Altered sleep patterns
☐ Panic attacks
☐ Weight loss/gain
☐ Irritability
☐ Withdrawal from people/situations
☐ Post traumatic stress disorder (PTSD)
☐ Emotional blunting
The VENT Study: Violence in Emergency Nursing and Triage

24. Following these episodes did you experience any of the following PROFESSIONAL responses? (Select ALL that apply)

- [ ] Feelings of professional incompetence and self doubt
- [ ] Reduced morale
- [ ] Avoidance of patients
- [ ] Decline in quality of care afforded patients
- [ ] Lack of empathy towards patients
- [ ] Considered leaving the Emergency Department – to transfer to a lower risk unit/department
- [ ] Considered leaving nursing altogether
- [ ] Burnout/stress
- [ ] Conflict with co-workers
- [ ] Depersonalising the event
- [ ] Dimishing/minimising the event

25. Did your injury/illness require you to take time off work?
   - [ ] Yes
   - [ ] No

26. Did your injury/illness result in permanent disability and change of work duties or inability to work?
   - [ ] Yes
   - [ ] No

4. FACTORS ASSOCIATED WITH PATIENT-RELATED WORKPLACE VIOLENCE

This section deals with episodes you have both experienced and/or witnessed in the last 6 months.

27. What percentage of episodes involved Male or Female patients?

Please select from the drop-down menu:

- [ ] Male
- [ ] Female
- [ ] Both
The VENT Study: Violence in Emergency Nursing and Triage

28. In what patient age group have you observed the majority of episodes? (Select ONE option).
   - [ ] <16 years
   - [ ] 16-25 years
   - [ ] 26-35 years
   - [ ] 36-45 years
   - [ ] 46-55 years
   - [ ] 56-65 years
   - [ ] 66-75 years
   - [ ] >75 years

29. Did any episodes involve the parent(s) or carer(s) of a child who was a patient?
   - [ ] Yes
   - [ ] No

30. If YES, in what age group were the parent(s) or carer(s) approximately)? (Select ONE option)
   - [ ] <16
   - [ ] 16-25
   - [ ] 26-35
   - [ ] 36-45
   - [ ] >46

31. What relationship to the child was the parent(s) or carer(s) involved in these episode(s)? (Please specify).

32. What triage category were the majority of these patients assigned? (Select ONE option)
   - [ ] 1
   - [ ] 2
   - [ ] 3
   - [ ] 4
   - [ ] 5
33. Please indicate the diagnoses or clinical signs/symptoms of patients who displayed violent behaviour. (Select ALL that apply).

- Alcohol intoxication
- Substance misuse
- Mental health issues
- Delirium
- Dementia
- Pain
- Fear
- Anxiety & agitation
- Head injury
- Cognitive dysfunction e.g. Hypoxia
- Disorientation/confusion
- Trauma
- Paediatric emergency
- Unknown

Other (please elaborate)

34. What time of day did the majority of these episodes occur? (Select ONE option).

- 0700-1500
- 1500-2300
- 2300-0700
- More than 1 time period

35. When did the majority of these episodes occur? (Select ONE option)

- Weekday
- Weekend
- Public Holidays

Other (please elaborate)
The VENT Study: Violence in Emergency Nursing and Triage

36. Please indicate the nursing activities that were occurring at the time of these episodes. (Select ALL activities that apply).

- Triaging
- Communicating with patients
- Managing patients’ reaction to delays
- Assisting patients in the waiting room
- Giving injectable medications
- Giving oral medications
- Performing invasive procedures e.g. cannulation
- Assessing patients/taking patients’ history
- Mobilising or Transferring patients
- Restraining patients
- Assisting with Activities of Daily Living
- Positioning/turning/lifting patients
- Not engaged in any nursing activities at the time of the event

Other nursing activity (please elaborate)

37. Please list 3 common activities during your working day, which you consider to be high risk activities for patient-related violence in the Emergency Department.

1
2
3
The VENT Study: Violence in Emergency Nursing and Triage

38. Where did these episodes occur? (Select ALL that apply).
   - [ ] Triage
   - [ ] Waiting room
   - [ ] House doctor
   - [ ] Observation room
   - [ ] Corridors
   - [ ] Ambulance bay
   - [ ] Patient cubicles
   - [ ] Resuscitation room
   - [ ] Not in the department e.g. car park
   - [ ] Transferring patient to another department/hospital
   - [ ] Other (please elaborate)

39. In your opinion is patient-related violence an inevitable part of your job as an Emergency Department nurse?
   - [ ] Yes
   - [ ] No
   - [ ] Somewhat

40. Thinking back over your career, do you think the frequency of patient-related violence is...? (Select ONE option).
   - [ ] Increasing
   - [ ] Decreasing
   - [ ] Staying the same

41. In your opinion are there any groups of patients who are more likely to exhibit violent behaviour than others?
   - [ ] Yes
   - [ ] No

42. If Yes - please elaborate.
43. Do you feel any one season or time of year is a higher risk period for episodes of violence from patient?

☐ Yes
☐ No

44. If Yes - please elaborate.

45. Which of the following PATIENT SPECIFIC factors do you think may be contributing/precipitating factors for patient-related violence? (Select ALL that apply).

☐ Past history of violence
☐ Illicit substance misuse
☐ Alcohol intoxication
☐ Mental health diagnoses
☐ Acute pain
☐ Cognitive dysfunction e.g. hypoxia
☐ Dementia
☐ Patients’ unrealistic expectations of staff & health system
☐ Cultural issues

Other (please specify)

46. Which of the following PATIENT BEHAVIOURS do you think may be warning signs for impending violence? (Select ALL that apply)

☐ Agitation
☐ Staring
☐ Tone of voice
☐ Attitude
☐ Menacing
☐ Pacing

Other (please elaborate)
The VENT Study: Violence in Emergency Nursing and Triage

47. Which of the following STAFFING ISSUES do you think may be contributing/precipitating factors for patient-related violence? (Select ALL that apply)

- Workload and time management
- Inadequate staffing
- Poor skill mix
- Lack of staff skills to manage episodes of patient-related violence
- Nursing practice and attitudes of individual nurses
- Time/day of shift
- Inadequate communication with patients e.g. about waiting times
- Professional communication issues e.g. handover/documentation

Other (please elaborate)

48. Which of the following factors SPECIFIC TO THE EMERGENCY DEPARTMENT do you think may be contributing/precipitating factors for patient-related violence? (Select ALL that apply)

- Noise levels
- Environmental factors - Lighting and temperature
- Lack of privacy
- Personal space issues
- Over-crowding
- Long waiting times/delays

Other (please elaborate)

49. In your experience do socio-economic indicators play a significant role in episodes of patient-related violence?

- Yes
- No
- Not sure

50. What factors do you believe contribute to episodes of violence escalating from minor to major incidents?
The VENT Study: Violence in Emergency Nursing and Triage

51. In your opinion do nurses who are the victims of violence from patients have a nursing approach/manner which makes them more likely to experience such behaviour?
   - Yes
   - No
   - Not sure

52. If Yes - please elaborate.

53. What measures do you believe can be used to more effectively manage violent patients/episodes?

54. What actions have YOU found to be effective in dealing with the consequences of patient-related violence? (Select ALL that apply)
   - Informal debriefing with other staff
   - Talking with friends and family
   - Talking with NUM/managers
   - Formal group debriefing
   - Employer counselling services e.g. EAP
   - Private counselling services
   - Talking with union or professional association
   - Talking with Human Resources or Occupational Health & Safety Representative
   - Nothing helped
   - Took no action
   - Other (please elaborate e.g. physical exercise)

55. Thinking of your most significant episode, did your organisation/department/unit introduce any immediate changes subsequently?
   - Yes
   - No
The VENT Study: Violence in Emergency Nursing and Triage

56. If Yes - please elaborate.

57. If No - why do you think this was the case?

58. For the most significant episode of patient-related violence in the last 6 months, were you offered access to recognised counselling services?
   - Yes
   - No
   - N/A

59. For the most significant episode of patient-related violence in the last 6 months, do you think that you were provided with adequate information, support and follow-up after the episode?
   - Yes
   - No
   - Not involved in any episodes

60. If you answered YES/NO please elaborate.

5. TYPES OF VIOLENT BEHAVIOUR

This section deals with episodes you have both experienced and/or witnessed in the past 6 months.
61. Please indicate which of the following types of VERBAL ABUSE AND/OR NON-PHYSICAL BEHAVIOURS from patients you have observed during episodes of patient-related violence (Select ALL that apply).

- [ ] Swearing
- [ ] Name calling
- [ ] Making unreasonable demands
- [ ] Sarcasm
- [ ] Insulting/questioning professional ability e.g. Incompetent, incapable
- [ ] Ridicule in front of others
- [ ] Anger
- [ ] Threatening comments – to self, family or property
- [ ] Shouting
- [ ] Rudeness
- [ ] Rumour mongering
- [ ] Sexual innuendo
- [ ] Taunting
- [ ] Staring
- [ ] Berating
- [ ] Gesturing
- [ ] Unjustified criticism
- [ ] Stepping into personal space
- [ ] Symbolic violence e.g. punching/hitting glass/desk at triage
- [ ] Formal complaints without cause

Other (please elaborate) 


The VENT Study: Violence in Emergency Nursing and Triage

62. Please indicate which of the following PHYSICAL behaviours displayed by patients, you have observed during episodes of patient-related violence (Select ALL that apply).

- Pushing
- Destructive behaviour e.g. punching safety glass/table etc
- Use of hospital equipment as weapons e.g. Sharps, chairs
- Use of a traditional weapon e.g. knife
- Grabbing
- Spitting
- Hitting
- Kicking
- Punching
- Grabbing and twisting a body part
- Biting
- Scratching
- Choking
- Pulling hair/jewellery/clothing
- Throwing/struck with an object
- Restraining/imobilising staff
- Inappropriate physical contact
- Sexual assault
- Threat using body fluids e.g. blood

Other (please elaborate)

6. MANAGEMENT AND PREVENTION OF EPISODES OF PATIENT-RELATED VIOLENCE

This section deals with your organisation's approach to the management and prevention of patient-related violence.
63. Do you think your immediate managers/team leaders are approachable and supportive in the event of an injury caused by a patient?
- Yes
- No
- Sometimes

64. Do you think upper management are approachable and supportive in the event of an injury caused by a patient?
- Yes
- No
- Sometimes

65. Which of the following risk prevention/minimisation measures are present at your place of employment? (Select ALL that apply)
- Access to training (e.g. Aggression minimisation training)
- Duress alarms
- Signage e.g. Zero Tolerance posters
- Fixing of moveable objects that could be used as weapons e.g. chairs
- Safety glass window at triage
- Restricted access to the department e.g. key or card access
- Increased security measures after hours
- Security personnel based in the department
- Security personnel available but based elsewhere in the hospital
- Police called if a situation deteriorates
- Availability of restraints and policies for their use
- Use of patient management plans
- Consultation with management about prevention
- Clear policies for management of aggression
- Other (please elaborate)

66. Is aggression minimisation training available at your workplace?
- Yes
- No
The VENT Study: Violence in Emergency Nursing and Triage

67. IF YES Have you ever completed aggression minimisation training at your workplace?
   ○ Yes
   ○ No

68. If Yes - do you think it was effective?
   ○ Yes
   ○ No
   ○ Not sure

69. If YES – Approximately how long ago did you complete your last course?

70. Have you completed regular refresher programs in Aggression Minimisation?
   ○ Yes
   ○ No

71. Which risk management follow-up strategies have been adopted by your employer? (Select ALL that apply)
   □ Investigating reported episodes – prompt follow-up and feedback
   □ Reporting episodes to police
   □ Rotating staff in high risk areas e.g. triage
   □ Informal debriefing at handover
   □ Formal debriefing
   □ Staff counselling services
   □ External counselling services
   □ Consulting with staff about OH&S issues

Other (please elaborate)
### The VENT Study: Violence in Emergency Nursing and Triage

72. Do you think that your organisations policies and procedures related to prevention and management of patient-related violence are effective?  
- [ ] Yes  
- [ ] No  
- [ ] Somewhat  

Please elaborate.  

73. Please comment on how safe you feel at work?  

74. In your opinion, what would be the most effective way to prevent/minimise the occurrence of patient-related violence in your department?  

75. Thank you for completing the survey.  

If you have any additional comments please add below.  

### 7. EXPRESSION OF INTEREST TO PARTICIPATE IN FOLLOW UP INTERVIEWS

NOTE: If you have experienced episodes of violence from young adults (16-25 years of age) and/or the parent(s) or carer(s) of paediatric patients, we would like to interview you.

If you would like to participate in an interview, please email jacqueline.pich@newcastle.edu.au to express your interest.

Please include the following information: -  

- Name  
- Email address  
- Contact phone numbers

Please specify if you have experienced episodes of violence from: -  
1. Young adults (16-25 years of age);  
2. The parent(s)/carer(s) of paediatric patients;  
3. Both groups.

We will contact you to seek your consent and to organise a suitable time for the interview, either in person or over the phone.
The VENT Study: Violence in Emergency Nursing and Triage

For the purposes of accuracy, interviews will be audiotaped. All information and identifying details will be treated confidentially.
Appendix I: Information Sheet

For further information please contact:
Jacqueline Pich
School of Nursing & Midwifery
The University of Newcastle NSW
Ph: (02) 4921 5768
Jacqueline.Pich@newcastle.edu.au

The VENT Study:
Violence in Emergency Nursing and Triage

The Research Team
Chief Investigator
Professor Michael Hackett
Head of School
School of Nursing and Midwifery
The University of Newcastle

Co-investigators
Dr Ashley Hilde
School of Nursing & Midwifery
The University of Newcastle
Dr Deborah Sundin
School of Nursing & Midwifery
The University of Newcastle
Jacqueline Pich
School of Nursing & Midwifery
The University of Newcastle

Complaints about this research?
If you have concerns about your rights as a research participant, you may speak to the complaints officer or lodge a complaint with the University of Newcastle's human research ethics committee. You may also contact the Ethics Officer, Researcher's Office, University Of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone 02 4921 5768, fax 02 4921 5778, email ethics@newcastle.edu.au.
How does patient-related workplace violence impact on nurses working in Emergency Departments in Australia?

Why is the research being done?
The research team is interested in the issue of workplace violence experienced by nurses in their daily working life and the impact this has on them.

The Emergency Department has been identified as a high-risk clinical setting where nurses have an increased risk of exposure to violence. The purpose of this research is to describe and evaluate emergency nurses' experiences of patient-related workplace violence.

Who can participate in the research?
All nurses currently employed in an Emergency Department in Australia.

What choice do you have?
Participation in this research is entirely your choice. Completion of the survey form will be taken as your informed consent.

Subsequent participation in interviews is also voluntary. Only those people who give their consent will be interviewed. Whether or not you decide to participate, your decision will not affect your professional relationship with the researcher.

You will be able to withdraw from the study at any time, including after your interview has been conducted.

What will you be asked to do?
You will be asked to complete a survey form about your experiences with violence from patients in your workplace. The survey is anonymous. No information will be collected on the survey that will identify you.

The survey form can be completed electronically or in printed form. We ask that you do this within the next 2 weeks, but definitely within 2 months of receiving the survey form.

There will also be an opportunity for interested participants to take part in interviews. If you are interested, your voluntary and non-identifiable information will be collected that can identify you or your place of work.

How much time will it take?
The survey form should take approximately 20 minutes to complete.

If you agree to take part in an interview, it is expected to take approximately 45 minutes.

Are there risks and benefits of participating?
There will be no direct benefit to you from participating in the research.

There is a risk. To participants that recalling an event during participation, this study may result in distress due to the outcome of the event. Only if the respondent has Post Traumatic Stress Disorder. It is expected to be unlikely, but possible that this could occur if you have been diagnosed with Post Traumatic Stress Disorder or if you are recalling events during participation in this study.

If you find that you are distressed at any time, you should not continue but will be encouraged to return the survey (without name) and seek support.

Support can be obtained through organizations such as LINC centred at 1300114, the Employee's Assistance Program of the Nurses Association in your state or territory.

How will your privacy be protected?
The survey form is anonymous and it will not be possible to identify you from your answers. A study number is printed on the survey, however it is not possible to identify you by this number.

Survey forms used to create data files will be stored in a secure location at the University of Newcastle and disposed of 5 years after the conclusion of the project. Electronic data files will only be accessible by the research team and will be password-protected. Your study number will only be used for the purposes of data checking.

How will the information collected be used?
The results will be presented in a PhD thesis for Jacqueline Pilch as well as in peer-reviewed journals and conferences.

A summary of the research can be obtained at the end of the study by contacting Jacqueline Pilch.

What do I need to do?
Just complete the survey online or return your completed survey in the reply-paid envelope provided. If you are interested in an interview, complete the "expression of interest" at the end of the survey and we will be in touch.

You are encouraged to keep this information brochure for future reference.
Appendix J: Envelope
Appendix K: Pen
Appendix L: Reminder postcard

Thank you for participating:
The VENT Study: Violence in Emergency Nursing and Triage

Recently you would have received a study package for The VENT Study: Violence in Emergency Nursing and Triage The purpose of the study is to investigate emergency nurses’ experiences with patient-related violence in their workplace.

If you have already returned your completed survey form to the University of Newcastle, Thank you!

If you have not yet returned the survey it is not too late — you can send it now or type http://www.surveymonkey.com/s/ventstudy into the address bar of your web browser and complete it online.

Your experiences and opinions on this topic are important to us and we want you to have your say on this important issue facing all emergency department nurses today.

If you need another package or if you would like further information about the study please contact:
Jacqui Pich, School of Nursing & Midwifery, The University of Newcastle, Callaghan NSW 2308
Telephone: 02 4921 5788. Email: jacqueline.pich@newcastle.edu.au

Thank you for considering this invitation — your opinion is important to us.
If you have any concerns about the study, you are welcome to contact the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia Telephone 02 4921 6333, Email human-ethics@newcastle.edu.au
Appendix M: Logo
Appendix N: Statistical analysis plan

STATISTICAL ANALYSIS PLAN

THE VENT STUDY: VIOLENCE IN EMERGENCY NURSING & TRIAGE

ANALYSIS 1: Frequency of episodes of violence

AIM 1: To measure the frequency of individual emergency nurses reported exposure to patient-related workplace violence and associated outcomes in the preceding six months.

POPULATION OF INTEREST: Q1: Nurses who were eligible for the study and completed the survey.

OUTCOME VARIABLE: Experienced at least 1 episode of patient-related violence in the last 6 months (Q10)

PREDICTOR VARIABLES OF INTEREST:

Q9: Have you been involved in an episode in preceding week?

Q10: Have you been involved in an episode in preceding 6 months?

Q11: How many episodes

Q12: How many involved: -

   a. Verbal abuse and non-physical behaviours;
   b. Verbal abuse and non-physical behaviours that progressed to physical contact;
   c. Only physical contact with people or objects;
   d. Patients accompanied by police.

Q39: Is patient-related violence an inevitable part of your job?

Q40: Do you think the frequency of patient-related violence is increasing...?
ANALYSIS: Basic statistical data on means, median, IQR, SD and range.

Data compared by geographical regions.
AIM 2: To identify the types of violent behaviours experienced by emergency nurses.

POPULATION OF INTEREST: Q1: Nurses who were eligible for the study and completed the survey.

OUTCOME VARIABLE: Experienced at least 1 episode of patient-related violence in the last 6 months (Q10)

PREDICTOR VARIABLES OF INTEREST:

Q12: How many involved: -
   a. Verbal abuse and non-physical behaviours;
   b. Verbal abuse and non-physical behaviours that progressed to physical contact;
   c. Only physical contact with people or objects;
   d. Patients accompanied by police.

Q20: Did you sustain a physical or psychological injury?

Q21: Which body part was affected?

Q22: Type of injury sustained;

Q23: Emotional responses;

Q24: Professional responses;

Q25: Time off work required?

Q26: Permanent disability or change in work duties?

Q61: Types of verbal abuse;

Q62: Types of physical behaviours
ANALYSIS:

- Descriptive statistics;
- Pearson’s chi-squared analysis (Fisher’s exact test where cells <5) to compare with episode experienced in the last 6 months;
- Data analysed according to region.
AIM 3: To uncover emergency nurses’ perceptions of risk prevention measures and risk management strategies adopted by their employers.

POPULATION OF INTEREST: Q1: Nurses who were eligible for the study and completed the survey.

OUTCOME VARIABLE:

PREDICTOR VARIABLES OF INTEREST:

Q13: Did you report these episodes?

Q14: Did you report all or some?

Q15: Why did you report?

Q16: How did you report?

Q17: Why did you decided not to report?

Q18: How did you employer respond?

Q19: Were you satisfied with your employer’s initial response?

Q54: What actions have you found effective in dealing with the consequences?

Q55: Changes introduced following an episode?

Q56: Yes: Description of changes;

Q57: No: why;

Q58: Were you offered access to counselling?

Q59: Follow up;

Q60: Elaborate;

Q63: Support of immediate managers;
Q64: Support of upper management;

Q65: Prevention/minimisation measures at your place of employment;

Q66: Availability of Aggression Minimisation Training;

Q67: Have you completed Aggression Minimisation Training?

Q68: Do you think this training was effective?

Q69: How long ago did you complete the training?

Q70: Have you completed refresher programs in Aggression Minimisation?

Q71: Which risk management follow-up strategies have been adopted by your employer?

Q72: Do you think existing policies & procedures are effective;

Q73: How safe do you feel at work?

ANALYSIS:

- Descriptive analysis in tables
- Pearson’s chi-squared (Fisher’s exact test where cells <5) for comparison to episodes experienced in the preceding 6 months
- Data analysed according to region
- Logistic regression analysis
AIM 4: To identify factors associated with patient-related workplace violence that precipitate, escalate or de-escalate episodes of violence.

POPULATION OF INTEREST: Q1: Nurses who were eligible for the study and completed the survey.

OUTCOME VARIABLE: Precipitants and antecedents to episodes of violence.

PREDICTOR VARIABLES OF INTEREST:

Demographic value re sample Q2-8?

Q27: Gender;

Q28: Age grouping;

Q32: Triage category;

Q33: Clinical diagnoses/signs and symptoms;

Q34: Time of day;

Q35: Type of day;

Q36: Nursing activity;

Q37: High risk activities;

Q38: Location in ED;

Q41: types of patients;

Q42: Elaboration of Q41;

Q43: Time of year;

Q44: Elaboration of Q43;

Q45: Patient specific factors;
Q46: Patient behaviours;
Q47: Staffing issues;
Q48: ED specific factors;
Q49: Socio-economic factors;
Q50: What factors (free text);
Q51: Nurse behaviours;
Q52: Elaboration of Q51.

ANALYSIS:

- Descriptive analysis in tables
- Pearson’s chi-squared (Fisher’s exact test where cells <5) for comparison to episodes experienced in the preceding 6 months
- Data analysed according to region
- Logistic regression analysis
AIM 5: To investigate the issue of violence with respect to younger adults (16-25 years of age) and the parents of paediatric patients.

POPULATION OF INTEREST: Q1: Nurses who were eligible for the study and completed the survey.

OUTCOME VARIABLE: Episodes involving parent(s) or carer(s) of a child who was a patient (Q29).

PREDICTOR VARIABLES OF INTEREST:

Q30: Age grouping;

Q31: Relationship to child.

ANALYSIS:

- Descriptive statistics
- Comparison by geographical region
**AIM 6:** To develop **recommendations** for employers about patient-related workplace violence and safety in the workplace for emergency nurses.

**POPULATION OF INTEREST:** Q1: Nurses who were eligible for the study and completed the survey.

**PREDICTOR VARIABLES OF INTEREST:**

Q53: What measures do you believe can be used to more effectively manage violent patients/episodes?

Q74: In your opinion what would be the most effective way to prevent/minimise patient-related violence?

Q75: Additional comments.

**ANALYSIS:**

- Descriptive statistics
# Appendix O: Expression of Interest

## 7. EXPRESSION OF INTEREST TO PARTICIPATE IN FOLLOW UP INTERVIEWS

NOTE: If you have experienced episodes of violence from young adults (16-25 years of age) and/or the parent(s) or carer(s) of paediatric patients, we would like to interview you.

If you would like to participate in an interview, please email jacqueline.pich@newcastle.edu.au to express your interest.

Please include the following information:

- **Name**
- **Email address**
- **Contact phone numbers**

Please specify if you have experienced episodes of violence from:

1. Young adults (16-25 years of age);
2. The parent(s)/carer(s) of paediatric patients;
3. Both groups.

We will contact you to seek your consent and to organise a suitable time for the interview, either in person or over the phone.
Participant Demographic Profile for the Research Project:

The VENT Study: Violence in Emergency Nursing and Triage.

1. How many years have you worked as a nurse? ___________ Years

2. What is the average number of hours per week in which you worked as an emergency nurse during the last month?

__________ Hours per week

3. Is your principal employment (please mark ONE option)

1 Full time  2 Part time  3 Casual

4. Years of experience working in an Emergency Department? ___________ years

5. Are you (Please circle ONE option)

(1) Male     (2) Female

6. What is your age? ____________ Years
7. What is your nursing classification? (Please circle ONE option)

- New Grad
- RN
- CNC
- CNS
- CNE
- Nurse practitioner
- NUM

What is the postcode of your primary employer? _________________________
Appendix Q: Interview schedule: Violence from young adults

Draft Interview Schedule for the Research Project:

The VENT Study: Violence in Emergency Nursing and Triage.

DRAFT INTERVIEW QUESTIONS: Violence from young adult patients aged 16-25 years of age.

I would like to begin the interview by thanking you for your participation in this study.

As a requirement of The Ethics Committee I would like to remind you that your participation in this interview is voluntary and that you may stop at any time. For the purposes of confidentiality I would ask that you do not identify yourself or name any third parties during the course of the interview. Do you consent to this interview being audio-taped?

Recounting experiences involving violence can sometimes be distressing. If you begin to feel distressed we can pause at any time, and you can cease the interview at
any stage.

I would like to explain that for the purpose of this study, the definition of violence that we are using includes verbal abuse, physical threats and assault as well as emotional abuse and involves both implicit and explicit challenges to your well-being.

You indicated on your survey form that you have experienced episodes of violence from young patients aged between 16-25 years of age.

1. From your personal experience do you feel that this group are increasingly associated with episodes of patient-related violence?

2. If Yes, WHY do you think this is occurring?

3. Could you describe a typical encounter please?

4. Could you tell me about the patient involved, for example their age, and presenting problem?

5. Did this/these episode(s) occur in front of any person(s) accompanying the patient?

6. How did this make you feel?

7. Were you able to resolve this/these episode(s)? Could you elaborate?

8. Did you report this/these episode(s)?

9. How did your manager respond to this/these episode(s)?

10. How did your colleagues respond to this/these episode(s)?

Is there anything you would like to add?
Appendix R: Interview schedule: Violence from the parents of paediatric patients

Draft Interview Schedule for the Research Project:
The VENT Study: Violence in Emergency Nursing and Triage.

DRAFT INTERVIEW QUESTIONS: Violence from the parents/carers of paediatric patients.

I would like to begin the interview by thanking you for your participation in this study.

As a requirement of The Ethics Committee I would like to remind you that your participation in this interview is voluntary and that you may stop at any time. For the purposes of confidentiality I would ask that you do not identify yourself or name any third parties during the course of the interview. Do you consent to this interview being audio-taped?

Recounting experiences involving violence can sometimes be distressing. If you begin to feel distressed we can pause at any time, and you can cease the interview at
any stage.

I would like to explain that for the purpose of this study, the definition of violence that we are using includes verbal abuse, physical threats and assault as well as emotional abuse and involves both implicit and explicit challenges to your well-being.

You indicated on your survey form that you have experienced episodes of violence from the parent(s)/carer(s) of a paediatric patient.

1. From your personal experience do you feel that this group are increasingly associated with episodes of patient-related violence?

2. If Yes, WHY do you think this is occurring?

3. Could you describe a typical encounter please?

4. Could you tell me about the child involved, for example their age, and presenting problem?

5. How did this make you feel?

6. Did these episodes occur in front of the child or children? If YES, how did the child respond?

7. Were you able to resolve this/these episode(s)? Could you elaborate?

8. Did you report this/these episode(s)?

9. How did your manager respond to this/these episode(s)?

10. How did you colleagues respond to this/these episode(s)?

11. Is there anything you would like to add?
Appendix S: Consent Form

Consent Form for the Research Project:

The VENT Study: Violence in Emergency Nursing and Triage

I agree to participate in the above research project and give my consent freely.

I understand that the project will be carried out as described in the Information Brochure, a copy of which I have retained.

I understand my consent is voluntary and that I can withdraw from the project at any time and do not have to give a reason for withdrawing.

I consent to participating in an interview and having it recorded and to completing a brief participant demographic form.

I understand that my personal information will remain confidential to the researchers.

I have had the opportunity to have questions answered to my satisfaction.

PRINT NAME: _________________________________________________

SIGNATURE: __________________________________________________

I consent to my interview responses being quoted in the reporting of the research and understand that all information will be de-identified to protect my privacy.
PRINT NAME: ________________________________

SIGNATURE: ________________________________

For the purposes of accuracy you will be provided with a transcription of the interview after it has been transcribed to verify that the contents represent a true and valid account of your responses during the interview. You will have the opportunity to edit or amend the content of the transcript if you wish.
Appendix T: Field Notes

Field notes form VENT interviews

Participant 1

- Met at reception in ED
- ED waiting room is quite large but only a few people waiting in it (end of day shift) – TVs on – triage & clerks behind screens – have to bend over/sit to talk to them – issues of having to raise your voice to be heard obvious
- Interview in cafeteria of hospital
- Large, busy ED – regional
- Male – mid 40s – tall – confident - friendly
- Speaks of being fearful for colleagues more than himself
- Sense of frustration that people are abusing the system/have no manners/don’t like to wait
- Frustrated at inability to be able to “defend” himself in violent encounters
- Episodes are very frequent – predictability – following times of alcohol consumption in the community e.g. weekends & public holidays
- Frustration with parents of paediatric patients expressed - alludes to things he saw while on active duty in the military and that people here don’t realise how good they have it
- Sense that participant has demons around this that are at times difficult to cope with

Participant 2

- Phone interview
- Very well spoken female
- High levels of empathy apparent when discussing incidents – reluctance to apportion blame
• Becomes very tearful – offer to stop interview & wait a few minutes – she continues – but I sense that raw emotion is very close to the surface throughout – I feel empathy/sorry for what she is going through & have to be mindful of this & try to keep the interview on track – but moving on if needed & providing support too
• She empathises with parents due to her own status as a mother
• However while saying she empathises and not blaming them – it is obvious that this abuse is taking a toll on her as whenever she discusses incidents there is a lot of emotion evident
• Remind her to talk to someone/EAP if needed at conclusion of call as I acknowledge this – she says it took her by surprise
• Works casually & as an academic

Participant 3

• Meet in ED & given a tour
• ED is very busy/close to full – small waiting room - waiting room contains families – frustration in some evident – sick & well kids mixing as all brought to the ED with parents – noisy – triage not always present – people having to wait – time Saturday 8AM
• Very warm & friendly female – early 50s – very happy to help – competent - professional
• Interview begins in cafeteria but cleaner comes in & we have to relocate to a meeting room
• Acknowledges there is a problem of parental violence – but empathy & understanding expressed for majority of offenders – not wanting to blame
• Feels there is a sexist element here – sense annoyance that she feels female nurses are treated differently to males and to medical staff
• Sense that she feels it is part of the job – but at the same time there is an annoyance that it takes up time & that she has to deal with it
• Discusses violence from paediatric patients themselves – issues of D & A in kids as young as 10

Participant 4

• Same ED to p3 – different day – later in day 2pm – covered by another staff member
• Male – mid 40s – friendly
• Sense of frustration & annoyance at the situation
• Empathy not evident – willing to assign blame to parent offenders
• Frustration that no punishment/consequences
• I sense a degree of burn out – but care evident towards patients & a love of the job seems to keep him there
• Us & them mentality comes through a little when talking of incidents: nurses VS parents

Participant 5

• Phone interview
• Female
• Interview scheduled for after the school run
• Recounts story of physical violence for which she is still on sick leave with an upcoming court case – not wanting sympathy – I feel shocked at her situation & angry that this has happened to her at work
• Talks “matter of factly” about the episode – wants other to know about it – wants change
• Very negative/cynical about the possibility of change & that things will just be the same when she goes back to work – sense that she feels nervous about going back – says she shouldn’t have to work in another department to be safe (but has obviously considered this) – family are worried too
• Nervous about upcoming court case – seeing perpetrator again – not sure if perhaps she is having dreams/flashbacks to episode
• She has worked in various EDs to try to move away from the violence but says it is always there

Participant 6
• Phone interview
• Male – wife is also an ED nurse
• Feels that males are exposed to more violence as they are used “as muscle” to stop patients becoming aggressive (the assumption is that the patient will be less aggressive if they feel they have a fair fight or if the nurse is bigger than them) – this annoys him as he feels it is a form of discrimination
• It is not the impact of this violence that he goes on to talk about – but rather the frustration at only getting “bad patients” every shift – and being “used” – says female staff joke about this

Participant 7
• Meet in reception at ED
• Participant has forgotten about the interview so is late – but very apologetic & happy to squeeze it in
• Busy ED – Sunday PM (beginning of afternoon shift) – people shifting between inside & outside to smoke (where it isn’t allowed) – talking on mobiles – there is a nurse obviously managing the waiting room – coming out to do obs etc – they are “popular” when this happens – lots of people asking the “how much longer” questions
• Interview in his office
• Male – very professional – mid 30s
• Very pragmatic approach – acknowledges violence but does not dwell on it – rather he is very conscious of the need to manage it e.g. “fast tracking”
• Communication key
• Protection of his staff also paramount
• Feels he has measures in place to manage the issue
• Some staff can exacerbate situation – he is frustrated at this as it is his job to “clean up the mess”

Participant 8

• Female
• Seems to be saying that it is a problem – but not for her as she can handle/manage it
• Belief that the problem will always exist and can’t be managed – nurses need to be able to “hack it”
• Very matter of fact in her discussion – feeling that some things thrown in for “shock” value – and that despite her assertions that she is fine with the issue – she is actually feeling angry that things have to be this way and that she gets sworn at every day at work by people she is trying to help (this does seem to have an impact on her – she seems sad when discussing)

Participant 9

• Female
• Phone interview
• Patients can be “badly behaved” especially through use of alcohol
• Idea of females almost competing to behave more badly than males? Increased alcohol use evident
• Feeling that the constant verbal abuse is “beating her down” – incremental effect?
• Sensed a very real fear that she believed that a patient may at some stage try to hurt – even try to kill her – which I found very disturbing…
Participant 10

- Female - mid 30’s – pleasant – easy to talk to
- Feeling that waiting room can actually be unsafe for people – due to actions of a few
- Worried about potential of what could happen to others – patients, their families, other nurses & staff
- Sensed anxiety surrounding going to work – unexpected outcomes/possibilities – idea that she sometimes actually feels “unsafe” there?

Participant 11

- Female
- Met at venue outside hospital – coffee shop – some background noise but still able to hear/be heard
- Sensed she almost feels a duty/obligation to the profession to pass on her experiences – as she doesn’t report at work – too busy/not encouraged
- Violence – mainly verbal constant – every day – a day without is rare
- Wears down on her – makes her feel bad about herself & doubt her worth as a nurse/even a person? – some anxiety evident around this perhaps
- Almost apologetic for feeling this way – wanting to appear strong? Or almost a typical ED nurse - pressure from within to be able to manage violence

Additional notes – reflecting on main ideas expressed

Precipitating factors

Drugs

- Usually there is a medical reason at the core of the presentation e.g. assault
- Marijuana
- Prescription drugs
- Alcohol
• Psychosis side effects

**Mental health:** “mad” vs “bad” patients

**Waiting times** – lack of communication “handballing around”

• Not just waiting to get into ED – series of waits e.g. specialist, x-ray, pathology etc

**Pain** – “anyone who is in pain is more likely to act irrationally or verbally escalate...”

Use of “early analgesia” in waiting room if needed

**Triage category** 4 or 5

• Parents & children – attitude “bred into them...that’s how you treat the staff...and get away with it”

**Gender** – males over females

Females - **passive aggressive** behaviour e.g. making derogatory comments within earshot e.g. she is a bitch

• Increase in female violence

**Frequent flyers**

**Types of violence**

**Verbal**

• **Threats** – kills, rape, family e.g. “you don’t know...if they are nuts enough they could find you”

• **Swearing**

• Jabs at **competence**

• Abuse **continuing** over many hours/days – waiting on a bed
Physical

- **Previous assaults** – broken nose – court case - anxiety
- **Weapons**: Guns & knives in ED
- Chairs thrown
- Bed wheeled/smashed through closed doors

**Frequency/Common** – “it’s getting very common now” (p1): e.g. 4 code greys in 1X6-hour shift – including a police officer assaulted in waiting room

Violence is **contextual** – what is accepted in ED is not outside

Different in attitude between **experienced & newer RN’s** – tend to put up with it because that is the way it has always been & nothing happens if you report & could be worse

**Impact on other patients**

- Increase in chest pain
- Patient struck after striking nurse

**Cues**

- Danger in relying on them as can be misinterpreted & sometimes there are no warning signs
- Behavioural cues: anxious, pacing, distracted, agitated
- Verbal cues: tone (frustrated), tutting & sighing

**Communication skills**

- Calm
- Not raising voice
- Walking away if needed
- Be engaged – like you are doing something for them
○ Poor skills – linked to escalation of episodes “the failure to recognise ...
amongst the triage & CIN nurses...how to help...deescalate that scenario...that often makes the situation worse” (p2)
○ “...enhancing communication with the waiting room to help reduce incidences” (p2)
○ Many episodes can be traced back to a breakdown in communication

Informal debrief

• “...we all vent at work”

Under-reporting

• Time management issue
• No response on any IIMS reports filed

Environmental design of the ED

• Barrier at triage “don’t come near me” – power imbalance apparent from the start

Conflict between being seen to “reward” patients with fast track access due to their behaviour & keep waiting room safe & provide best care for patients

Role of CIN
Appendix U: Audit Trail

RESEARCH AUDIT TRAIL: Part II of the study

Research Question/Study Aims:

The overall aim of the study was to investigate ED nurses’ experiences with patient-related violence in their workplace. Part II of the study was undertaken to address the fifth aim of the study: To investigate the issue of violence with respect to young adults (16-25 years of age) and the parents of paediatric patients. The results would also be used to achieve the final aim of the study: To develop recommendations for employers about patient-related workplace violence and safety in the workplace for emergency nurses.

Research process

Sampling method

Participants were recruited to the study using purposive sampling. An Expression of Interest to participate in semi-structured interviews was included with the Questionnaire used to collect data in Part I of the study.

In purposive sampling, the most readily accessible persons are chosen to participate in a study, resulting in a sample that is both accessible and convenient to the researcher (Haber, 1994; Leedy, 1993). The advantages of this method of sampling relate to the convenience and accessibility of potential participants; however the risk of bias is greater than with any other sampling type (Haber, 1994). This is due to the fact that such samples are typically self-selecting, and the motivation for participation is unknown. This can threaten the representativeness of the sample, as the characteristics of non-participants are not able to be compared to participants (Haber, 1994). In this study purposive sampling was employed, however all
participants were chosen from the same population: members of CENA, which strengthens the representativeness of the sample.

Data collection

Interview schedule

Two interview schedules (Appendices R and S) were developed and designed to explore ED nurses’ individual experiences of patient-related workplace violence with the two sub-groups of interest, young adults and the parents of paediatric patients. A series of open-ended questions were developed based on a review of the current literature pertaining to the topic. To establish the validity of the interview schedules they were peer reviewed by a senior researcher with clinical experience in the ED environment (DS). Slight modifications were then incorporated into the final version of the interview schedules.

A demographic profile sheet was developed by the researcher to collect basic data about the participants including gender, age and years of experience. Participants were asked to complete this prior to the interviews.

Expressions of Interest (EOI) were received from participants by e-mail and through the use of the EOI form attached to the survey. Return contact by the researcher was made initially using email to acknowledge receipt of the EOI and followed up with a phone call to organise and time and place for the interview to take place.

After the completion of 11 interviews data saturation was deemed to have occurred and no further participants were recruited to the study.

Place and time of interviews

Participants were given the option to have interviews conducted face-to-face, either at their place of work or at a location of their choice, or over the phone, at a time
convenient to them. Eleven interviews were subsequently conducted over a four week period, including four phone interviews and seven conducted face-to-face.

All face-to-face interviews were conducted at the participants’ place of work. The time scheduled for the interviews included before and after shifts commenced; in a scheduled break or at a time where cover for the staff member had been organised. The locations of the interviews included: participants’ office; ward tea room and hospital cafeteria. One interview had to be relocated after cleaning staff started to vacuum the cafeteria.

Three phone interviews were conducted on the participants’ days off, while one was conducted with a participant at her primary place of work (not a clinical setting). One negative aspect was that phone coverage during one interview was less than optimal and some data was not able to be transcribed as a result.

**Interview data collection**

Digital recordings of the interviews were professionally transcribed verbatim by an independent transcriber. Transcripts were checked for errors against the recorded versions by the researcher to ensure the accurate and authentic reproduction of accounts. Field notes taken at the time of the interviews were used to augment the transcripts and detail the researcher’s experience and reflection on the interview (Appendix U).

Participants were provided with an opportunity to read transcripts of their interviews and comment on their accuracy. When transcription had been completed, copies of transcripts were returned to participants by mail with a reply paid envelope and space provided to either confirm or reject the accuracy of the data as presented. Eight participants responded and all confirmed the accuracy of the transcripts.
Data analysis process

Data from demographic profiles was used to provide basic data about the study sample, including age, gender and years of experience using summary statistics.

Transcripts of digital recordings were analysed using qualitative analysis (Sandelowski, 2000b), and the aim was to let the data speak for itself and limit the influence of the researcher on the results (Sandelowski, 2000b). Thematic analysis was conducted on these data using a structured approach described by Sandelowski and Neergard et al (Neergaard et al., 2009; Sandelowski, 2000b) and based on the approach discussed by Miles and Huberman (Miles & Huberman, 1994).

A four stage process of data analysis was employed.

Stage one: Initial categorisation: using categories based on semi-structured interview schedules.

The transcripts were initially reviewed separately for the two groups of interest: young adults (16-25 years of age) and the parents of paediatric patients. Initial categorisation was made using these group names as headings. Questions were asked on both interview schedules about the following issues:

- A typical encounter;
- Types of violence;
- Impact of violence;
- Management of patients/parents.

Stage two: Coding using descriptive labels related back to the qualitative aim of the study.

Coding was related back to the qualitative study aim: To investigate the issue of violence with respect to young adults (16-25 years of age) and the parents of paediatric patients.
Descriptive labels were assigned to the two groups separately as below:

**Group 1: Young adults:**
- Presenting problem;
- Physical and verbal;
- Patient behaviours;
- Fast tracking;
- Physical and psychological - fearful.

**Group 2: Parents of paediatric patients**
- Verbal;
- Parent behaviours;
- Nurses’ concerns for children/patients;
- Unpredictable, psychological.

The data grouped under each descriptive label was analysed and emergent themes identified as detailed below:

**Group 1: Young adults:**
- Presenting problem – alcohol intoxication, substance abuse and mental health diagnoses;
- Patient behaviours – demanding to be seen;

**Group 2: Parents of paediatric patients**
- Parent behaviours – worried about child and wanting them to be seen quickly;
- Nurses’ concerns for children/patients – unpredictable and psychological - fearful.

**Stage 3: Results of coding discussed and compared to determine commonalities and differences with qualitative expert (MH).**
The themes decided on for the two groups were:-

- Alcohol and substance abuse;
- Performing and attention seeking behaviours;
- Verbal and physical violence;
- Parental emotions.

Similarities between the descriptive labels for the two groups were identified and these results discussed with the qualitative expert (MH).

Similarities were identified between the types of violence experienced – with both groups experiencing verbal abuse – but physical violence only reported in the “young adult” group. In addition both groups shared some behaviour in common: for example being loud and demanding attention/to be seen; and trying to attract the attention of not just the ED staff but others in the ED for example those in the waiting room. A decision was made to label these behaviours as “performing and attention seeking” with the aim of being fast tracked through the ED. In addition those in the “young adult” group presented with a group of people and performed to them primarily.

A decision was also made to label episodes where objects were thrown/hit as “symbolic violence”.

**Stage 4: Themes and relationships between descriptive labels were agreed upon with qualitative expert.**

The relationships between the themes for the two groups are illustrated in Figure 2. A decision was made to include a final theme of “feeling unsafe at work” as an overarching theme as it was mentioned frequently in different areas.

The methods used to ensure rigour in this part of the study are detailed below.
Trustworthiness

In qualitative research rigour is considered in terms of trustworthiness. The concept of rigour speaks to the overall truth and validity of a study and how the methods employed stand up to the scrutiny of other researchers (Milne & Oberle, 2005). This study adopted the four criteria proposed by Guba to establish trustworthiness: credibility, transferability, dependability and confirmability (Guba, 1981).

Credibility

The provisions employed to ensure credibility included: -

- Consistent interview process with all participants.
- The use of a professional transcriber to transcribe the recorded interviews verbatim.
- The use of member-checking, which Lincoln and Guba regard as the single most important method of ensuring credibility in a study (Lincoln & Guba, 1985).
- Peer review of emergent themes was provided by an experienced qualitative researcher (MH) to confirm consistency with the data and to reduce subjective interpretation (Milne & Oberle, 2005).
- Frequent debriefing sessions between the researcher and her supervisors also were conducted throughout the data analysis process to enable the researcher to identify any biases or preferences in analysis and to widen and strengthen the discussion (Shenton, 2004).
- Scrutiny of this project by peers has also been welcomed through the presentation of the findings at a number of domestic and international conferences.
**Transferability**

In this study transferability was demonstrated by comparison of the results to the body of evidence based literature on the topic with similar themes consistently identified (Streubert & Carpenter, 1995). While a small sample size can limit transferability, the fact that the participants in this study were drawn from four Australian states and territories extends the representativeness of the findings to similar EDs throughout the country.

**Dependability**

Dependability has been demonstrated by providing a detailed account of the research design, method and process and by documenting the field notes and an audit trail for the study. In addition the strengths and limitations of the study have been acknowledged (Milne & Oberle, 2005).

**Confirmability**

This was achieved through the use of an audit trail (Schneider et al., 2004), where decisions made during analysis were documented and reviewed by the peer reviewer (MH). In addition the use of direct quotes from the interviews illustrated that the findings are grounded in the data.
Figure 8: Audit Trail Flowchart

What are ED nurses’ experiences with violence from young adults (16-25 years of age) and/or the parents of paediatric patients?

Process

Determine appropriate research method

Determine appropriate sampling method

Study aim clearly stated

Purposeful sampling

Description of nurses’ experiences is desired

Expression of interest used to recruit participants

Questions derived from research question and literature

Data collection

Place and time of interview

Interviews digitally recorded and field notes taken

Option of phone or face to face

Transcripts professionally transcribed

All face to face at participants’ place of employment

Copy of transcript sent to participants to verify accuracy

Final interviews schedules included questions about:
- Typical encounter, types, impact and management

Data saturation achieved – no further participants recruited

4 phone and 7 face-to-face interviews conducted

Transcripts deemed accurate

Qualitative Descriptive Methodology
Figure 9: Flowchart of identification of themes

Young Adults
(16-25 years of age)

Typical encounter
Management of patients
Types of violence
Impact on nurses

Types of violence
Management of parents
Typical encounter
Impact on nurses

Patient behaviours
Physical
Verbal

Demanding to be seen
Physical; Psychological; Fearful

Performing and attention seeking behaviours

Fast tracking

Verbal and physical

Worry; wanting child to be seen quickly
Parental emotions
Nurses’ concerns for children/patients

Alcohol intoxication; Substance abuse; Mental health diagnosis

Feeling unsafe at work

Alcohol and substance abuse

Presenting problem

Unpredictable, psychological
Appendix V: IENJ article

Violent behaviour from young adults and the parents of paediatric patients in the emergency department

Jacqueline Pich RN, BNurs (Hons 1), BSc, PhD Candidate and Casual Academic*,
Michael Hazelton RN BA MA PhD, (FACMHN (Life Member), Head of School, Nursing and Midwifery) b,
Ashley Kable RN, Dip Teach Nurs Ed, Grad Dip Health Serv Mgmt, PhD, (Deputy Head of School (Research),
School of Nursing and Midwifery) c

ARTICLE INFO
Article history
Received 21 June 2012
Received in revised form 27 August 2012
Accepted 29 August 2012

Keywords:
Violence
Aggression
Emergency department
Ambulance
Patient-related
Nurse

ABSTRACT
Violence in healthcare is a significant issue and one that is increasing in prevalence globally. Nurses have
been identified as the professional group at most risk, with patients the main source of this violence. The
aim of this study was to describe the experiences of Australian ED nurses with episodes of patient-related
violence from young adults (16–25 years of age) and the parents of paediatric patients. Data analysis of
semi-structured interviews led to the identification of antecedents to episodes of violence and behaviours
specific to these two groups of interest. These behaviours included; “performing” and attention-seeking
behaviours and violent behaviours including both verbal and physical abuse. Antecedents discussed by
participants included: parental emotions and alcohol and substance abuse. Overall the results speak to
a working environment where participants regularly feel unsafe. Violence in the ED is perceived to occur
frequently and to such an extent that participants have become resigned to expect and accept it as part of
their job. The role played by distinct groups such as young adults and the parents of paediatric patients
must be acknowledged and this knowledge used along with other known risk factors to help identify
patients at risk of potential violence.

© 2012 Elsevier Ltd. All rights reserved.

Introduction

The issue of patient-related violence, both verbal and physical, has emerged as a priority for the nursing profession internation-
ally. A position statement from the International Council of Nurses has condemned “all forms of abuse and violence against nursing personnel” (ICN, 2006). Emergency department (ED) nurses have been identified as especially vulnerable to patient-related violence (Crilly et al., 2004), with rates up to four-times that of other special-
ities (Gerberich et al., 2004). The literature reports that episodes of patient-related violence are increasing in both prevalence and severity (Estryn-Belka et al., 2008) and that aggression and vio-

ence are now regarded as common occurrences in the modern ED (Ryan and Maguire, 2006).

BACKGROUND/LITERATURE

Violence in the health sector has emerged as a significant issue and one that is reportedly increasing in both severity and preva-

lence (The Joint Commission, 2010). Violence can be perpetrated by patients or clients, relatives or visitors or can be horizontal in

nature and be directed at health care workers by others in the pro-

fession (Ryan and Maguire, 2006). Patient-related violence is the

most common source of violence (Ryan and Maguire, 2006), with

patients responsible for up to 89% of all cases (McKinnon and Coss,

2008) and recent evidence has identified parent(5)care(5) of paede-

diatric patients as a potentially significant group (Pich et al., 2011).

This paper reports results from a study that focused specifically on

patient-initiated violence and other types are beyond the scope of

this paper.

The nature of nursing leaves those in the profession especially vulnerable to violence, and the evidence confirms that nurses are

the professional group at greatest risk of such violence (Estryn-

belka et al., 2008), with their rates of exposure higher than any

occupational group in the health sector or indeed in any other
work environment (Peronne, 1998). The ED has been identified as one of the highest risk settings for violence, and within this clinical environment (Taylor and Rew, 2011), the majority of nurses, between 60% and 90%, report exposure to verbal and/or physical violence (Lau et al., 2004). For some nurses such violence is a daily occurrence (Rich et al., 2011; Hegerty et al., 2008) which can lead to a dangerous and volatile clinical environment (Taylor and Rew, 2011).

For the purpose of this study a definition of violence was provided to ensure consistency of understanding and was modified from one used in Mayhew and Chappell (2005). Violence was defined as any act, explicit or implicit, that is intended to threaten or challenge the safety, well-being or health of another (Mayhew and Chappell, 2005). This includes a spectrum of behaviours from overt acts of physical violence to non-physical forms of violence such as verbal abuse and sexual harassment (Getteich et al., 2004).

Methods

Aim

The aim of this study was to describe the experiences of Australian (ED) nurses with episodes of patient-related violence from young adults (16–25 years of age) and episodes of patient-related violence from those accompanying paediatric patients. This paper reports selective results of the qualitative part (Part II) of the Violence in Emergency Nursing and Triage (VENT) Study.

Design

This was a qualitative descriptive study and data were collected by interviewing participants using a semi-structured interview schedule.

Participants/sample

In Part I of the VENT Study a survey was distributed to all members of the College of Emergency Nursing, Australia (CENA) nationally (n = 1150) (these data will be published separately). An expression of interest for participating in Part II of the study was included at the end of the survey. This invited interested nurses to take part in interviews to discuss their experiences with patient-related violence, specifically involving parents of paediatric patients and young adults (16–25 years of age).

Eleven Registered Nurses volunteered and were recruited as a result of this purposive recruitment strategy. The participants included, seven female and four male participants, with a median age of 44 and an average of 15 years clinical experience working in the ED environment. The sample was drawn from metropolitan and regional locations across New South Wales, Queensland and Victoria, Australia.

Inclusion criteria

All participants were Registered Nurses who had worked clinically in an Australian ED in the preceding 5 months, and were members of CENA in 2010.

Data collection

Eleven participants took part in semi-structured interviews in 2010. These included both face-to face and phone interviews and all were audio-taped and subsequently transcribed. Two interview schedules were used tailored to the group of interest being discussed (parents of paediatric patients or young adults) and participants were asked to describe a typical encounter and the feelings such an encounter caused. They were also asked about their ability to resolve a difficult situation and the level of support received from their colleagues and management at their place of work. These data were augmented with field notes taken by the researcher. Interview transcripts were sent to participants to verify their accuracy.

Ethical considerations

Ethical approval was obtained from The University of Newcastle Human Research Ethics Committee. Methods employed to ensure that the confidentiality of participants was maintained included cautioning participants not to name any third parties during data collection, de-identifying transcripts and coding of data.

Data analysis

Transcripts of digital recordings were analysed using a qualitative descriptive framework utilising the strategy of content analysis (Neergaard et al., 2009). The aim was to let the data speak for itself and limit the influence of the researcher on the results (Sandelowski, 2000). Qualitative description is recommended as the method of choice where a description of a phenomenon is sought and is especially relevant where the aim is to gain firsthand knowledge of health professionals’ experience with a particular topic (Neergaard et al., 2009). While it is true that no description or analysis is free of interpretation, a qualitative descriptive methodology involves low-inference interpretation that is likely to result in consensus of meaning amongst researchers or peers (Sandelowski, 2000). Consequently, data were analysed to identify and extract relevant themes while maintaining an uncritical perspective to produce a descriptive summary of the data (Neergaard et al., 2009).

Validity/reliability/rigour

Strategies to enhance rigour and credibility included those proposed by Milne and Oberle (2005). Transcripts were verified with participants (member checking) to ensure accuracy. Peer review of emergent themes was provided by an experienced qualitative researcher (MH) to confirm consistency with the data and to reduce subjective interpretation (Milne and Oberle, 2005). An audit trail of the decisions made during analysis was documented and reviewed by the peer reviewer.

Results

Data analysis led to the identification of antecedents to episodes of violence and behaviours specific to the two groups of interest: parents of paediatric patients and young adults aged 16–25 years of age. Although the behaviours and antecedents differed for these two groups, participants perceived that they shared a common goal: to be seen and treated by an ED doctor as quickly as possible.

The behaviours identified included:

- "Performing" and attention-seeking behaviours.
- Violent behaviours: verbal abuse and physical violence.

Antecedents discussed by participants included:

- Parental emotions.
- Alcohol and substance abuse.

Overall the results contribute to an overarching theme of feeling unsafe at work.
Behaviours

"Performing" and attention-seeking behaviours by patients

Participants reported that patients from these groups of interest often displayed attention-seeking behaviours such as being noisy, intimidating, disruptive, and demanding. These behaviours were reportedly performed to "fetch" the perpetrator who had accompanied them: "...there's usually a group of them and they continually you know and that out in the waiting room..." (P2). This extended to patients waiting to see, with perpetrators using those in the waiting room as an ace in their sleeve: "...they draw attention to themselves." (P5). Contacts of the other patients and nurses were often made directly to the waiting room with the perpetrators looking for a reaction, be it positive or negative: "...she's a bitch..." (P1). These behaviours were considered to be exacerbated by long waiting times, both actual and perceived.

Participants perceived that such patients often displayed these behaviours as a direct ploy to gain access to the department: "...a lot of its attitude and expectation...so they expect to be seen here and now..." (P7). This strategy appears to be effective with participants reporting that these types of patients were usually "fast-tracked" to maintain the safety of others in the waiting room: "...usually try to fast track them..." (P7); "...they end up getting seen quicker just to get rid of them and stop the queue going on..." (P2); "...they get the attention purely because it's unsafe for them to be out in the waiting room..." (P16).

This reaction by participants was acknowledged to be a type of positive reinforcement that perpetuated a negative cycle, leading to a situation where such patients present repeatedly with the expectation that nurses will reward their "poor" behaviour. Participants expressed uneasiness about the unpredictability of subsequent presentations and the potential for violence of these patients, many of whom have a history of aggression: "...you'll see different ones come..." (P15); "...we go, this is so and so...frequent flyers..." (P7); "...you just don't know what's going to happen..." (P16).

In addition, participants described a domino effect amongst those left in the waiting room: "...it's like Chinese whispers..." (P7), the domino effect. (P7). Once the disruptive patient has been removed, those remaining are left feeling frustrated that the perpetrator has in effect jumped the queue and been seen before them: "...everybody starts getting anxious and usually becomes worse..." (P7).

Episodes of violence: verbal abuse and physical violence

All participants had experienced verbal abuse including swearing and personal threats, and reported that it was a regular occurrence: "...verbal...every shift..." (P9). They noted that this abuse was more frequent than it had been in the past and that the nature of threatening statements had become more sinister: "...the threats are more serious now..." (P2); "...there are threats..." (P3); "...he was threatening to kill me..." (P2); "...I'm going to kill you she said to me..." (P9); "...I'm going to follow you to your car...find out where you live, I'm going to kill you...I'm going to hurt your family..." (P3).

Physical abuse was reported by several out of the 11 participants: "...cos I've been physically assaulted...I make sure I don't get too close to get physically abused..." (P3); "...people going to hurt you...having a go at you...at least every week or a couple of times every week..." (P9).

The participants discussed the use of both traditional weapons and opportunistic items as weapons to intimidate and threaten staff: "...chairs pushed across the floor..." (P1); "...whipped out a knife and started slashing the air..." (P6); "...threat of a gun a couple of weeks ago..." (P2); "...grabbed a pole and came back and smashed the window down trying to kill her..." (P7); "...grabbed a bed...smashed the doors open and broke all the locks and electronic systems..." (P1).

Physical injuries sustained by participants included: 'a broken nose..."(P5); "...turned around and just got a full smack in the nose..." (P3); "...waist injury; ligament damage to thumb..." (P2); "...scratched, bitten; and injury to finger (squeezed between trolley and patient)." In addition, participants reported psychological injuries and many expressed fears about the consequences of future episodes which they considered even greater: "...nurses are going to be killed in the future..." (P7).

Antecedents

Alcohol and substance abuse

Many of the patients exhibiting the attention-seeking behaviours described above were reported by participants to be under the influence of alcohol and/or illicit drugs. Participants reported that such patients were more likely to be males aged 16–25 years of age: "...more young kids are coming into hospital when they've had alcohol..." (P8), however females were increasingly presenting in this state: "...more girls coming in with alcohol...there's more aggression then in the past..." (P9).

Participants felt that the behaviours of this "generation y" group were linked to the desire for instant gratification, the internet age, they want it faster and they don't want to wait...and unfortunately our system at the moment is not designed around rapid delivery..." (P7). They concluded that this decreased tolerance in terms of waiting times exacerbated attention-seeking behaviours and again resulted in fast-tracking through the department: "...with alcohol-related things, because of how they act, they get seen straight away...seen to...jump the queue..." (P2).

Participants also reported a lack of insight from young adults who often failed to recognize that their substance abuse could have been the cause of their presenting symptoms, and were aggressive when that possibility was raised: "...it's surprising to see how anything to do with it..." (P9); "...Cos they're coming in 'oh, someone's put something in their drink and inevitably, they've got a high blood alcohol, no drugs..." (P5).

Parental emotions: fear, anxiety, impatience and lack of understanding/knowledge

Participants discussed their experience of parent-initiated violence from those accompanying paediatric patients to the ED. These episodes were typically precipitated by aggressive and demanding behaviours that went beyond what participants considered reasonable. There were a number of emotions associated with these behaviours including fear and anxiety over the condition of their child: "...is my child not going to survive?" (P1); frustration and impatience with the system, for example with waiting times: "...it really has to do with the parent's ability to cope with this situation which they're not used to..." (P3). This was especially evident amongst young parents: "...kids having kids..." (P6) and what was referred to as "professional males". They were described as well presented men who acted in a condescending manner to the nurses, particularly the female nurses. There was a lack of understanding of the triage scale: "...disconnect between parent's expectations...what's possibly wrong with their child...low triage category..." (P1). Conflict also developed when parents were unhappy with a medical course of action and sometimes drew on their previous experiences with the system regarding their expectations: for example "...the last doctor put her on a drip..." (P6). Participants reported that these issues created the potential for conflict if parents perceived their needs, or those of their child, were not being met: "...a father picked up a phone and threw it on the desk..." (P8).
Participants reported that these episodes typically involved adults between the ages of 12 and 17 years. (P1)

Pediatric patients at the centre of episodes of parent-related violence varied in terms of their presenting problems varied, however, in some cases, the parent was consistently reported as being of low priority: “…quite often the child is not necessarily as sick as many others in the department but the parent’s perception is really what you are managing…most of these children in my memory, actually end up going home as opposed to being admitted” (P6).

Parents often used information gained from the media or the Internet as part of their preparation to visit the ED. (P3) Patients who actually assaulted parents believed that some parents believed that any rash was meningococcal and so “…every rash is deadly…” (P1). If this information is correct, then the triage nurse and their child was given a low priority in terms of triage, there was a potential for conflict. “…4 or 5 year old daughter to the window and virtually screamed in at me that the child needed an ECC nurse. The child was probably experiencing some fever and tachycardia.” (P3). Parents may react by refusing to accept the triage nurse’s directions and demanding to see someone more senior in the department, usually a doctor who they think will validate their concerns about their child: “…demanding…insistence on the most senior person in the department seeing the child” (P6).

The nurses interviewed reported that following such episodes perpetrators would often offer an apology for their behaviour: “I’m really sorry, I was like that…It wasn’t personal…I wouldn’t normally be like that…” (P2). Patients who identified themselves as parents acknowledged that they accepted such apologies and empathised with the perpetrators: “…having been a parent yourself, knowing that there are times where you lose the plot…you are so depressed…you’re living on a knife-edge.” (P6). However, others believed that such apologies were not genuine or were offered as an excuse after the perpetrator had got their own way “…got a slight apology from him later…” (P1).

Feeling unsafe at work

The central emergent theme from this analysis was that nurses frequently felt unsafe at work: “…I just feel so unsafe…” (P2); “…I feel less safe here than I did in the military…” (P9). This fear was not just for the individual nurse’s well-being but was extended to others in the department, including other patients: “…concerns for our safety… the safety of people in the waiting room” (P4). There was also concern at the impact violent behaviour from parent had on the children accompanying them in terms of acceptability: “…I’m scared not just for myself but for the other patients around me and I’m scared of the impression the child is getting about what might be normal…” (P6).

Underlying this sentiment was the issue of police involvement in dealing with episodes of violence. While such episodes are not regular occurrences they cause great concern for staff and can be very violent: “…in the last 12 months, two incidents where I had to call the police…genuine concern that it’s going to get well and truly out of hand…” (P2). One patient who identified themselves as police in the waiting room “…in the last 12 months, two incidents involving police where I had to call the police…” (P3). However, this did not extend to actual charges being laid by police punishment: “…they’re allowed to just get away with it…” (P10). People can be seen at us, spit at us, bite us…try to hurt us and nobody puts in an incident report in…” (P1). Patients appeared resigned to feeling this way: “…I think it’s a healthy fear most days when you’re in triage…” with many expressing the view that it is something to be expected: “…sadly I put it down as part of the job…” (P2).

Discussion

The levels of violence experienced by the participants in this study are reflective of those experienced by ED nurses globally and this has created a culture where such violence is expected and accepted as “part of the job” by many nurses who see themselves as “legitimate targets” (ICN, 2009). All participants had experienced verbal abuse and threats, while 7 out of the 11 had been physically abused and as a result many felt unsafe at work, at least part of the time. A review of the literature reveals that upwards of 50% of ED nurses have experienced physical violence from patients on the job (Cakmak et al., 2006) and a majority have been verbally abused (Hinari and Ermak, 2011). The International Council of Nurses has reported that the majority of nurses (72%) globally do not feel safe at work, while a survey of American nurses put this figure at upwards of 80% (ANA, 2001). An Irish study found that 91% of nurses were worried about being physically assaulted while at work (Rose, 1997). This is especially significant when considering that Occupational Health and Safety legislation and guidelines exist in most countries to protect the health, safety and welfare of workers.

While participants expressed concern and often dismiss the levels of violence they were exposed to, they felt that these were an expected part of their job, one that was beyond their control to change. This resignation to violence is documented throughout the literature (Ray, 2007; Erickson and Williams-Kenny, 2000), and it is thought to be responsible in part for the epidemic underreporting of episodes of violence (Galicki-Smith et al., 2008). In addition it is evident from participants that these concerns have forced them to practice in a defensive way which has implications for their ability to effectively engage with their patients.

The issues of alcohol and substance abuse were cited as significant antecedents for episodes of violence, especially where the perpetrators were young adults accompanied by a group. Haberkern et al. (2010) found that rates of alcohol intoxication in the 16–25 year old age group had increased over an 8-year period. Alcohol is known to provoke or increase aggressive behaviour (National Committee on Violence, 1989) and this effect can be magnified where a group is involved. The groups accompanying these patients were often used as an ad hoc audience for them as they indulged in disruptive attention-seeking behaviours in an attempt to “fast-track” their way through the department. In addition to those people accompanying the perpetrator, those sitting in the waiting room were also often drawn into the “performance”, with negative comments about nurses made directly to them. This phenomenon has previously been reported in the literature, with ED nurses describing the waiting room as being “thick with hatred” (Holmgren and Molby, 2003).

Aggressive and disruptive patients were often “fast-tracked” through the department by participants, in an attempt to manage their behaviour and safeguard those in the waiting room. As a result many have come to associate their disruptive behaviour with being seen more quickly and thus repeated these behaviours on subsequent visits. Patients who presented frequently to the ED were referred to as “frequent flyers” by participants, and they were repeatedly able to manipulate the system. The term “frequent flyers” is a nuanced term with a variety of meanings. It is typically used to refer to patients who present to the ED on multiple occasions (Mutham and Gautier, 2011). There was a clear perception amongst the participants that while some of these patients were genuinely seeking care, others were often seeking a confrontation, and their aggressive behaviours were offensive with the intent to cause harm (Gilson, 1987). This notion of repeat offenders has been discussed in the literature, and is linked to the fact that a previous history of violence is an important predictor of future
violence (Ferns, 2005). These types of behaviours are often found in the same typical “rebellious” group, a term coined to describe predominantly young males who enjoy physical confrontations (Gahan and Wells, 2003).

Participants consistently linked these behaviours to young adults, specifically those in “generation y” - the 16–25-year-old age group. The broad definition of “generation y” encompasses those born in the 1980s and 1990s (Oxford Dictionary, 2012). Young males are identified in the literature as being the most likely perpetrators of patient-related violence (Duchary and Whittington, 2005). According to the Garling Report into Acute Care Services in New South Wales, Australia (Garling, 2008), this age group is over-represented in terms of ED presentation and often have co-morbidities of drug and alcohol dependence. This has been linked to a sense of entitlement and a reluctance to have “wait” for any part of their care in the ED (Pich et al., 2011).

The increased noise and activity of these demanding patients has an impact on other patients in the department. It can lead to increased levels of anxiety in certain types of patients; for example, mental health patients and dementia patients (Kahle et al., 2011). According to the literature, the environment of the ED can be counterproductive in dealing with mental health patients (Ferns, 2005), and the business, noise, and overcrowding that are commonplace can provoke aggression in these patients (Jones and Lyonsham, 2010).

Recognition of this has prompted the exploration of new models of care for example dedicated mental health services located either in the ED or as discrete units and consultant mental health nurses, nurse practitioners and psychiatrists (Ward et al., 2012). In addition many universities, including the University of Newcastle, have implemented Mental Health First Aid training in their undergraduate program to equip nurses with the skills to deal with mental health patients (Bitchener et al., 2010). Similarly, the ED can be a stressful place for the parents of paediatric patients and this can lead to violent behaviour toward nurses. Parent-related violence was reported by Gillespie et al. (2010) who found that mothers and fathers typically become violent during medical and trauma care situations. Similarly, paediatric patients are often exposed to verbal abuse and/or physical assault from patients and patient families during the course of their training (Judy and Verelik, 2005).

Parents in these situations experience a range of emotions, from fear and anxiety over their child’s condition to impatience and frustration at the delays and waiting times, common in the ED. These emotions can increase the potential for aggressive behaviour if the parent feels their child’s needs are not being met, and are often associated with a lack of understanding and knowledge about the organisation of an ED, something which is more evident in younger parents (Pich et al., 2011). These factors are consistent with the literature on the topic, with Gillespie et al. (2010) reporting that certain situations increase the likelihood for violence in a paediatric ED. These included disagreement over a care plan, the denial of a service or request, perceived long waiting times, perceived rudeness and unapologetic attitude from a healthcare worker and grief over the loss of a child (Gillespie et al., 2010).

The concern expressed by participants that someone may ultimately be killed sadly became a reality in Australia in 2011, further underlining the seriousness of the issue. Two mental health nurses were stabbed by a patient in regional Australia resulting in the death of one (Smith, 2011), and this was followed later in the same year by the stabbing of an ED nurse by a patient in a metropolitan Australian ED (Kroeh, 2013). These events confirm that the fear expressed by participants and the perception that they are working in an unsafe environment are not misplaced.

The issue of lack of understanding of the operations and layout of the modern ED have recently been addressed by the UK Design Council, which used a holistic approach to tackling the issue of violence and aggression in this setting (Design Council, 2011). The project identified four key areas of concern: the “arrival” and “waiting” experiences, guidance and the people or stakeholders (Design Council, 2011). This approach offers potential solutions for other health care systems to adopt these measures and improve the safety of the ED for both the people who work there and those who seek to use its services.

Limitations

The approach used in this study reports data that may be affected by recall bias as participants were asked about their past experiences with episodes of violence. However, an attempt was made to minimise this by asking participants to limit their responses to episodes that had occurred in the preceding 6 months. Data was collected from three different states in Australia suggesting that the issues are potentially transferable to other ED contexts in spread across Australian EDs. However, the results may not be transferable to nurses in other countries. The authors acknowledge that the small sample size of 11 is a limitation; however, data saturation was achieved in this qualitative descriptive study and geographical diversity achieved by including participants from three different states in Australia.

Conclusion

The fast-tracking of aggressive patients who exhibit attention-seeking behaviours is a practical strategy to manage the potential for escalation of violent behaviour and to minimise the risk for other patients and staff, however it also rewards patients for their “poor” behaviour. However, this can lead to a situation where such patients are able to use this knowledge to manipulate the system on future presentations. The implications for nurses practicing in the ED are about decision-making to maintain safety in their working environment. Communication with those remaining in the waiting room about the necessity of moving such patients may be beneficial in terms of reducing any lingering hostility or resentment.

The role played by distinct groups such as young adults (16–25 year olds) and the parents of paediatric patients must be considered together with other known risk factors to help identify patients at risk of potential violence. This knowledge should be added to existing training programs on aggression minimisation to inform and better equip nurses to deal with these groups.

The behaviours of these two groups are at times to distracting and time-consuming for nurses that resources are diverted away from other patients leading to a situation where care can be compromised. There is a bitter irony here for nurses, who are mediated by a “helping” and empathetic ethic, to be exposed to aggression and violence and often palpable hatred. The professional and personal impact that these episodes of patient-related violence have on nurses can affect their subsequent interactions with patients. If ED nurses are forced to practice in a defensive manner due to feeling unsafe at work their ability to forge effective therapeutic relationships and engage with their patient and other members of the ED team will be hampered and patient care may be further compromised.

Acknowledgement

The authors would like to thank CUNA (College of Emergency Nursing Australia Ltd.) for their generous and continued support in this study.
References


