Original Research Article

Journal of College of Medical Sciences-Nepal, Vol-21, No.1, Jan-Mar 2025
ISSN: 2091-0657 (Print); 2091-0673 (Online) Open Access
DOI: 10.3126/jcmsn.v21i1.76596

Perceived Barriers Regarding Pain Management in Critically Ill Patients among Nurses Working in Tertiary Hospital

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ABSTRACT

Background

Pain is a significant concern and a primary reason people seek medical care, particularly in critical care settings. Patients should not endure unmanaged pain, especially when solutions are available, as every individual has the right to optimal pain assessment and management. This study aimed to assess perceived barriers regarding pain management among nurses working with critically ill patients at Bharatpur Hospital.

Methods

A cross-sectional descriptive research design was utilized, involving 88 staff members from the ICU, PICU, and ER. Data were collected between June 16 and June 29 using a non-probability purposive sampling technique. A self-administered, structured questionnaire with five-point Likert scale facilitated data collection, which was subsequently analyzed using SPSS version 20.

Results

The study findings revealed that key barriers identified included nurses' workload (3.47±1.01), financial constraints of patients (3.06±0.11), inadequate staffing (3.06±0.91), and time constraints (3.01±0.91). The study concluded that barriers related to medical staff are more prevalent among nurses than other types of barriers.

Conclusions

Thus, it is crucial to emphasize the necessity of focused interventions, such improving time management techniques, optimizing workforce numbers, and addressing financial support mechanisms, in order to raise the general efficacy and efficiency of healthcare delivery systems.

Keywords: barriers; critically ill patients; critical care area; nurses; pain management.

INTRODUCTION

The International Association for the Study of Pain (IASP) defines pain as "an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage".[1] Pain is a symptom that has a big influence on patients and poses difficulties for medical professionals.[2] Inadequate pain management can worsen a patient's and their family's quality of life, interfere with daily activities and outlook, and lengthen hospital stays.[3] The research points out how important it is to address nurses' perceived barriers to pain management in different healthcare settings in order to maximize patient outcomes and care delivery. Nurses frequently face obstacles that make it difficult for them to properly manage pain in critically ill patients, including low staffing, scarce resources, and a lack of support from other members of the healthcare team.[4] Furthermore, patients suffer negative consequences from untreated pain, highlighting the critical role that proper pain management plays in improving patient outcomes. It is imperative that nurses and other healthcare professionals have the required positive attitudes for pain treatment.[2] Untreated pain can adversely affect the quality of life of patients and their families, their daily activities

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and outlook in life, and increase the length of hospital stays.[6] Despite the availability of resources, strategies, training programs, and specialized pain teams for pain management, the prevalence of pain is still markedly high in health settings.[7] Several obstacles may influence the success of PAM by nurses. These barriers are nurse-related barriers such as lack of time, poor knowledge, and negative attitudes toward pain.[8] Physician-related barriers such as doctor's indifference and inadequacy of PAM; patient-related barriers such as inaccurate pain scale; and system-related barriers such as lack of appropriate patient-to-nurse ratio and lack of psychosocial support services.[9] Nurses play a crucial role in assessing and managing pain and advocating for patients' rights to adequate pain relief, especially when physicians are hesitant to prescribe analgesics. Effective pain management requires a multidisciplinary approach involving medical professionals, including nurses with the right attitudes and expertise in pain treatment. Without this, ignorance and negative attitudes can impede optimal pain management.[4] Lack of protocols/guidelines for pain evaluation, patient instability, and incapacity to communicate were the most frequent obstacles to pain assessment and management. Ongoing pain education for nurses and doctors who give appropriate dosages of analgesia, on the other hand, was the most prevalent facilitator of successful pain management practices.[5]

METHODS

A descriptive cross-sectional research design was used in the study to find out perceived barrier regarding pain management in critically ill patients among nurses. The study was carried out at Bharatpur hospitals located at Bharatpur 10, Chitwan, Nepal. The study population were nursing staff who are working in ICU, PICU, and emergency departments and are directly involved in patient care. Non-probability, enumerative sampling technique was used in the study for data collection. The expected sample size included in the study was 96 nurses from different units (ICU: 59, PICU: 13, emergency department: 24) of Bharatpur Hospital. Ethical approval was obtained from the authorized National Academy of Medical Science at Bharatpur Hospital Nursing College and the Institutional Research Committee (IRC) at Bharatpur Hospital, Chitwan. The data were collected from June 16 and June 29, 2024.

RESULTS

Out of 88 respondents, around half of respondent (45.5%) were from age group 26-28 and (25%) of respondent were age group of >28. The majority (98.9%) of respondents were female. Nurses with 3–4 years of experience amounted to 54.5%, and 21.6% had ≥6 years of experience. The nurse working area is in the PICU (9.1%) and in the ICU (67%). Likewise, 52.3% of the nurses had completed the bachelor of nursing, and 1.1% percent had only completed the master of nursing. Further, 89.8% of respondents reported no previous pain education (Table 1).

Table 1. Socio-demographic and professional information of respondents. (n=88)

Socio-demographic characteristics	Frequency (%)
Age Group	
<25	26(29.5)
26-28	40(45.5)
>28	22(25.0)
Mean±SD=26.42±3.32	
Sex	
Male	1(1.1)
Female	87(98.9)
Experience in years	
<2	21(23.9)
3-5	48(54.5)
≥6	19(21.6)
Work area	
ICU	59(67.0)
PICU	8(9.1)
ER	21(23.9)
Professional qualification	
Master in nursing	1(1.1)
Bachelor in nursing	46(52.3)
Diploma in nursing	41(46.6)
Previous training on pain management	
Yes	9(10.2)
No	79(89.8)

The table 2 shows that 72.7% of respondents answered that they always performed pain assessments, while 77.3% answered that they always performed reassessments after pain relief. Only 27.3% of nurses always employed non-pharmacological pain

management techniques.

Table 2. Pain assessment performed by respondents. (n=88)			
Variables	**Never n(%)**	**Sometimes n(%)**	**Always n(%)**
Frequency of Pain Assessment	1(1.1)	23(26.1)	64(72.7)
Reassessment performed after Pain Relief	-	20(22.7)	68(77.3)
Using of non-pharmacological management	4(4.5)	60(68.2)	24(27.3)

Table 3 presents barriers related to medical staff as reported by respondents on a 5-point Likert scale, where higher average scores indicate more significant barriers. The most common barriers identified were work overload (3.47±1.01) and time constraints (3.01±0.91). Other barriers were reported less frequently, with mean scores below the average. Notably, the barrier of low priority given to pain management had the lowest mean score of 1.76±0.97, indicating it was the least common issue.

Table 4 illustrates that the common barrier pattern was financial constraints (3.06±0.910), whereas patients or their families' refusal of analgesics presented a less frequent barrier pattern, as indicated by the minimum mean score (2.63 ± 0.94).

Table 5 of the study highlighted the common barrier pattern in the healthcare system were frequent shortages of adequate staffing (3.20 ± 1.01). Moreover, the least significant barrier pattern was the ICU/ER's lack of prioritization for pain management (1.67 ± 0.93).

DISCUSSION

The study shows that 25.4% of respondents routinely highlighted nurses' work overload as the main barrier to effective pain management. This finding is contrary to the study conducted by[6], where 48.4% of respondents routinely mentioned staff work overload as a significant barrier. This may be difference due to different in the study setting as in this study research was conducted in ICU, PICU and ER whereas the

Table 3. respondents' perceived barrier to pain management: medical staff. (n=88)						
Statement	**Never n(%)**	**Seldom n(%)**	**sometime n(%)**	**Often n(%)**	**Routine n(%)**	**Mean±SD**
Inadequate pain assessment	28(31.8)	9(10.2)	32(36.4)	12(13.6)	7(8.0)	2.55±1.28
Inadequate experience with pain control	27(30.7)	22(25.0)	32(36.4)	6(6.8)	1(1.1)	2.22±1.00
Insufficient knowledge about pain control	27(30.7)	16(18.2)	27(30.7)	15(17.0)	3(3.4)	2.44±1.19
Time constraints	6(6.8)	14(15.9)	45(51.1)	19(21.6)	4(4.5)	3.01±0.91
Reluctance to prescribe opioids	14(15.9)	18(20.5)	31(35.2)	20(22.7)	5(5.7)	2.81±1.13
Insufficient communication	13(14.8)	12(13.6)	51(58.0)	10(11.4)	2(2.3)	2.72±0.93
Work overload	5(5.7)	6(6.8)	32(36.4)	32(36.4)	13(14.8)	3.47±1.01
Poor documentation of pain assessment and management	34(38.6)	8(9.1)	37(42.0)	7(8.0)	2(2.3)	2.26±1.12
Low priority given for pain management	49(55.7)	16(18.2)	18(20.5)	5(5.7)	-	1.76±0.97

**Reserved statement*

Table 4. Respondents' perceived barriers to pain management: patients. (n=88)						
Statement	**Never n(%)**	**Seldom n(%)**	**Sometime n(%)**	**Often n(%)**	**Routine n(%)**	**Mean±SD**
Reluctance to report pain	8(9.1)	15(17.0)	56(63.6)	9(10.2)	-	2.75±0.97
Language barrier	6(6.8)	20(22.7)	50(56.8)	11(12.5)	1(1.1)	2.78±0.79
Financial constraint	7(8.0)	10(11.4)	44(50.0)	24(27.3)	3(3.4)	3.06±0.91
Insufficient knowledge of pain control	5(5.7)	28(31.8)	31(35.2)	19(21.6)	5(5.7)	2.89±0.99
Patients' instability	7(8.0)	28(31.8)	35(39.8)	18(20.5)	-	2.72±0.88
Patients/family refusal for analgesics	14(15.9)	18(20.5)	43(48.9)	12(13.6)	1(1.1)	2.63±0.94

**Reserved statement*

Table 5. Respondents' perceived barriers to pain management: healthcare system. (n=88)						
Statement	**Never n(%)**	**Seldom n(%)**	**Sometime n(%)**	**Often n(%)**	**Routine n(%)**	**Mean±SD n(%)**
Strict regulation of opioids	11(12.5)	17(19.3)	37(42.0)	15(17.0)	8(9.1)	2.90±1.11
Inadequate staffing	5(5.7)	14(15.9)	36(40.9)	24(27.3)	9(10.2)	3.20±1.01
Limited stock of different types of opioids	7(8.0)	21(23.9)	41(46.6)	15(17.0)	4(4.5)	2.86±0.94
ICU/ER pain management is not considered important	51(58.0)	21(23.9)	10(11.4)	6(6.8)	-	1.67±0.93
Medication and intervention cost	9(10.2)	21(23.9)	38(43.2)	15(17.0)	5(5.7)	2.84±1.01
Lack of protocol/guidelines for pain assessment	31(35.2)	17(19.3)	27(30.7)	10(11.4)	3(3.4)	2.28±1.16

**Reserved statement*

study conducted by,[6] was only in emergency unit. Furthermore, 35.2% of respondents in the study sometimes identified reluctance to prescribe opioids as a barrier, which is consistent with the study of [6], where 34% of respondents sometimes noted reluctance to prescribe opioids as a barrier. However, 5.7% of respondents responded that they often gave low priority to pain management, which differs from the study of K [7], where 17% of respondents reported giving low priority to pain management often. The reasons for this difference might be due to fact that more than half (52.3%) had completed bachelor degree in the present study, only one fourth (21%) of respondent had complete the bachelor degree.

The current study revealed that 56.8% of respondents sometimes encountered language barriers during pain management, which is not consistent with the study conducted by [7], who reported that 32.5% of respondents occasionally encountered language barriers. This may be due to the fact that the fact that in Nepal, a greater variety of languages might contribute to more frequent language barriers in clinical settings. Moreover, 39.8% of respondents identified patient instability as sometimes affecting pain management. This finding is consistent with[6], where 39.7% of respondents reported that patient instability sometimes impacts pain management. However, 13.6% of respondents often reported refusing analgesics as a barrier, a finding that aligns with the study of [6], where 29.4% of respondents also often reported refusing analgesics.

The findings of this study showed that 42% of respondents reported that strict opioid regulations sometimes hinder pain management, which is consistent with [6], where 49.7% reported a similar concern. Furthermore, 30.7% of respondents in this study indicated they sometimes experienced barriers related to the lack of protocol or guidelines for pain assessment. This finding is similar to that of [6], where 24.8% of respondents reported feeling a barrier to these issues.

CONCLUSIONS

The finding of this study highlights various barriers that hinder critical care nurse from providing optimal pain management. The most significant barriers are associated with the healthcare system, including nurses' excessive workload, financial constraints faced by patients, inadequate staffing, and time limitations. Addressing these systemic challenges is essential to improve the quality of pain management in critical care settings.

Conflict of interest: None

Funding: None

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Citation: Aryal N, Shrestha K, Sapkota DK, Raskoti P. Perceived Barriers Regarding Pain Management in Critically Ill Patients among Nurses Working in Tertiary Hospital. JCMS Nepal. 2025; 21(1): 83-87.