

AWARENESS AND PERCEPTIONS OF NURSES REGARDING PAIN MANAGEMENT IN PAEDIATRICS

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Abstract

Introduction: Effective pain management is vital in pediatric care, directly influencing recovery and overall well-being. Nurses are central to pediatric pain treatment; however, communication barriers, developmental factors, and misconceptions often lead to underdiagnosis and inadequate management.

Objectives: This study aimed to assess the awareness and perceptions of nurses regarding pediatric pain management.

Material and Methods: A descriptive cross-sectional design was employed at Evercare Hospital Lahore, involving 133 nurses selected through convenience sampling. Data were collected using a structured questionnaire and analyzed using SPSS version 21. Descriptive statistics including frequencies, percentages, means, and standard deviations were applied.

Results: Findings revealed that 51.65% of nurses demonstrated strong knowledge of pediatric pain assessment and management, while over half were familiar with evidence-based practices. However, gaps persisted, as 60% showed a positive perception toward pediatric pain management, compared to 40% who were indifferent or negative.

Conclusion: Despite favorable awareness and perceptions among most nurses, significant gaps remain, emphasizing the need for ongoing training and professional development programs.

INTRODUCTION

Pain is defined as an unpleasant sensory and emotional experience linked to actual or potential tissue damage (Arovas et al., 2022). It remains one of the most distressing reasons for children's hospital visits, admissions, and extended stays (Twycross et al., 2024). Effective pediatric pain management is therefore a vital component of healthcare, as it directly influences recovery, reduces anxiety, and improves overall well-being. Despite this importance, children's pain is often underdiagnosed and undertreated due to developmental differences,

communication barriers, and persistent misconceptions (Friedrichsdorf & Goubert, 2020; Pekyigit & AÇIKGÖZ, 2023).

Globally, pain management continues to be a challenge, with studies indicating that up to 78% of hospitalized patients experience moderate to severe pain despite the availability of training programs and pain teams (Majeed et al., 2020). Pediatric patients are particularly vulnerable, as their ability to self-report varies with age and developmental stage, making accurate assessment complex (Damico et al.,

2021; Fenta et al., 2023). Myths that children exaggerate pain or are less sensitive than adults contribute to inadequate management (Ali et al., 2021; Uhl et al., 2020). Consequently, untreated or poorly managed pain can heighten anxiety, avoidance behaviors, and physiological distress in children (Taylor & Wilson, 2020).

Nurses, as the frontline caregivers who spend the most time with pediatric patients, play a critical role in pain evaluation, management, and reassessment (Randell, 2023; Kim et al., 2020). Their awareness, attitudes, and perceptions strongly influence clinical decisions and outcomes. However, gaps in undergraduate training, limited continuing education opportunities, and misconceptions about pharmacological interventions hinder effective practice (Rojaye, 2024; Toivonen & Arpiainen, 2023). Since the International Association for the Study of Pain recognizes pain relief as a basic human right (de Leeuw et al., 2020), strengthening nurses' competencies in pediatric pain management is essential to ensuring equitable and effective care.

1. Materials and Methods

1.1 Study Design and Setting

This was a descriptive cross-sectional study conducted at Evercare Hospital Lahore over a duration of six months. The study population consisted of all nurses employed in the hospital across different departments.

1.2 Sample Size and Sampling Technique

A total of 200 nurses formed the target population. Using Slovin's formula at a 95% confidence level and a 5% margin of error, the calculated sample size was 133 participants (Anugraheni et al., 2023). A convenience sampling technique was adopted for data collection.

2. Results

Table 1. Description of Background Characteristics of Participants (n = 133)

Variable	Category	Frequency (n)	Percentage (%)
Age (Years)	25–30	31	23.3
	31–35	84	63.2
	>36	18	13.5
Marital Status	Single	77	57.9

1.3 Eligibility Criteria

Inclusion criteria comprised nurses aged 25–50 years, with more than two years of professional experience, who were willing to participate. Exclusion criteria included doctors, head staff, nursing students, paramedical staff, and any nurse unwilling to participate.

1.4 Variables

Demographic variables included age, marital status, education, working shift, years of experience, and type of unit. Study variables encompassed all questionnaire items assessing nurses' awareness and perceptions of pediatric pain management.

1.5 Data Collection Procedure

After briefing participants and obtaining informed consent, data were collected using a modified structured questionnaire adapted from Seipajærvi et al. (2024). The tool consisted of 10 items assessing awareness and 10 items evaluating perceptions. A comprehensive demographic profile was also documented. Confidentiality was strictly maintained throughout the process.

1.6 Data Analysis

Data were analyzed using SPSS version 21 (IBM). Descriptive statistics, including frequencies and percentages, summarized categorical variables. Data visualization tools such as bar charts, pie charts, and histograms were used to enhance interpretation and present findings clearly.

1.7 Ethical Considerations

The study was conducted in line with the Declaration of Helsinki (Preckel et al., 2020). Participants' privacy was ensured, informed consent was obtained, and measures were taken to protect them from any harm during the research process.

Qualification	Married	53	39.8
	Divorced	3	2.3
	General Nursing & Midwifery	52	39.1
	Post RN	44	33.1
	BSc. Nursing	17	12.8
	Specialization	17	12.8
Experience (Years)	MSN	3	2.3
	1-5	74	55.6
	6-10	50	37.6
	>10	9	6.8

Table 1 provides the demographic, educational, and professional profile of 133 participating nurses. Most respondents were aged 31–35 years (63.2%) and more than half were single (57.9%). Regarding qualifications, the majority held General Nursing & Midwifery (39.1%) or Post RN diplomas (33.1%), while only 2.3% had completed an MSN degree. In

terms of professional experience, over half (55.6%) had 1–5 years of experience, while 37.6% had 6–10 years, and only 6.8% had more than 10 years. These results reflect a relatively young, early- to mid-career nursing workforce with moderate levels of formal specialization.

Table 2. Awareness of Pediatric Pain Management (n = 133)

Sr. No	Statement	Agree (%)	Disagree (%)	Strongly Agree (%)
1	Children always give signs when they are in discomfort, which staff members can always pick up on.	42 (31.6)	29 (21.8)	62 (46.6)
2	Narcotics shouldn't be administered to pediatric kids due to the possibility of respiratory depression.	34 (25.6)	29 (21.8)	70 (52.6)
3	In order to determine whether a patient is truly in pain, it might often be helpful to administer a placebo.	80 (60.2)	52 (39.1)	1 (0.8)
4	A physician's/nurse's estimation of pain equals patient's self-report; chronic pain may require higher doses.	50 (37.6)	39 (29.3)	38 (28.6)
5	The sense of pain can be reduced by distraction (e.g., music, relaxation).	107 (80.5)	–	26 (19.5)
6	Growing needs for analgesics indicate addiction; euphoria requires reduced dosage.	47 (35.3)	68 (51.1)	18 (13.5)
7	One-fourth of patients on continuous drugs develop an addiction.	62 (46.6)	39 (29.3)	32 (24.1)
8	IM is the recommended method for giving narcotic painkillers to patients.	111 (83.5)	13 (9.8)	9 (6.8)
9	It is possible to keep patients completely pain-free.	88 (66.2)	33 (24.8)	12 (9.0)
10	With or without suffering, patients with chronic pain should take painkillers daily.	66 (49.6)	21 (15.8)	46 (34.6)

Table 2 shows nurses' awareness regarding pediatric pain management. Nearly half (52.6%) strongly agreed that narcotics should not be administered to children due to respiratory depression risks, and

60.2% agreed that placebo use can help determine pain, indicating misconceptions. A large majority (83.5%) agreed IM is the recommended route for narcotics, while 66.2% believed it is possible to keep

patients completely pain-free. Positive awareness was noted where 80.5% agreed that distraction techniques reduce pain, though concerns about addiction persisted, with 46.6% agreeing that one-

fourth of continuous drug users develop addiction. These results reflect mixed awareness, with both correct understandings and significant misconceptions present among nurses.

Table 3. Perceptions Regarding Pediatric Pain Management (n = 133)

Sr. No	Statement	Agree n (%)	Disagree n (%)	Strongly Agree n (%)
1	Not expressing discomfort does not imply not feeling pain.	59 (44.4)	38 (28.6)	36 (27.1)
2	For ongoing pain, a regular schedule of drugs is preferable to a PRN regimen.	91 (68.4)	29 (21.8)	13 (9.8)
3	Needing more analgesics is typically a sign of psychological dependence.	81 (60.9)	45 (33.8)	7 (5.3)
4	A patient should be in agony before receiving a new dose of painkillers.	86 (64.7)	33 (24.8)	14 (10.5)
5	Patients on PRN drugs have a higher chance of developing clockwatching tendencies.	62 (46.6)	39 (29.3)	32 (24.1)
6	The patient is the best indicator of how much pain they are experiencing.	111 (83.5)	13 (9.8)	9 (6.8)
7	Patients on PRN analgesics should request painkillers in advance before pain returns.	88 (66.2)	33 (24.8)	12 (9.0)
8	Since kids cry often, distraction is advised instead of addressing their true pain.	66 (49.6)	21 (15.8)	46 (34.6)
9	There is no maximum dose for morphine; the ideal dose is the one that best controls symptoms.	59 (44.4)	38 (28.6)	36 (27.1)
10	Patients have the right to expect that treatment will result in complete pain relief.	91 (68.4)	29 (21.8)	13 (9.8)

Table 3 illustrates nurses' perceptions regarding pediatric pain management. Most respondents (83.5%) agreed that the patient is the best indicator of pain, and 68.4% supported administering drugs on a regular schedule rather than PRN. However, misconceptions were evident: 60.9% associated increased analgesic needs with psychological dependence, and 64.7% believed patients should be

in pain before receiving another dose. Nearly half (49.6%) felt that distraction should replace addressing children's true pain. Overall, while positive perceptions were noted in recognizing patients' rights to pain relief, substantial gaps remain due to misconceptions about dependence, dosing, and pain expression.

3. Discussion

This study highlights significant gaps in nurses' knowledge and perceptions of pediatric pain management. Findings revealed that many nurses held misconceptions, such as associating frequent analgesic use with psychological dependence, believing painkillers should only be administered once severe pain appears, and preferring intramuscular administration of narcotics. These gaps align with previous research showing limited

awareness of the WHO analgesic ladder and inadequate understanding of pharmacological and non-pharmacological pain therapies (Kwok et al., 2021; Romanowski et al., 2020; Eccleston et al., 2021). Nurses' lack of familiarity with updated WHO guidelines may result in inappropriate treatment choices for children, increasing the risk of untreated pain and its consequences, including extended hospital stays and psychological distress (Anim-Boamah, 2023; Pinto et al., 2020).

Evidence from international studies suggests that pain management training can improve nurses' awareness and practices, though the effects diminish if education is not continuous. Short-term workshops have been found insufficient to change long-term practice, while extended training programs with repeated sessions significantly enhance knowledge retention and application (Siregar et al., 2020; Andersen et al., 2021). Kwok et al. (2021) recommend comprehensive pain education covering theory, physiology, assessment, attitudes, and both pharmacological and non-pharmacological interventions. Incorporating regular refresher courses and ensuring visible tools, such as posting the analgesic ladder in pediatric wards, may support sustainable improvements in practice.

Despite misconceptions, many nurses demonstrated positive attitudes toward pediatric pain management. A majority acknowledged that patients are the most reliable source for reporting pain and supported regular scheduling of medications for chronic pain. However, concerns about opioid use and misconceptions about addiction remain barriers, consistent with findings from Alzghoul and Abdullah (2020) and Jennifer (2020). These results emphasize the need for targeted, ongoing professional development programs that address both knowledge deficits and attitudinal barriers. Strengthening nurses' competence through education and access to updated clinical guidelines is essential to ensuring effective and compassionate pain management for children.

4. Conclusion

Based on the findings, it is concluded that nurses demonstrated both knowledge gaps and misconceptions regarding pediatric pain management, particularly in relation to the WHO analgesic ladder, opioid use, and appropriate treatment strategies. To address these gaps, it is recommended that continuous, structured pain management education and updated clinical guidelines be integrated into nursing practice to strengthen awareness, correct misconceptions, and ensure effective pediatric pain care.

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