

# An exploration of Indonesian nurses' perceptions of barriers to paediatric pain management

Journal of Child Health Care  
2017, Vol. 21 (3) 273–282  
© The Author(s) 2017  
Reprints and permission:  
sagepub.co.uk/journalsPermissions.nav  
DOI: 10.1177/1367493517715146  
journals.sagepub.com/home/chc



Henny Suzana Mediani<sup>1</sup>, Ravani Duggan<sup>2</sup>, Rose Chapman<sup>3</sup>,  
Alison Hutton<sup>4</sup> and Linda Shields<sup>5,6</sup>

## Abstract

There is a dearth of research in Indonesia regarding pain management in children. Previous studies have identified that although a variety of research and clinical studies on all aspects of pain have been conducted in many countries, children continue to experience moderate to severe pain during hospitalization. Greater research efforts are needed to identify and explore the factors that impede effective pain management in children. To address this gap, the researchers conducted an exploratory descriptive qualitative study to capture Indonesian nurses' perceptions of barriers to paediatric pain management in two hospitals. Using purposive sampling, data were collected from 37 nurses through semi-structured, in-depth interviews. Findings indicated that nurses working in Indonesian paediatric wards felt that they were not able to provide effective pain care to hospitalized children. Nurses identified several organizational structural and cultural factors that were thought to hinder their provision of effective pain care to paediatric patients. These factors are embedded in nurses' clinical practice. The study findings can assist to inform relevant initiatives and strategies to improve clinical nurses' performance and competency in providing effective pain care to paediatric patients.

## Keywords

Barriers to pain management, children, nurse's perceptions, pain management

<sup>1</sup> Faculty of Nursing, Universitas Padjadjaran, Bandung, Indonesia

<sup>2</sup> School of Nursing and Midwifery, Curtin University, Perth, WA, Australia

<sup>3</sup> School of Nursing and Midwifery, Australian Catholic University and Southern Health Victoria, North Sydney, NSW, Australia

<sup>4</sup> School of Nursing and Midwifery, The University of Newcastle, Newcastle, NSW, Australia

<sup>5</sup> School of Nursing, Midwifery and Indigenous Health, Charles Sturt University, Bathurst, NSW, Australia

<sup>6</sup> School of Medicine, The University of Queensland, Brisbane, QLD, Australia

## Corresponding author:

Henny Suzana Mediani, Faculty of Nursing, Universitas Padjadjaran, Bandung, Indonesia.

Email: hennymedi@hotmai.com

## **Introduction**

Effective pain management for paediatric patients remains an elusive goal in Indonesia. Hospitalized children are under-treated for pain, through a lack of physicians' prescriptions, and inadequate nursing pain assessment and management (Mediani, 2002). Inadequate pain control has been shown to be an issue for hospitalized children globally. For example, many do not receive adequate medication to relieve their pain and many continue to experience moderate to severe pain post-operatively (Pasero and McCaffery, 2011; Twycross, 2009). Findings like this suggest that nurses are not adequately prioritizing children's pain and this may have a considerable impact on children (Twycross and Finley, 2013; Van et al., 2011). Uncontrolled pain impairs the physical, social and psychological functions of paediatric patients and can lead to chronic pain in adulthood (Fortier et al., 2011; Taddio et al., 2009).

## **Background**

### *Context*

In the Indonesian context, the lack of prioritizing pain may be due to nurses' level of education and training. There is a serious deficit of qualified nurses in Indonesia, with an estimated 50 nurses per 100,000 people (Hennessy et al., 2006). Thirty-five percent of Indonesian nurses are educated to a vocational level as part of high school education, 60% are educated to diploma level undertaken after completion of high school and the remaining 5% hold a Bachelor's degree (Rokx et al., 2009). Additionally, there is no availability of paediatric post-basic training. The majority of nurses who work in paediatric are vocational nurses (Hennessy et al., 2006). Previous research has found that Indonesian nurses have inadequate knowledge of pain assessment and its management. When interviewed, nurses working at a paediatric department reported difficulties in interpreting young children's pain-related behaviour (Mediani, 2002), in part due to the fact that children simply cannot articulate their pain in the same way as an adult (Mediani, 2002). Moreover, although current research has shown that pain management strategies have been shown to be effective in relieving children's pain, and these approaches are used in other countries (Srouji et al., 2010), non-pharmacological interventions are not applied routinely by nurses in Indonesia due to lack of education in their use and limited time to apply strategies (Mediani, 2002).

### *Barriers to pain management*

Several barriers to pain assessment and management, in a variety of paediatric settings, can be grouped into four themes: nurse-related barriers, patient-related barriers, physician-related barriers and system-related barriers (Gimble-Berglund et al., 2008; Twycross and Collins, 2011). Insufficient knowledge about pain assessment and its management, difficulty in making decisions about pain management and nurses' fear or misconceptions regarding the use of opioid analgesics are the most important barriers in implementing effective pain management (Shrestha-Ranjit and Manias, 2010; Twycross and Finley, 2013). Another major barrier is inadequate prescriptions and medication orders (Czarnecki et al., 2011; Gimble-Berglund et al., 2008). Workload and lack of time contribute (Kaasalainen et al., 2007; Rejeh et al., 2009; Twycross and Collins, 2013) and contextual factors and the culture of organizations heavily influence nurses' pain management practice (Clabo, 2008; Rejeh et al., 2009).

Despite the fact that a variety of research and clinical studies on all aspects of pain have been conducted in many countries and the evidence to guide pain management practices is readily available, practices continue to fall short of the ideal and factors affecting pain management and its implementation have not been well identified (Czarnecki et al., 2011; Twycross and Collins, 2013). Therefore, under-treatment in children needs to be explored further; in particular, the contextual issues influencing Indonesian nurses' pain management practice.

## **Aims**

To explore Indonesian nurses' perceptions of and experiences with pain management of hospitalized children. This article reports on part of a larger study which focussed on Indonesian nurses' perceptions of barriers to pain management.

## **Method**

An exploratory, descriptive, qualitative approach was used to gain a full understanding of Indonesian nurses' perceptions of barriers of pain management. Qualitative inquiry aims to discover the experience of the situation from the participant's point of view, finding answers to questions that revolve around social experience, how it is created and how this gives meaning to human life (Denzin and Lincoln, 2003). Techniques associated with grounded theory (GT) were employed around data collection and analysis (Glaser, 1978; Glaser and Strauss, 1967).

## ***Setting and sampling***

The study was conducted in two states in West Java Province, Indonesia. Data collection occurred between October 2010 and December 2011. All nurses with more than three years' experience, currently working full-time in paediatric wards at two general teaching hospitals, were potential participants. Once ethics approval had been gained, the first author liaised with nursing unit heads to advertise the study. Information sessions were conducted where potential participants could meet the first author, receive information, have questions answered and provide informed consent. Consistent with techniques associated with GT methodology, the researcher initially used purposive sampling and continued with theoretical sampling strategies according to the codes and categories as they emerged. After interviewing 12 participants, data analysis demonstrated the need to explore questions around how nurses are educated and wider organizational and professional contexts. Data collection and analysis then focussed on clinical educators, head nurses, nursing supervisors, heads of nursing divisions and a head of a nursing education department as those who could best address emerging questions. Thirty-seven participants contributed. Data saturation determined sampling size, and data collection was ceased when information from participants became repetitive (Cutcliffe, 2000; Schreiber, 2001). The interviews were conducted in Indonesian and translated into English (with independent verification) for data analysis, interpretation and publication.

## ***Data collection and analysis***

Individual, semi-structured, in-depth interviews lasting 50 to 90 minutes were conducted at either the study hospitals or a venue determined by participants. Interviews were opened with an initial broad question, 'could you tell me of your experiences of working as a paediatric nurse in this hospital?'

This enabled the building of rapport between participant and interviewer and allowed for participants to feel comfortable during the interview and for authentic data to be collected. Follow-up questions focussed on experiences and perceptions of managing pain in children and factors that inhibited their ability to provide pain management. Appropriate prompts were used to encourage elaboration of responses when necessary. Data were collected and analysed concurrently using the constant comparative method as per a GT approach (Glaser and Strauss, 1967). Audio recordings of interviews and handwritten field notes were transcribed verbatim. Data were managed using manual thematic analysis procedures to identify themes, patterns and essential elements contained within the text, with constant comparative analysis using open, theoretical and selective coding (Glaser, 1978, 1998; Glaser and Strauss, 1967). Themes emerged that explained the factors that act as barriers to providing effective pain care. Credibility was established through member checking, prolonged engagement with participants and peer review. The participants were contacted after analysis and given a full transcript of their coded interviews, with a summary of the emergent themes, to see whether the codes and themes were true to their experience. As a further validity check, four expert supervisors did peer checking on 60% of all transcripts. Findings were checked with some senior nurses who did not participate in the research to confirm fittingness of the findings.

### *Ethics considerations*

This study was part of a doctoral study at Curtin University, Australia. Permission was obtained from both Curtin University's Human Research Ethics Committee and the research ethics committee at the Indonesian hospitals. Official permission was obtained from the Director of the Educational and Research Department at the two hospitals and participants signed a consent form.

### *Findings*

Individual characteristics of the participants are presented in Table 1.

Analysis related to nurses' perceptions of barriers to pain management revealed a theme of 'context of the organization', with five subthemes that contributed to nurses' inability to provide good pain care: (a) imbalance in nurse–patient ratios, (b) lack of sufficient education/training, (c) lack of organizational support, (d) lack of professional autonomy and (e) feeling powerless. These subthemes are discussed individually and are supported by the use of verbatim participant quotes.

#### *Imbalance in nurse–patient ratios*

Imbalanced nurse–patient ratios (not enough nurses) inhibited provision of effective pain care with implications for both nurses and patients. This had an impact on their ability to fulfil their role and deliver quality patient care.

I can't focus on caring for paediatric patients . . . I have many tasks to complete on this shift . . . I am not able to deliver effective pain care. (P#23)

Another participant explained:

There are 40 paediatric patients on this ward and there are only three nurses on the afternoon shift. How can we provide optimal pain care to all these patients in one working shift? We don't have time to do a lot of things, we are busy. (P#5)

**Table 1.** Summary of the profiles of the nurse participants.

Participant demographic information		
Category	Information	Number of participants
Gender	Female	30
	Male	7
Age group (years)	25–30	6
	31–40	18
	41–50	9
	51–60	4
Highest qualification obtained	Diploma in Nursing	17
	Bachelor of Nursing	18
	Masters of Nursing	2
Years of experience	0–5	2
	6–10	10
	11–20	14
	21–30	9
	More than 30	2

### *Lack of sufficient education and/or training*

The participants had inadequate training and preparation to effectively manage their patients' pain, and this was the main reason for their being unable to provide effective pain care:

... our academic education at diploma and degree level does not prepare students to conduct pain assessment and management adequately because we have only received the knowledge in brief. (P#31)

Another suggested:

As long as I have been working in this hospital I have never attended a course or training about pain management because the hospital has not provided training for pain management in children. I have only basic knowledge based on my education and experience and I am aware that my knowledge of pain assessment and pharmacological intervention is still limited. (P#12)

Lack of knowledge resulted lack of confidence to contribute to discussions of pain management with doctors.

### *Lack of organizational support*

Nurses perceived that hospital management did not provide them with resources to effectively manage children's pain, including pain assessment tools, pain management guidelines and standard operating procedures. This lack of standardized patient pain care, including clinical guidelines for pain assessment and management, constituted a barrier and this influenced how they applied their knowledge in practice:

The tools for measuring pain are not available on the ward. Moreover, we do not have standard procedures for pain assessment and management. So that way, many nurses do not know how to do pain

assessment theoretically. Many of us do pain assessment without using pain assessment tools for measuring pain. We are working without guidelines. (P#18)

### *Lack of professional autonomy*

One missing aspect of autonomy was participants' independent and interdependent (collaborative) involvement in pain management decisions. Nurses perceived that they lacked authority to control institutional practice and that their professional opinions often were not valued. They perceived that they did not have a voice in patient care decisions:

Nurses still do not have the authority to make decisions about pain treatment. Only doctors do it; they do not involve nurses to give their opinions about therapy . . . This situation makes me felt powerless. (P#18)

Within the organization's culture, doctors had authority over pain treatment plans. As such, many nurses followed the doctor's instructions and orders:

I suppose that the nurses' role in managing children's pain is important. However, I believe the nurse's role is not visible and powerful like doctors because we still lack knowledge and confidence. Even some nurses still assume that they are only the doctor's assistant and some doctors still have the perception that nurses are their helpers. Therefore, many nurses only follow the doctor's orders. (P#19)

### *Feeling powerless*

Nurses felt powerless because of their perceived lack of knowledge, authority and professional autonomy when making patient care decisions. This was due to cultural organizational elements such as medical dominance in delivering patient care that contributed to feelings of powerlessness. They felt subordinate to doctors and often considered they were not heard and had no impact on decision-making. They therefore considered that they had to follow the doctor's orders.

The doctor has power, while the nurse must obey and follow the doctor's decisions, including when caring for children in pain. We can't control this situation . . . (P#4)

Another participant commented:

I feel inadequate when I cannot relieve the patient's pain because I am not able to discuss with the doctor and ask about pain therapy. I realize my knowledge about analgesia is still limited compared with the doctor's. I feel hesitant and lack confidence to discuss with the doctor. (P#31)

## **Discussion**

Despite significant knowledge development during the last two decades, and internationally available guidelines for effective pain relief, the management of children's pain remains ineffective not only in Indonesia, but also globally (Stinson et al., 2008; Twycross and Finley, 2013). This phenomenon still exists with many factors within the Indonesian paediatric setting contributing.

The organizations in this study imposed a number of constraints, which unintentionally impeded effectiveness of pain management in children. In line with other studies (Czarnecki et al., 2011; Gimbler-Berglund et al., 2008; Twycross and Collins, 2013), organizational practice, policies and procedures limited the extent to which the nurses could fulfil their pain management roles.

The nurses knew that regular assessment was an important component of pain management in children. However, due to organizational constraints and working conditions including the unavailability of pain assessment tools, heavy workloads and time constraints, nurses realized that they were often unable to provide routine pain assessment or management. For example, they considered that they were unable to apply effective non-pharmacological interventions to relieve patients' pain despite being taught this during their pre-service education, again, similar to others (Kaasalainen et al., 2007; Rejeh et al., 2009; Twycross and Collins, 2013) demonstrating the important role that workplace environment plays in enabling nurses to provide effective pain management. Organizational support is imperative, for example, modifying working conditions to develop patient-centred care to enable nurses to provide effective and safe pain care.

Pain assessment should be routine and integral to paediatric care. Systematic, routine pain assessment using standardized, validated measures is the basis of effective pain management for all patients, regardless of age, conditions and setting (Kaasalainen et al., 2007; Twycross and Collins, 2013). Regular assessment leads to improved pain management and results in overall patients', parents' and health care providers' satisfaction with pain assessment and management.

Insufficient education and/or training were contributing factors that hinder nurses from providing effective pain care to children. The content of curricula in Indonesian nursing diploma programs was identified as a barrier to effective pain care. Pain assessment and management were not specifically identified in the paediatric nursing syllabi. In addition, nurses suggested that because they had trained for a general role, pain management was covered, but not in the detail required to take on a specialized pain management role in paediatrics. Similarly, lack of basic training has been identified as one of the major reasons for nurses providing inadequate paediatric pain management (Malviya et al., 2005; Namnabati et al., 2012). The participants need to have good knowledge and skills as a way to increase their self-confidence and to enable them to act as a patient advocate; this knowledge would be acquired through continuing education or training in pain assessment and pain management. Having more knowledge and improved skills will empower nurses (Sawhney and Sawyer, 2008; Williamson-Swift, 2007).

Another significant finding was the lack of support from the organization, which was identified as another barrier to providing effective pain care for children. Participants had a strong sense of an external locus of control where they felt that the care they provided, and any changes to care, needed to be directed from higher up within the organization. People with an external locus of control are more likely to believe that their fate is determined by outside forces that are beyond their own personal control (Salazar et al., 2006).

Participants perceived that nurses lacked professional autonomy. They did not have the freedom to make decisions about pain management for children. Lack of professional autonomy, combined with little authority or influence over the governance of hospitals, was a barrier preventing nurses from being able to take control over their practice and provide effective pain care. The association between lack of autonomy, job dissatisfaction and collaboration between nurses and doctors were identified in previous studies (Birks et al., 2009; Rejeh et al., 2009).

In this study, participants felt powerless because they lacked knowledge, authority and professional autonomy when making patient care decisions. Medical dominance was widespread and

had an impact on paediatric nursing care, including pain management, thereby contributing to the workplace pressures that caused the nurses to provide ineffective pain care. This current study's finding on medical dominance was also congruent with previous studies conducted in Iran, describing the barriers to effective pain management (Nasrabadi et al., 2003; Rejeh et al., 2009).

## **Limitations**

Data sources were restricted to interviews of nurses only. Future studies should explore physicians' perceptions and experiences regarding paediatric pain management practice in Indonesian hospitals. Data and findings are specific to the Indonesian context and specifically, a particular region, and therefore are not necessarily transferable to other contexts.

## **Implication for clinical practice**

The study findings extend beyond the current body of knowledge and provide a greater understanding of the psychosocial processes, interactions and experiences faced by nurses when caring for hospitalized children in pain in Indonesia. The study emphasizes a need to empower nurses to provide pain care. The nurses understood that the influential culture of physician-led care placed nursing as a subordinate profession, which added to their feelings of powerlessness. They perceived that they lacked both the authority and self-confidence to make decisions regarding paediatric patient care. They recognized that in order to be able to provide effective pain care and exercise control over their nursing practice, they needed to empower themselves within the hospital's organizational system.

## **Conclusion**

This study provided a portrait of the clinical reality for paediatric nurses from two Indonesian hospitals. Nurses identified several organizational structural and cultural factors that were thought to hinder their provision of effective pain care to paediatric patients. These factors are embedded in nurses' clinical practice. The study's findings can help to inform relevant initiatives and strategies to improve clinical nurses' performance and capability in providing pain care to paediatric patients, so the quality of such care can be continually improved into the future. The findings have the potential to influence change in the nursing profession in the area of clinical initiatives, education and research.

## **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## **Funding**

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This project was part of the main researcher PhD study was funded by Directorate Research Higher Degree Ministry of Education Indonesia and Curtin University Australia.



## References

- Birks MJ, Chapman Y and Francis K (2009) Women and nursing in Malaysia unspoken status. *Journal of Transcultural Nursing* 20(1): 116–123.
- Clabo LML (2008) An ethnography of pain assessment and the role of social context on two postoperative units. *Journal of Advanced Nursing* 61(5): 531–539.
- Cutcliffe JR (2000) Methodological issues in grounded theory. *Journal of Advanced Nursing* 31(6): 1476–1484.
- Czarnecki ML, Turner HN, Collins MP, et al. (2011) Procedural pain management: a position statement with clinical practice recommendations. *Pain Management Nursing* 12(2): 95–111.
- Denzin NK and Lincoln YS (2003) The discipline and practice of qualitative research. In: Denzin NK and Lincoln YS (eds), *The Landscape of Qualitative Research: Theories and Issues*, 2nd ed. Thousand Oaks, CA: SAGE, pp. 1–45.
- Fortier MA, Chou J, Maurer EL, et al. (2011) Acute to chronic postoperative pain in children: preliminary findings. *Journal of Pediatric Surgery* 46: 1700–1705.
- Gimble-Berglund I, Ljusegren G and Enskär K (2008) Factors influencing pain management in children. *Paediatric Nursing* 20(10): 21–24. PMID: 19119745 [PubMed – indexed for MEDLINE]
- Glaser BG (1978) *Theoretical Sensitivity: Advances in the Methodology of Grounded Theory*. Mill Valley, CA: Sociology Press.
- Glaser BG (1998) *Doing Grounded Theory: Issues and Discussions*. Mill Valley, CA: Sociology Press.
- Glaser BG and Strauss AL (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago, IL: Aldine De Gruyter, Transaction Publishers.
- Hennessy D, Hicks C and Kawonal Y (2006) The training and development needs of nurses in Indonesia, paper 3 of 3. *Human Resources for Health* 4(10): 1–12.
- Kaasalainen S, Coker E, Dolovich L, et al. (2007) Pain management decision making among long-term care physicians and nurses. *Western Journal of Nursing Research* 29: 561–580.
- Keuter K, Byrne E, Voell J, et al. (2000) Nurses' job satisfaction and organizational climate in a dynamic work environment. *Applied Nursing Research* 13(1): 46–49. PMID: 10701283 [PubMed – indexed for MEDLINE].
- Malviya S, Voepel-Lewis T, Merkel S, et al. (2005) Difficult pain assessment and lack of clinician knowledge are ongoing barriers to effective pain management in children with cognitive impairment. *Acute Pain* 7(1): 27–32.
- Mediani HS (2002) *Pain in children: Indonesian nurses' beliefs and practices*. Unpublished Master Thesis, The Flinders University of South Australia, presented at the international nursing conference, Jakarta, Indonesia, 25–27 June 2003.
- Namnabati M, Abazari P and Talakoub S (2012) Identification of perceived barriers of pain management in Iranian children: a qualitative study. *International Journal of Nursing Practice* 18(3): 221–225.
- Nasrabadi AN, Emami A and Yekta ZP (2003) Nursing experience in Iran. *International Journal of Nursing Practice* 9(2): 78–85.
- Pasero C and McCaffery M (2011) *Pain Assessment and Pharmacologic Management*. St. Louis, MO: Mosby/Elsevier.
- Rejeh N, Ahmadi F, Mohammadi E, et al. (2009) Ethical challenges in pain management post-surgery. *Nursing Ethics* 16(2): 161–172.
- Rokx C, Satriawan E, Marzoeki P, et al. (2009) Indonesia's doctors, midwives and nurses: current stock, increasing needs, future challenges and options. Available at: <http://www.wds.worldbank.org> (accessed 24 March 2013).

- Salazar J, Pfaffenberg C and Salazar L (2006) Locus of control vs employee empowerment and the relationship with hotel managers' job satisfaction. *Journal of Human Resources in Hospitality and Tourism* 5(1): 1–15.
- Schreiber RS (2001) The “how to” of grounded theory: avoiding the pitfalls. In: Schreiber RS and Stern PN (eds), *Using Grounded Theory in Nursing*, pp. 55–83.
- Shrestha-Ranjit JM and Manias E (2010) Pain assessment and management practices in children following surgery of the lower limb. *Journal of Clinical Nursing* 19(1–2): 118–128.
- Srouji R, Ratnapalan S and Schneeweiss S (2010) Pain in children: assessment and non-pharmacological management. *International Journal of Paediatric*. DOI: 10.1155/2010/474838. PMCID: PMC 2913812.
- Stinson JN, Stevens BJ, Feldman BM, et al. (2008) Construct validity of a multidimensional electronic pain diary for adolescents with arthritis. *Pain* 136(3): 281–292.
- Sawhney M and Sawyer J (2008) A cross-sectional study of the role of Canadian nurses with a specialty practice in pain management. *Acute Pain* 10(3): 151–156.
- Taddio A, Chambers CT, Halperin SA, et al. (2009) Inadequate pain management during routine childhood immunizations: the nerve of it. *Clinical Therapeutics* 31(2): S152–S167. DOI: 10.1016/j.clinthera.2009.07.022.
- Twycross A (2009) Why managing pain in children matters. In: Twycross A, Dowden S and Bruce E (eds) *Managing Pain in Children*. UK: Blackwell Publishing, pp. 1–15.
- Twycross A and Collins S (2013) Nurses' views about the barriers and facilitators to effective management of paediatric pain. *Pain Management Nursing* 14(4): 164–172.
- Twycross A and Finley A (2013) Nurses' aims when managing pediatric postoperative pain: Is what they say the same as what they do? *Journal For Specialists in Pediatric Nursing* 1–11. DOI: 10.1111/jspn.12029.
- Van HVC, Wilkie DJ and Wang E (2011) Pediatric nurses' beliefs and pain management practices: an intervention pilot. *Western Journal of Nursing Research* 33(6): 825–845.
- Williamson-Swift A (2007) Education and training of pain nurse specialists in the United Kingdom. *Acute Pain* 9(4): 207–213.