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Title:

Practices and processes used in the return to work of injured New South Wales nurses: are these consistent with RTW best practice principles?

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Abstract:

Purpose: Workplace injury and illness rates are high within the nursing profession, and in conjunction with current nursing shortages, low retention rates, and the high cost of workplace injury, the need for effective return to work (RTW) for injured nurses is highlighted. This study aimed to identify current practices and processes used in the RTW of injured nurses, and determine if these are consistent with the Seven Principles for Successful RTW as described by the Canadian Institute for Work & Health.

Method: As part of a larger cross-sectional study, survey data were collected from New South Wales nurses who had sustained a major workplace injury or illness. Survey questions were coded and matched to the Seven Principles for Successful RTW.

Results: Of the 484 surveys eligible for analysis, most were from Registered Nurses (52%) in the Public Hospital Sector (48%). Responses indicated four main areas of concern: a commitment to health and safety by the workplace; early and considerate employer contact; provision of modified work; and individual knowledge of and involvement in the RTW process. Positive participant responses to co-worker and supervisor involvement were identified as areas consistent with best practice principles.

Conclusions: These findings suggest the practices and processes involved in the RTW of injured nurses are inconsistent with best practice principles for RTW, highlighting the need for interventions such as targeted employer education and training for improved industry RTW outcomes.

Keywords: nurses, occupational rehabilitation, best practice, return to work, workplace disability

Introduction:

Background

High rates of workplace injury occur among the nursing profession, both nationally and internationally, resulting in occupational injury and rehabilitation being of significant importance among this profession (1).

Effective timely and sustainable RTW is essential to address these high injury rates, to improve outcomes for all parties through: optimal recovery and function for the worker through workplace-based rehabilitation; reduced costs for insurance companies and the wider community; and increased retention for the nursing profession, which will ultimately impact on service delivery (2). A return to work (RTW) program is based on the principle that an employer facilitates a coordinated return to work following injury or illness. RTW programs are developed in consultation with a medical practitioner and the injured employee. Programs are outcome-based and recognise existing skills and capabilities of the employee (3). In NSW, Australia, RTW Coordinators are responsible for developing and implementing a return to work program, educating the workforce, keeping statistics and developing policies to improve systems. They also liaise with the injured worker, doctor, and insurer to coordinate and monitor progress in treatment and RTW (4).

Successful RTW is constituted by early and safe return to sustainable employment following workplace injury or illness (5). The RTW process is complicated by national and state legislation and numerous stakeholders, and requires an understanding by all involved parties to achieve a successful outcome (6). Components recognised as barriers or facilitators to this process, and therefore successful rehabilitation, are identified by Foreman et al (7) as: medical or rehabilitation interventions; workplace factors; organisational, industry and system factors; and individual worker characteristics. Within the health services sector factors influencing successful RTW have been recognised as: workforce composition; difficulty in identifying suitable alternative duties due to budget and staffing constraints; workplace culture; difficulty with establishing cooperative relationships with treating doctors; workplace stress; failure to identify psychological factors that affect RTW; and the lack of appropriate ergonomic design of equipment. However, barriers and facilitators to RTW have not been adequately discussed specifically in relation to nursing (6).

In 1997, Langford reported that 52 per cent of the 170 injured nurses in their study were unable to return to pre-injury role or hours, supporting the need to further examine RTW for this profession (6).Through exploring the

experiences of nurses, studies have shown negative experiences with the workers compensation system and a lack of awareness about the rehabilitation programs and their workers compensation entitlements (6, 8).

Numerous studies have detailed the occupational rehabilitation process, as well as the barriers and facilitators to successful rehabilitation (2, 7, 9). Based on current literature, the Canadian Institute for Work & Health developed seven key principles for RTW to guide the successful rehabilitation of workers. These principles are: 1) a commitment to health and safety is demonstrated by the employer and workplace; 2) an offer of modified work is made by the employer to facilitate the early and safe return of the worker to suitable duties; 3) RTW planning supports the worker without disadvantaging others within the workplace; 4) supervisors are trained in work disability prevention and included in RTW planning; 5) early and considerate employer contact is made with the worker; 6) the responsibility to coordinate RTW is assumed by someone; 7) and that there is adequate communication between employers and health care providers about the workplace demands as needed (5). There is currently no literature documenting the RTW of nurses in relation to best practice principles.

The aims of this study were to identify 1) current practices and processes used in the RTW of injured nurses, and 2) if these practices and processes are consistent with the Seven Principles for Successful RTW as described by the Canadian Institute for Work & Health (5).

Method:

A cross-sectional study of injured nurses was conducted as part of a larger WorkCover NSW funded study which was designed to provide evidence about current practices associated with the occupational rehabilitation of injured nurses in New South Wales, Australia (10). This study used a purposefully constructed seven-section survey to assess the experiences and perceptions of occupational rehabilitation and RTW processes in injured nurses.

Participants

Participants were nurses from NSW, Australia who had experienced a major workplace injury or illness, defined by WorkCover NSW as being absent from work for 5 or more days with an eligible claim submitted, during the 2005/06 and 2006/07 financial years. Using the WorkCover NSW claims database sampling frame, 5067 potential

participants were identified. Potential participants were from a range of nursing roles, classifications, specialty areas of practice, employment sectors and geographical areas of NSW.

Procedure

Initial contact was made with the participants by WorkCover NSW mailing a study package containing an Information Statement, the non-identifiable survey and a pre-addressed reply paid envelope. Participation in the study was voluntary, with consent deemed to be given through completion and return of the survey. Ethical approval for the study was granted by the University of Newcastle Human Research Ethics Committee (H-2008-0192).

A study specific survey was developed based on previously published studies about workplace rehabilitation (7, 11) and the process as described by WorkCover NSW regulations (4). Questions related to socio-demographics, pre-injury/illness workplace information, injury/illness information, initial and continuing management of injury/illness, the rehabilitation process, and the experience and perceptions regarding the rehabilitation process. The format included dichotomous questions (Yes/No), multiple choice questions with exclusive categories, short answer sections, ratio scale questions, and likert scale questions with Disagree/Strongly disagree, Uncertain and Agree/Strongly agree categories.The face and content validity of the survey was established through testing with an expert panel of academics and currently practicing RTW coordinators prior to it being distributed to injured nurses.

In this study, survey questions detailing the practices and processes used in the RTW of nurses were retrospectively matched to the Seven Principles for Successful RTW (5) in an attempt to determine the consistency of current RTW of nurses with best practice principles. Two of the researchers independently reviewed the survey questions and coded these into one of the Seven Principles of Successful RTW. The researchers discussed the coding, collapsing and synthesising of these over a series of meetings. This ongoing dialogic process led to what Kvale calls “intersubjective agreement” on final codes, increasing validity of the study (12).

A commitment to health and safety by the workplace and workplace parties, outlined in Principle 1, was linked to questions regarding the establishment of a RTW plan, assessment of the workplace by a relevant party prior to the worker returning to the workplace, and the provision of relevant information to the injured worker from the

employer following injury. Principle 2 states that an employer makes an offer of modified work. Questions matching this principle relate to changes in working hours, suitable duties being consistent with medical restrictions, worker perspectives on the appropriateness of duties provided and the realistic nature of the RTW plan and rehabilitation. Principle 3 outlines the need for the RTW plan to support the injured worker without disadvantaging co-workers and supervisors for best practice. This is best linked to questions specifying the provision of duties in a supernumerary capacity (where an employee is working as an 'extra person' in additional to normal staffing numbers), ability to perform provided suitable duties, presence of other injured co-workers, co-worker support, and contact with the insurer case manager. The involvement and training of supervisors in the occupational rehabilitation process (Principle 4) was related to questions describing the supportive and informed nature of the supervisor, supervisor role in RTW planning and cooperation with the RTW Coordinator. Principle 5 is outlined as early and considerate contact with the injured worker by the employer. This is characterised by questions detailing the time taken to initially contact the worker and provide a RTW plan, injured worker perspectives on supportiveness of the employer and employer perspective on the genuineness of the injury. Principle 6 assumes that someone has the responsibility to coordinate RTW, and this is seen in identifying the parties involved in the development of a RTW plan, and description of the involvement of the RTW coordinator in all RTW practices and processes. Communication between the employer and health care providers (Principle 7) can be seen in the involvement of these parties in RTW plan modifications. Details of the types of questions included under each of the principles can be seen in Table 1.

Data Analysis

Socio-demographic characteristics (age, gender geographic location nursing role and mode of employment) were tabulated and totals and percentages calculated. Descriptive analysis of survey data on the Seven Principles for Successful RTW were analysed using the statistical package STATA/IC v11.2 (13).

Data on participants' nursing roles (assistant in nursing, enrolled nurse, registered nurse, other nurses) and employment sector (public hospital, private hospital, aged care, and disability/community) were analysed to determine differences in responses.

Results:

Participants

Of the 4734 potential participants, 674 participants responded to the postal survey, yielding a response rate of 14.2%. Of the returned surveys, 484 were eligible for analysis in this study. Of the eligible surveys, 448 participants indicated a RTW plan was appropriate, and data from these respondents was analysed related to RTW practices.

Participant characteristics are shown in Table 2, the mean age of participants was 48.4 years ± 10.5 and the mean years of nursing experience was 20.3 years ± 12.4, across all employment sectors. Participants were primarily from a major city (41%), and worked in a Public Hospital (48%).

RTW Practices for Injured Nurses and the Best Practice Principles of RTW

Principle 1: A commitment to health and safety is demonstrated by the employer and workplace

Of the 448 respondents who indicated a RTW plan was appropriate, 76% were provided with a plan by their employer, 20% indicated no RTW plan had been established. Most participants (79%) were able to carry out the suitable duties that had been recommended in the RTW plan. Relevant information regarding health and safety in the workplace was provided to 183 (40%) of participants by their employer following injury (Table 3), however the same proportion reported they had not been provided with this information.

The stakeholder most frequently identified by participants to be involved in workplace assessments prior to returning to work was the Employer RTW coordinator (39%). This involvement was significantly less likely for Assistants in Nursing (AINs), compared with other nursing roles (P=0.04). A large number (42%) of all nurses did not know whether their workplace had been assessed by any stakeholders, and this was significantly higher (58%) for AINs (P = 0.001).

Principle 2: An offer of modified work is made by the employer to facilitate the early and safe return of the worker to suitable duties

The Majority of participants (75%) were provided with suitable duties consistent with their medical restrictions. Types of suitable duties provided included nursing duties (40%), clerical or other duties (25%) and restricted or light duties (35%). The majority of injured nurses reported they believed they were provided with acceptable

suitable duties (63%), and that their rehabilitation and RTW plan was realistic (62%) (Table 3). Half of the respondents (51%) indicated that they received reduced hours per day and a third (36%) stated that they received reduced days per week in order to assist in their rehabilitation. One third (36%) of nurses also indicated they received no change in working hours.

Principle 3: RTW planning supports the worker without disadvantaging others within the workplace

Consideration of co-workers and supervisors for injured nurses in the RTW process is described in Table 3. Regarding co-worker support and burden, most participants reported that co-workers were supportive during the RTW process (64%), and almost half reported that co-workers were not over-loaded (48%). Participants also reported that having other nurses in the unit who are injured can make it more difficult (40%).

Principle 4: Supervisors are trained in work disability prevention and included in RTW planning

The training of supervisors in work disability prevention and inclusion in RTW planning is shown within Table 3. Most participants (62%) reported that their supervisor was supportive during their RTW, also that their supervisor was kept informed of their progress (74%), their supervisor and RTW coordinator cooperated (67%) and their RTW plan was modified in consultation with their supervisor (63%).

Principle 5: Early and considerate employer contact is made with the worker

As shown in Table 3, 53% of participants reported that the genuineness of their injury/illness was not questioned, and employer support of RTW processes was reported by 56% of participants. In addition 61% per cent of participants indicated that they were contacted on the same day or the day after notification of injury, however 15.2% were not contacted after a week or more. The median number of weeks reported for the employer to contact the injured nurse was 4 (inter-quartile range: 2 - 8) weeks. Furthermore, only a small number of participants (16%) reported that they were provided with a RTW plan within one week of their injury

Principle 6: The responsibility to coordinate RTW is assumed by someone

Regarding the responsibility for the coordination of RTW of injured nurses, 64% of participants reported that the RTW coordinator maintained regular contact, 57% were knowledgeable about their role and 52% were experienced in their role (shown in Table 3). Most participants (67%) were involved in the development of their

RTW plan. There was no difference in the number of participants involved in their RTW plan between employment sectors. Other stakeholders involved in the RTW plan were the injured nurse's nominated treating doctor (69%), the employer/supervisor (48%) and employer return to work coordinator (56%). In addition, contact by the Insurance Case Manager was reportedly regular for 44% of participants, whereas a similar amount (40%) disagreed with this statement.

Principle 7: There is adequate communication between employers and health care providers about the workplace demands as needed

Principle 7 shows communication between employers and health care providers about workplace demands. Most participants reported being kept informed about the progress of their case (55%), and that their insurance company approved their treatment in a timely manner (68%). In addition, most participants reported that the RTW plan was modified after consultation with their doctor, RTW coordinator, supervisor and themselves (shown in Table 3).

Discussion:

Principle 1: A commitment to health and safety is demonstrated by the employer and workplace

It is recognised that organisational culture, determined largely by the commitment of a workplace to the health and safety of employees, has a large influence on the effectiveness of RTW strategies (14, 15). The development and implementation of a RTW plan for all injured workers where applicable is acknowledged within legislation and literature (4, 5). However in this study, 21% of nurses indicated that no RTW plan had been established despite a RTW plan being appropriate for their situation. This mirrors findings from a Victorian study of nurses reported by the Australian Nursing Federation, which also reported that "*nurses have little knowledge or awareness about RTW, and that a significant proportion of nurses believe that workplace injury and/or illness and RTW and rehabilitation practices lead to increases in the workload of non-injured nurses*" (16), as well as generalised RTW study findings (17). Despite this consistency with other studies, the self-report of inability to provide over one fifth of study participants with a RTW plan suggests a lack of commitment to workplace health and safety by health facility management, and is inconsistent with this best practice principle.

As reported by the injured nurses in the current study, 40% were provided with all the relevant information needed by the employer. The same proportion of nurses reported not being provided with all relevant information. This highlights the importance of employer commitment to health and safety in the workplace and suggests further training for employers may be necessary to ensure workers are provided with all appropriate information.

Lack of understanding and knowledge about the RTW process has been identified as a significant barrier to timely and effective RTW (8). A lack of knowledge about the workers compensation process was evident in this study with a high number of participants responding they did not know whether their workplace had been assessed by either the Employer RTW Coordinator, an External Rehabilitation Provider, or an Insurance Case Manager. Although it is unclear whether these responses were due to a lack of awareness of the assessment taking place, or a lack of comprehension about the roles of those involved in the RTW process, these data do not indicate a positive level of understanding by the injured worker. This reflects findings from a study of nurses reported by the Australian Nursing Federation suggesting these workers have little knowledge or awareness about RTW (16). The effect of this lack of understanding about the system on the worker's rehabilitation was identified by Friesen, Yassi and Cooper (14) through the worker's sense of disempowerment and reduced motivation to participate in the RTW process.

It is also relevant to consider that knowledge of RTW may-be linked to nurse education and to cultural backgrounds. It has been recognised that the Australian aged care sector workforce consists of less formally qualified nursing staff (18), which is consistent with the responses in this study where there were more AIN's working in Aged Care than other sectors. These comparatively lower levels of nurse education, in aged care, may be a contributing factor to the lower levels of knowledge about the RTW in this employment sector (7, 19).

State guidelines often dictate that it is the employers responsibility to provide the injured worker with adequate information about the policies and processes of managing their injury and rehabilitation, as well as who is responsible or accountable for this within the organisation (4). The implementation of better education of injured nurses by the employer about the RTW process may be warranted to improve RTW outcomes (20).

Principle 2: An offer of modified work is made by the employer to facilitate the early and safe return of the worker to suitable duties

Dissatisfaction with RTW duties can have a negative impact on the sense of value the injured worker places on their worker role, particularly if the worker feels that the duties provided are not appropriate for their skill level, do not accurately reflect their abilities or are not matched to their capacity (8). The majority of nurses in this study believed they were provided with acceptable suitable duties, and one quarter of our respondents disagreed or

strongly disagreed with this. This was common across all nursing employment sectors in this study, and is supported in findings from previous qualitative studies which found identifying and implementing suitable duties for nurses is a significant industry-specific barrier to RTW (21, 22). Many nurses desire the opportunity to continue to contribute as nurses, and therefore highly valued suitable duties were identified as those involving clinical work (21). Consequently, unsuitable duties were defined as non-nursing duties such as administration tasks, and recognised the impact on the individual on feelings of unproductivity, low mood and motivation. This highlights the importance of key stakeholders having an understanding of relevant medical conditions in discourse with doctors as a strategy to assist in selecting suitable duties for injured nurses (23). To address this issue, adopting a "bottom up" hypothesis, where injured nurses and their direct front line supervisors are involved in identifying appropriate and relevant suitable nursing duties for their specific ward or environment as RTW duties, thereby assisting nurses to remain in their clinical role where possible, as recommended by the Australian Nursing Federation (16) needs consideration.

Principle 3: RTW planning supports the worker without disadvantaging others within the workplace

The role of co-worker support, cooperation and relationships in the RTW process has been recognised as having the potential of being either a barrier to or a facilitator for successful RTW (24). The majority of nurses in this study identified co-worker interactions to be positive and supportive, aiding in their RTW. Co-worker relationships have been reported to assist in reducing worker distress in relation to workplace stressors by acting as a buffer and through the provision of emotional support (25). This involvement of co-workers is negatively affected when several nurses are injured concurrently, as almost half of participants reported increased difficulty in managing workloads in this situation.

Despite the identification of the nursing culture as a barrier to successful RTW in a previous report (26), this study showed co-worker communication and support to be a strength of the nursing profession which aligns with best practice principles (specifically Principle 3). Positive views on co-worker interaction can be attributed to organisational factors such as the caring, supportive nature of the nursing profession and the extension of these attitudes towards injured co-workers (27).

The importance of providing suitable duties for nurses in a supernumerary capacity, (where an employee is working as an 'extra person' in additional to normal staffing numbers) has been recognised in aiding the retention

of nurses in the workforce and relieving extra work pressures put on co-workers (22). Budgetary allocation for supernumerary duties is an important part of organisational structure in the healthcare sector and as noted in previous research (9) returning injured nurses to work as a supernumerary is often a management decision which clearly shows employer commitment to the RTW process.

Principle 4: Supervisors are trained in work disability prevention and included in RTW planning

Shaw, Hong, Pransky and Loisel (28) have identified the need for RTW coordinators to be trained and experienced in ergonomic and workplace assessment, clinical interviewing, social problem solving, workplace mediation, knowledge of business and legal aspects, and knowledge of medical conditions for effective RTW. Furthermore, collaboration between the RTW coordinator and supervisor is needed to communicate relevant information from these areas and implement workplace interventions. Supervisors must have the skills necessary to provide suitable modified work based on medical recommendations, and are often the primary contact for immediate concerns of the injured worker. Therefore, training and encouragement in the injury management and RTW process is essential for successful RTW outcomes (2, 29). In this study, participants found the involvement, support and collaboration of supervisors and return to work coordinators to be positive. This is a strength of the nursing profession and is consistent with best practice in relation to supervisor support collaboration and training outlined in Principle 4.

Principle 5: Early and considerate employer contact is made with the worker

It is acknowledged that it is good practice for the employer to make early and considerate contact with the injured worker. Time frames for initial contact may vary depending on the specific situation of the worker; however this study recorded a mean duration of 7.2 weeks for employer contact, which is inconsistent with the principle of 'early' contact. Distance and availability of resources may have contributed to the delay in employer contact and provision of the RTW plan. Physical distance and access to services in rural locations was an issue highlighted in a study of 25 RTW coordinators from 14 different areas in NSW, that impacted on timeliness of the injury management process (30). The 2005 WorkCover NSW study of the RTW of 1000 seriously injured workers across a range of industries, found that 80% of workers reported they were contacted by their employer within a week of injury (17).This contact is an essential part of the worker feeling that they are still connected to their workplace and colleagues, and may influence the worker's attitudes towards the RTW process, relationship with the employer, and therefore RTW outcomes. Early contact by the employer has been reported to significantly reduce

the duration of disability and rehabilitation, as well as financial costs (11) and is therefore an important issue not only for Principle 5, but the entire rehabilitation process for all injured employees including injured nurses.

The nature of employer contact should be considerate, with no discussion of injury causation or blame, however within this study over one third of nurses reported that the genuineness of their injury had been questioned. These findings are inconsistent with the 'no blame' policy stipulated by both the Comcare and WorkCover NSW workers compensation policies, where fault by either party does not need to be demonstrated, and detracts from the focus on rehabilitation (4, 31). Furthermore, this may lead to negative attitudes towards the employer and RTW process by the injured worker, and may have adverse consequences for the duration of rehabilitation (11). This is a significant issue for psychological injuries, where injuries are not visible and therefore the legitimacy is more likely to be questioned when compared to more visible physical injuries (15). Importantly, the adoption of a 'no-blame' response, combined with a strong commitment to health and safety by the workplace (as outlined in Principle 1) have been identified as the most important factors for creating an organisation culture that facilitates RTW (15).

This study determined that 34% of nurses reported that their employer had not been supportive. Again, this is seen to affect interpersonal workplace communication and worker attitudes towards the RTW process, indirectly affecting all other aspects of rehabilitation (14). Typically, each injured worker should be noticed and acknowledged by the employer, and provided with support and understanding in order to establish a work environment that promotes the value of the worker returning to the workplace (32). Conversely, without a supportive employer, the duration of work disability is likely to be prolonged (11).

The importance of a RTW plan for the injured worker has been discussed in relation to Principle 1, however best practice recognises that the RTW plan should be established by the employer as soon as possible following the injury. Victorian workers compensation legislation requires that a RTW plan must be formulated by the employer within 7 days of notification of injury (33). In this study only 15% of injured nurses were provided with a RTW plan within one week indicating this is an area for improvement in the RTW of injured nurses to the workplace. The RTW plan outlines procedures that help manage the delivery of immediate medical interventions as well as RTW strategies to assist the injured worker back to work as quickly and efficiently as possible, and therefore the delayed provision of a RTW plan reduces the potential for early RTW (34).

Principle 6: The responsibility to coordinate RTW is assumed by someone

Individual involvement in RTW planning is an integral part of successful occupational rehabilitation; however over a third of study participants in this study did not contribute to the planning of their own RTW. The risks of limited individual involvement include a lack of knowledge about the RTW process, lack of discussion on appropriate or relevant duties, and potential lack of adherence to the identified work accommodation (2). Conversely, active involvement helps increase the worker's level of knowledge of, commitment to and ownership of their rehabilitation process, which has been shown to increase RTW success (34).

Most participants reported the primary stakeholders involved in the RTW plan were their doctor and their employer RTW coordinator. It has previously been identified that the successful involvement of the RTW coordinator is determined by a range of technical knowledge and personal qualities for RTW Coordination and important elements of the case management style used to facilitate RTW (22). The involvement of the insurance case manager occurred within the first week after injury for only a third of participants, and almost half of participants reported the regular contact from the insurance case manager was not maintained. This identifies the importance of training stakeholders to improve their commitment to RTW planning.

Principle 7: There is adequate communication between employers and health care providers about the workplace demands as needed

Data gathered in this study showed good consistency with best practice RTW principles for communication between the employer and health care providers, as outlined in Principle 7, and this was evident by moderately high rates of responses to questions examining collaboration and cooperation between these parties. Strong communication between health providers and the workplace is noted to significantly reduce work disability duration, and may include such things as: phone calls, reports, case conferences and the conduction of workplace assessments in order to relay relevant information or updates about the individual's work capacity. However Principle 7 also assumes that this communication is conducted in conjunction with the injured worker and 45% of injured nurses in this study reported they were uncertain or did not agree that they were kept informed about all aspects of their case. This is closely linked with reduced individual involvement within the RTW process, as outlined for Principle 6, which may result in the worker feeling excluded from their RTW and ensuing negative

attitudes towards the employer and/or health care providers. This further highlights poor individual inclusion in the RTW process as a significant issue for the nursing profession.

Study Summary and Future Recommendations:

The prominent areas for concern with the RTW process for injured nurses that this study identified are: 1) a commitment to health and safety by the workplace; 2) early and considerate employer contact; 3) provision of modified work; and 4) individual knowledge of and involvement in the RTW process. Importantly, these areas of concern are either the responsibility of the employer or are areas where the employer has the ability to implement positive change. Consequently, an emphasis on targeted education and training of employers on the Seven Principles for Successful RTW is needed to highlight their use for improving RTW outcomes. This education should be implemented across all levels of the organisation: from management staff to RTW Coordinators and Nursing Unit Managers/Assistant Nursing Unit Managers to ensure that best possible results for RTW of injured nurses are obtained.

These findings support the need for further research exploring employer attitudes and employer-employee relations as recommended by Lysaght and Larmour-Trode (25), as well as research linking these areas specifically to the nursing and health care industry.

Study Strengths and Limitations:

This study is able to inform numerous groups - including nurses, their employers, professional nursing associations, insurers, Australian state and national regulators - about practice that contributes to the successful rehabilitation of injured nurses. This in turn can lead to the implementation of strategies for more effective RTW outcomes and therefore better health outcomes for injured workers and mutual benefits for other stakeholders. The study is able to provide a leading insight into the RTW of nurses in a NSW context, adding to the small base of literature available on the RTW of injured nurses. Despite a moderate response rate, this study is the largest study of its kind, aiding generalizability to all injured nurses within Australia.

A limitation of the study exists in the retrospective nature of the cross-sectional survey, as respondents reported data from a period of two years prior when completing the survey and significant recall and/or participant bias may have affected results. The limitation of using self-report is that the results provided are participant perception

only, and do not reflect absolute fact. In addition, a larger sample size would have strengthened findings. The study was conducted in one state of Australia, therefore results are generalizable to this specific state, however similarities in the occupational rehabilitation processes across jurisdictions means the results can be interpreted favourably in other similar environments.

Conclusion:

This study shows the practices and processes involved in the RTW of NSW nurses to be inconsistent with best practice principles as defined by the Seven Principles for Successful Return to Work' in many areas (5). By informing relevant stakeholders about practice that contributes to the successful rehabilitation of injured nurses, this study is able to help achieve more positive RTW outcomes for nurses. Successful RTW for nurses will help prevent the loss of valuable nurses from the health system, aiding the retention of nurses and reducing the burden on the healthcare system. In addition, through identifying the many areas for improvement in the rehabilitation of nurses, the potential to reduce state-wide workers compensation costs through more effective RTW can be realised.

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Table 1. Question details and types included for each of the Principles

Question detail	Type of question
Principle 1	
Length of time after injury worker contacted by employer	MCQ with exclusive categories
RTW Plan established	Dichotomous (yes/no)
Workplace Assessed	MCQ with exclusive categories
Worker provided with all the relevant information needed by employer after injury	Likert scale
Principle 2	
Changes in working hours to assist rehabilitation	MCQ with exclusive categories
Suitable duties consistent with restrictions	Dichotomous (yes/no)
Rehabilitation and return to work plan were realistic	Likert scale
Worker was provided with acceptable suitable duties	Likert scale
Principle 3	
Able to undertake the suitable duties recommended in return to work plan	Dichotomous (yes/no)
Supernumerary duties	Dichotomous (yes/no)
Co-workers were supportive during my return to work	Likert scale
My co-workers were not over-loaded during my rehabilitation	Likert scale
When other nurses have also been injured in a unit, it can make it more difficult	Likert scale
Other injured co-workers can be supportive to nurses attempting to return to work	Likert scale
Insurer Case Manager maintained regular contact with me	Likert scale
Principle 4	
Supervisor was supportive during my return to work	Likert scale
Supervisor was kept informed of worker's progress	Likert scale
Supervisor and Return-to-Work Coordinator cooperated in return to work program	Likert scale
RTW Plan was modified in consultation with supervisor	Likert scale
Principle 5	
Initial Employer Contact	MCQ with exclusive categories
Provision of return to work plan by employer	MCQ with exclusive categories
The genuineness of worker's injury/illness was not questioned	Likert scale
Employer was supportive during return to work	Likert scale
Principle 6	
Parties Involved in development of Return To Work Plan	MCQ with exclusive categories
Return-to-Work Coordinator:	
Was supportive during return to work	Likert scale
Understood the rehabilitation process	Likert scale
Maintained regular contact with me	Likert scale
Responded in a timely manner	Likert scale
Was knowledgeable about their role	Likert scale
Was experienced in their role	Likert scale
Was well informed and able to answer all of worker's questions	Likert scale
Was supported by management and no competing demands on their time	Likert scale
Principle 7	
Assessments conducted	MCQ
Worker was kept informed about all aspects of their case	Likert scale
Return to Work Plan:	
Was modified in consultation with treating doctor	Likert scale
Was modified in consultation with worker	Likert scale
Was modified in consultation with supervisor	Likert scale
Was modified in consultation with Return-to-Work coordinator	Likert scale
Was monitored on a regular basis	Likert scale
Was adjusted according to my progress	Likert scale
Insurance company approved treatment in a timely manner	Likert scale

Table 2. Participant Demographic Information

Variable	Category	Total (N=484)* N (%)	Variable	Category	Total (N=484)* N (%)
Geographic region	Major city	196 (41%)	**Gender**	Male	44 (9.1%)
	Inner and outer regional	106 (23%)		Female	440 (91%)
	Remote and very remote	138 (29%)	**Mode of employment**	Full time (permanent)	216 (45%)
	Not reported	44 (9.1%)		Part time (permanent)	220 (45%)
Employment sector	Public hospital	230 (48%)		Casual	32 (6.6%)
	Private hospital	36 (7.4%)		Not reported	16 (3.3%)
	Aged care	128 (26%)	**Principal area of practice**	Medical/surgical	80 (17%)
	Disability / community	65 (13%)		Emergency, intensive care, operating theatre	75 (16%)
	Other	23 (4.8%)		Aged care	149 (31%)
	Not reported	2 (0.4%)		Mental health, drug & alcohol	46 (9.5%)
Nursing role	Assistants in nursing	125 (26%)		Other	115 (24%)
	Enrolled nurses	76 (16%)		Not reported	19 (3.9%)
	Registered nurses	250 (52%)	**Injury type**	Physical	414 (86%)
	Other nurses	28 (5.8%)		Psychological	38 (7.9%)
	Not reported	5 (1.0%)		Other	31 (6.4%)
Hours worked/week	less than 9 hours per week	2 (0.4%)		Not reported	1 (0.2%)
	10-19 hours	24 (5.0%)			
	20-29 hours	98 (20%)			
	30-39 hours	190 (39%)			
	40-49 hours	142 (29%)			
	greater than 49 hours	13 (2.9%)			
	Not reported	15 (3.1%)			

* Some participants did not complete all questions in the survey; therefore totals in each analysis vary accordingly

Table 3. The Best Practice Principles of RTW and Perceptions of Injured Nurses to RTW Practices

	Disagree / Strongly Disagree (N=448)* N (%)	Uncertain (N=448)* N (%)	Agree/ Strongly Agree (N=448)* N (%)
Principle 1			
Worker provided with all relevant information by employer	183 (40%)	68 (15%)	183 (40%)
Principle 2			
Rehabilitation and RTW plan were realistic	114 (25%)	46 (10%)	288 (62%)
Worker was provided with acceptable suitable duties	114 (25%)	38 (8.2%)	291 (63%)
Principle 3			
Co-workers were supportive during RTW	113 (24%)	43 (9.2%)	300 (64%)
Co-workers were not over-loaded during rehabilitation	137 (30%)	88 (19%)	219 (48%)
When other nurses have also been injured in a unit, it can make it more difficult	111 (25%)	90 (20%)	180 (40%)
Other injured co-workers can be supportive to nurses attempting to RTW	44 (10%)	68 (15%)	320 (69%)
Insurer Case Manager maintained regular contact with worker	204 (44%)	42 (9.2%)	186 (40%)
Principle 4			
Supervisor was supportive during RTW	136 (29%)	31 (6.7%)	288 (62%)
Supervisor was kept informed of worker's progress	43 (10%)	66 (14%)	348 (74%)
Supervisor and RTW Coordinator cooperated in RTW program	58 (12%)	57 (12%)	313 (67%)
RTW Plan was modified in consultation with supervisor	83 (19%)	41 (9%)	289 (63%)
Principle 5			
Genuineness of injury/illness was not questioned	157 (34%)	48 (10%)	242 (53%)
Employer was supportive during RTW	156 (34%)	37 (7.7%)	258 (56%)
Principle 6			
Was supportive during RTW	128 (28%)	37 (8%)	258 (56%)
Understood the rehabilitation process	88 (19%)	71 (15%)	266 (58%)
Maintained regular contact with worker	123 (27%)	31 (7%)	269 (60%)
Responded in a timely manner	130 (29%)	37 (8%)	255 (55%)
Was knowledgeable about their role	93 (21%)	73 (16%)	261 (57%)
Was experienced in their role	88 (19%)	94 (21%)	232 (52%)
Was well informed and able to answer all of worker's questions	121 (26%)	67 (15%)	233 (52%)
Was supported by management and did not have competing demands on their time	107 (24%)	108 (24%)	194 (43%)
Principle 7			
Worker was kept informed about all aspects of their case	146 (32%)	59 (13%)	248 (55%)
Insurance company approved treatment in a timely manner	102 (24%)	30 (8.1%)	286 (63%)
Was modified in consultation with treating doctor	57 (12%)	28 (6.1%)	338 (73%)
Was modified in consultation with worker	71 (15%)	16 (3.5%)	336 (72%)
Was modified in consultation with supervisor	83 (19%)	41 (9%)	289 (63%)
Was modified in consultation with RTW coordinator	77 (16%)	37 (8%)	296 (64%)
Was monitored on a regular basis	107 (23%)	38 (8.3%)	276 (60%)
Was adjusted according to worker's progress	102 (23%)	30 (6.6%)	286 (62%)

***** The respondents who indicated a RTW plan was appropriate

Principles: 1) a commitment to health and safety is demonstrated by the employer and workplace; 2) an offer of modified work is made by the employer to facilitate the early and safe return of the worker to suitable duties; 3) RTW planning supports the worker without disadvantaging others within the workplace; 4) supervisors are trained in work disability prevention and included in RTW planning; 5) early and considerate employer contact is made with the worker; 6) the responsibility to coordinate RTW is assumed by someone; 7) and that there is adequate communication between employers and health care providers about the workplace demands as needed (5).