



A Study To Assess The Knowledge And Attitude Of Nursing Students Regarding The Use Of Opioids In Selected Nursing College

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Abstract:

Introduction: Adequate knowledge and positive attitudes about opioids are imperative for nursing students to ensure that pain is managed effectively and an opioid addiction is avoided. Understanding student's perspectives regarding use of opioids and overdoses is important for the improvement of nursing education as well as the care of the patients. The relative rise in the use of opioids has produced numerous challenges and responsibilities for healthcare professionals, particularly nurses. This study aims to determine the knowledge and attitude of nursing student of selected colleges on opioid use. Evaluating their perceptions and awareness is important for promoting safe and effective practices of pain management. By identifying these factors, educational gaps can be recognized, and the curriculum can be strengthened to better prepare future nurses to be prepared in the administration of opioids and patient care.

Aim: The aim of study is to evaluate the knowledge and attitude of nursing students about use of opioids in nursing college.

Materials and Methods: The quantitative research approach was employed in this study, and the descriptive research design was adopted. The study was performed at selected nursing college. A convenience sampling technique was used in the choice of participants. The sample was a population of 100 nursing students. The collected data were analysed and interpreted based on the aforementioned study objectives and using descriptive and inferential statistics.

Conclusion: The study was carried out to assess the knowledge and attitudes of the nursing students who studied in various nursing college. It also sought to increase the level of knowledge by identifying the relationship between knowledge and other variables, hence emphasizing the importance and utilization of the study.

Index Terms - Knowledge, attitude, opioids, Nursing students

I. INTRODUCTION

Opioid use disorder is a major problem from a public health perspective in India and it is especially prevalent in Kashmir in terms of the burden of substance use and an addition-related issues. As recently as the last few years, addiction has become a growing issue in Kashmir Valley, affecting both the individual, the subgroups, and healthcare systems. Among different forms of misuse of substances, opioid misuse has become particularly worrying due to the growing number of dependence, overdose and serious health problems associated with this drug. This situation has assisted opioid use being an important issue in modern healthcare and has pointed out the need for a higher degree of awareness among healthcare professionals.

Pain management is one of the most vital aspects of patient care and opioids remain a large part of treating moderate to severe pain. Although these drugs provide an effective source of relief when used appropriately, there are instead considerable risks involved, including tolerance, dependence, misuse and overdose. For this reason, it is important that healthcare workers have a balanced view of both the therapeutic value of opioids and the potential dangers. In particular, nurses are central to the administration of medications, evaluation of patient responses, education on health problems and early identification of drug misuse or adverse effects.

Nursing students, as future frontline health care providers, must be adequately prepared to manage opioid-related issues in health care settings both in hospitals and in the community. Their knowledge and attitudes toward the use of opioids can strongly impact their clinical decision-making and pain management practices and ability to educate patients safely. Since nurses frequently observe the direct effects of opioid abuse in homes, communities and medical institutions, it is important to ensure that they are equipped with correct knowledge and good professional attitudes. Therefore, the present study intends to determine the knowledge and attitudes of nursing students in some colleges of Rajasthan on the use of opioids, the possible gaps in their knowledge, and to provide evidence that may assist in strengthening the nursing educational system and help improve judgment with regards to the competency in effective control of opioid-related cases.

II. Background of the Study

The opioid crisis is not just an issue of illegal drug use; it also tells about the lack of preparedness in health-system to meet the demands, pain-care routes, patient education, and workforce training. In case clinicians are afraid of opioids too much, pain can be undertreated. In cases of underestimation of risks, bad things happen. Such strains complicate the process of opioid-related decision-making in a particular area of students and the unskilled practitioner.

The published literature has revealed the situation when nursing students and other trainees state that they usually possess an incomplete body of knowledge, feel uncertain about safe prescribing and monitoring, lack the confidence in treating patients with opioid use disorder, and are subject to stigma-based or fear-related attitudes. Educational interventions though have proved that knowledge as well as attitudes may be improved through the use of structured teaching modules. Such findings indicate that undergraduate training is still a strategic location on how to improve future practice.

The current study was created based on this learning requirement. Evaluating the knowledge and attitudes of nursing students in the selected nursing college, the study provides local evidence of readiness to deal with opioid-related care and aids in identifying the gaps in the curriculum that could be filled in with specific teaching and clinical support.

III. Need of the Study

It is evident that a review of the knowledge and beliefs of nursing students regarding opioids prior to them joining the profession is necessary. Poor knowledge may undermine safety of administration, slow adverse event recognition, dilute counseling of patients, and increase risks of either undermining pain treatment or inadequate reassurance of opioids safety.

In the environment where nurses can be requested to attend to the patients with pain, post-surgical services, trauma, palliative, and substance-related complications. Regardless of this fact, local data concerning preparedness of students has been scarce. There was a need to conduct a formal evaluation of whether the present nursing education is adequate in terms of focusing on opioid use, misuse, and risk of overdose, and the role of the nurse in the process of monitoring or not.

This research is also required since the attitudes are as important as the factual knowledge. Clinical behavior, communication, empathy, and decision making may be influenced by fear, stigma or moral discomfort. Knowing the attitude of students will assist educators to develop interventions that enhance student clinical competence, as well as encourage non-judgmental, evidence-based care.

IV. REVIEW OF LITERATURE

Several studies have been conducted to assess pharmacology and nursing student's knowledge and attitude about opioid usage, overdose, and pain management. Madiha Zarif, Hafsa Sattar, Arooj Fatima, et al. Nursing Students' Knowledge and Attitudes About Opioids and the Opioid Overdose Crisis Cross-sectional Study. The study was conducted in Medicare Hospital of Nursing, Multan from December 2023 to December 2024. 100 full-time nursing students were considered as study population. Data were collected using a 34-item questionnaire that evaluated demographic variables, knowledge, attitudes regarding opioids and opioid overdoses, experience with pain management and satisfaction with opioid-related policies. The results confirmed that knowledge scores significantly improved as the students advanced in education, from first to fourth year students. While almost half of the students showed negative attitudes regarding opioids, high school students and above showed a decrease. The study concluded that the knowledge and attitude of nursing students had satisfactory knowledge and moderately positive attitudes on nursing students which improved with academic advancement. It also highlighted the importance of curriculum improvement and practical clinical experiences in order to reinforce the understanding and better patient care.

Hedieh Hatami Sirjani conducted a systematic analysis which focused on knowledge and attitude of the nursing students on the pain management and use of opioid. The work was made up of three projects. The first project was an review of the effects of educational interventions on knowledge and practices behavior of healthcare professionals in regard to prescription opioids. The second project was a qualitative one that attempted to learn about nursing students experience, self-efficacy and knowledge regarding opioid use for pain management and their perceived need for more education. The third is the implementation and evaluation of an educational module for undergraduate nursing students. The findings demonstrated that the educational interventions positively impacted on the healthcare providers knowledge and clinical practice. Nursing students have been found to have limited knowledge and low confidence in opioid use for pain management and express a strong preference to have comprehensive educational opportunities. The education module had a significant positive impact on student's knowledge, attitude, perceived behavioral control and intentions in regard to opioid use. The study concluded that there should be structured and comprehensive opioid education as part of undergraduate healthcare education.

Laura F. Lewis and Lauren Jarvis researched the experience and attitude of undergraduate nursing students towards working with patients with opioid use disorder in a clinical setting by using a qualitative study. Using a purposive sampling method, the researchers recruited eleven senior nursing students from a public university in New England. Semi-structured interviews were conducted until data saturation was reached and Krippendorff's qualitative content analysis was used to identify emerging themes. Six major themes were identified after the analysis, even though one arts person had died: navigating ethical dilemmas, becoming comfortable with time and experience, avoiding difficult discussions, learning through clinical scenarios in real life, witnessing discriminatory care, and being aware of bias and stigma. The study revealed that nursing students frequently encountered comfort, bias and moral struggle, especially in clinical maternity care. It was concluded that nursing education should incorporate ability to act in communication in a practical way, ways to manage hard clinical situations, and a way to decrease stigma and moral distress. The authors also indicated the importance of nurses being positive role models by showing nonjudgmental attitudes and behaviors.

Overall, nursing students' knowledge and attitudes related to opioid use are influenced by academic exposure, clinical experience, and education interventions, as suggested by the reviewed studies. While many students exhibit improving levels of knowledge as they work through their studies, a difference fares between confidence, practicalities of preparedness, and attitude. These findings support the importance of strengthening nursing curricula with focused education to focus on opioid use, pain management, preventing opioid overdose, and reducing stigma to better prepare future nurses to care for and patient care.

The reviewed studies collectively suggest that the nursing student knowledge and attitudes about opioid use are not solely determined by teaching and learning theories, but also the clinical exposure, organized educational modules and by directly interacting with the patient dealing with opioid use disorder. As students progress through their academic journey and develop increased levels of practical experience, their knowledge levels tend to improve and negative attitudes over time are reduced. These results suggest that in nursing curricula, there is a need to include specific training in opioid pharmacology, safe pain management, prevention of opioid overdose, reducing stigma, and a patient-centered communication approach to prepare the student for clinical practice.

V. AIMS AND OBJECTIVES OF THE STUDY

- To assess the status of level of knowledge about opioids use among Nursing students of selected Nursing college
- To inventory the student perceptions toward usage of opioid in solving pain complaints among the students of the selected colleges.
- To analyze the relationship between certain demographic parameters such as age and clinical exposure with knowledge with regard to opioid use by nursing students.
- To explore the association of selected demographic variables with selected opioid use attitude among nursing students.

VI. Hypothesis

There is significant association between the knowledge and attitudes of the nursing students with their selected demographic variables.

VII. Assumptions

The study assumes the nursing students have some degree of knowledge about opioid use and have attitudes towards the use of opioids.

VIII. Materials and Methods

The study was conducted using a quantitative research design that was descriptive in nature at selected nursing college.

The sample population involved the selected nursing colleges in their last-semester nursing students. A convenience sampling method was adopted and 100 nursing students who qualified to be included in the sample were sampled.

The criteria were inclusive in that they included:

- (1) nursing students were enrolled in the final semester,
- (2) were willing to take part, and
- (3) had participated in at least one clinical posting.

The exclusion criteria were unavailability during the data collection, and unwillingness to take part. Some of the characteristics of independence variables that were selected were age, gender, and length of clinical exposure. Knowledge and attitude to opioid use were dependent variables. Towards the objectives of the study, descriptive and inferential statistics were adopted to analyse the data.

IX. RESULTS

The findings are presented below through reconstructed journal-style tables and figures based on the data reported in the source paper.

Table 1. Grading scale and score interpretation

S. No.	Grade	Score	Percentage
1	Inadequate	≤ 09	<50%
2	Moderately adequate	10–13	50–72%
3	Adequate	>13	>72%

Scores less than 50% were categorized as inadequate, scores between 50% and 72% as moderately adequate, and scores above 72% as adequate.

Table 2. Knowledge regarding opioids

Grade	Number	Percentage
Inadequate	38	38%
Moderately adequate	62	62%
Adequate	0	0%

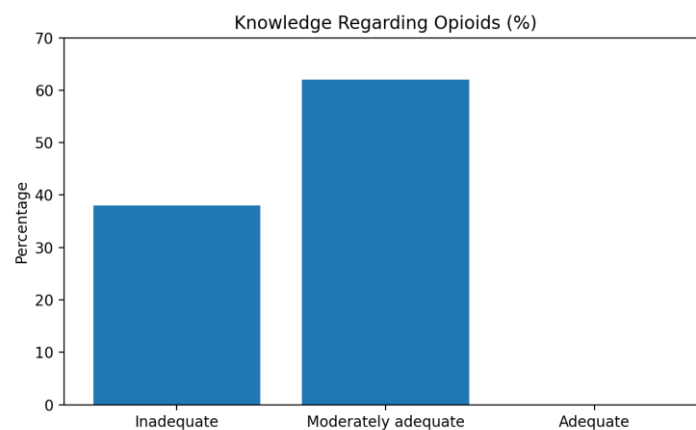


Figure 1. Knowledge regarding opioids (%)

A majority of nursing students (62%) had moderately adequate knowledge, 38% had inadequate knowledge, and none demonstrated adequate knowledge.

Table 3. Total knowledge score

Score obtained	Total score	Percentage
981	1800	54.5

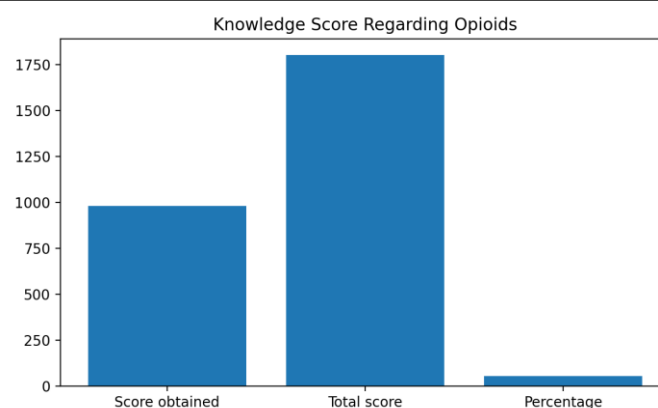


Figure 2. Knowledge score regarding opioids

The total knowledge score achieved by the study group was 981 out of 1800 (54.5%), indicating an average overall level of knowledge regarding opioids.

Table 4. Attitude regarding opioids

Domain	Yes	No
Confidence and knowledge in opioid administration	70%	30%
Attitudes toward opioid use and risks	76%	24%
Role and responsibilities in patient education and monitoring	72%	28%

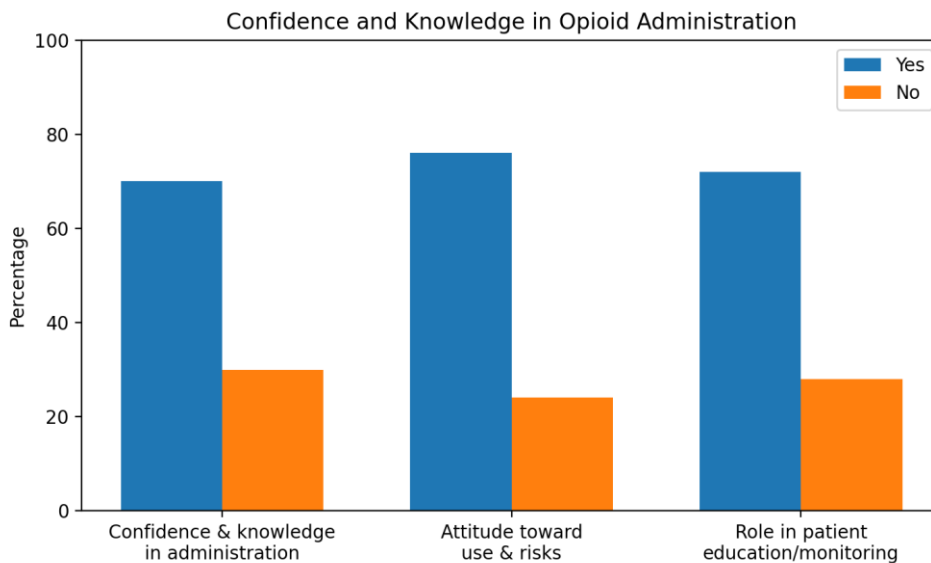


Figure 3. Confidence and knowledge in opioid administration

Most students reported confidence and knowledge in opioid administration (70%), a positive orientation toward opioid use and risk awareness (76%), and recognition of the nurse's role in patient education and monitoring (72%).

Table 5. Attitudes toward opioid use and risks

Variable	Yes	No
Opioids are too risky to be used for pain management in most cases.	52%	48%
Opioid use in pain management is often underutilized due to fear of addiction.	60%	40%
Overall positive attitude toward opioid use for pain management.	72%	28%

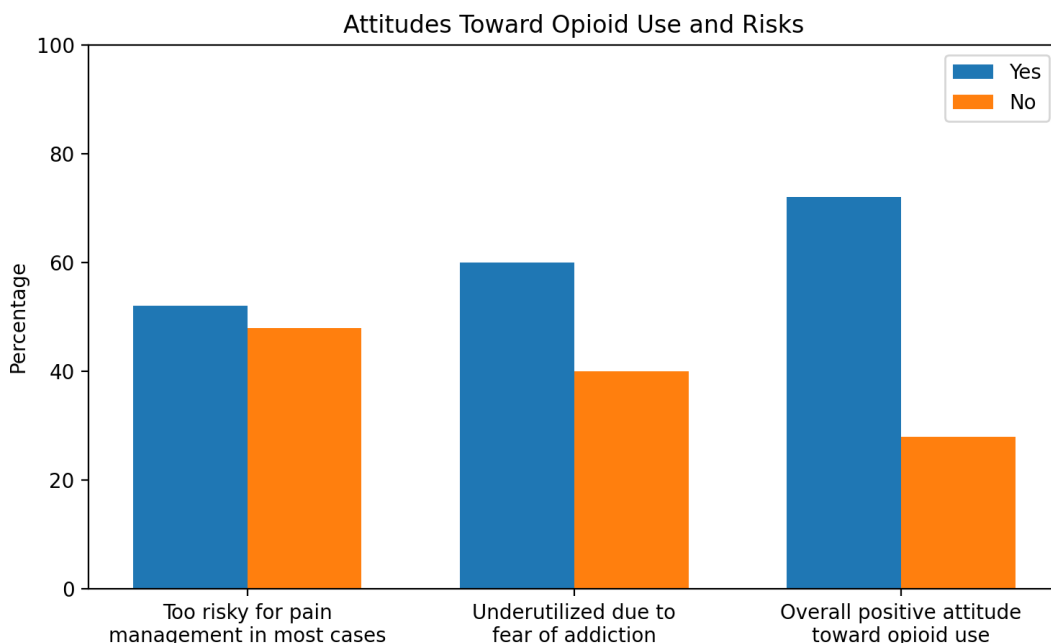


Figure 4. Attitudes toward opioid use and risks

These findings reflect mixed attitudes. More than half believed opioids are underutilized because of fear of addiction, while about half also considered opioids too risky for routine pain management.

Table 6. Perspectives on patient monitoring and nursing roles in opioid management

Variable	Yes	No
Patients receiving opioids should be closely monitored to prevent addiction.	50%	50%
Nurses play a critical role in educating patients about and preventing opioid misuse and addiction.	62%	38%

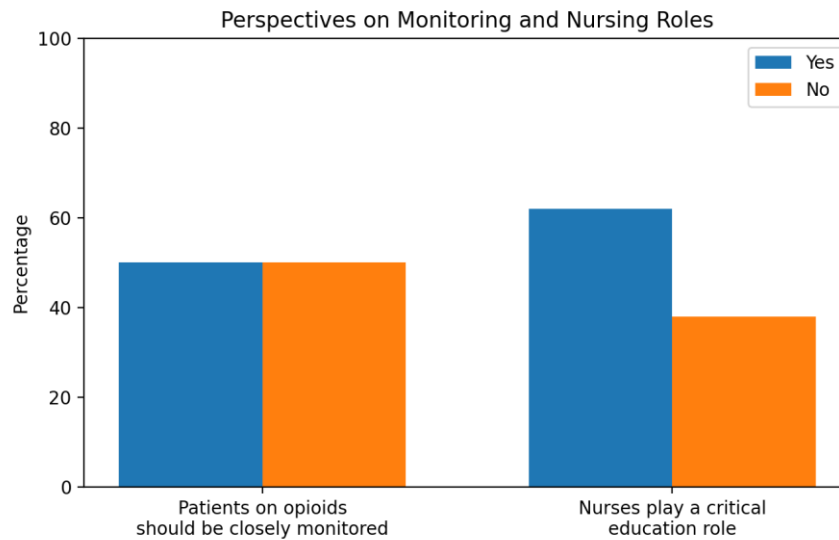


Figure 5. Perspectives on monitoring and nursing roles

Half of the respondents endorsed close monitoring of patients receiving opioids, and nearly two-thirds recognized the nurse's educational role in preventing misuse and addiction.

Table 7. Association of knowledge with duration of clinical exposure

Duration of clinical exposure	Yes	No	Total	df	Chi-square calculated	Chi-square tab	Interpretation
3–6 months	801	639	1440	1	8.7658	3.841	Highly significant
7–10 months	170	190	360				
Total	971	829	1800				

Knowledge was significantly associated with duration of clinical exposure, indicating that clinical experience may contribute to improved understanding of opioid-related care.

Table 8. Association of knowledge with gender

Gender	Yes	No	Total	df	Chi-square calculated	Chi-square tab	Interpretation
Male	408	348	756	1	0.133	3.841	No significant difference
Female	573	471	1044				
Total	981	819	1800				

No significant association was reported between knowledge and gender, suggesting that knowledge gaps were broadly distributed across male and female participants.

X. Discussion

The research reveals that the knowledge concerning the use of opioids among nursing students was average, and not strong. The lack of any participant in the sufficient knowledge group is interesting and contributes to the question that was raised in earlier research and found that undergraduate students might lack the necessary level of readiness to make decisions related to opioids and monitor them. The attitude results were better as compared to the results with regard to knowledge, but they indicated the presence of ambivalence. The percentage of students who viewed opioids as risky is large and most of them also believed that opioids could be under-used due to the fear of addiction. This trend implies that students understand the clinical risks linked to opioids that may endanger the people around them but possibly, lack the required clinical trust to differentiate between proper and abusive use of opioids. The correlation of knowledge and clinical exposure is a significant discovery. It indicates that the experience of direct patient care could reinforce the knowledge on the administration of opioids and safety surveillance in addition to pain management. This is consistent with what has been presented before in literature that experiential learning, simulation and structured clinical teaching may enhance competence and diminish stigma. Combined with the results, they support the importance of nurses curriculum extending beyond a simple pharmacology. Students need practice-based instruction on opioid stewardship, patient communication, how to recognize the risk of an overdose, the monitoring parameters, safe storage and disposal instruction, and the treatment of patients having opioid use disorder. A curriculum that incorporates these competencies can be used to help foster safer and more understanding practice.

XI. Nursing Education and Implication

Nursing programs need to think about specific teaching on opioid pharmacology, indications, contraindications, adverse effects, dependence, overdose identification, and harm-reduction. Skill retention and confidence in practice can be enhanced by using simulations and discussions of cases. Clinical staff nurses and clinical instructors are expected to provide non-stigmatizing language that is evidence-based when attending to patients under opioids or those affected by opioid use disorder. This is particularly of importance since the culture of students in form of their attitudes is influenced not merely by lectures but also by the observed culture in clinical settings. Periodic assessment of the pain-management skills of the students and the inclusion of the opioid-related material in the assessments, workshops, or the further education route may also be beneficial to the institutions.

XII. Limitations

The sample size was also restricted since a convenient sample was used and the study was confined to one institutional setting which limits the ability to generalize. The sample was small, and the research was based on the reported questionnaire information but not on the observed clinical performance. Nevertheless, the results also provide valuable local education preparedness understanding.

XIII. Conclusion

The research closes by finding the study indicated that nursing students within the chosen environment possessed inappropriate knowledge and confused attitudes towards opioid use. Despite the fact that the role of the nurse in patient education and monitoring was acknowledged by many, the knowledge gaps were present. Empowering the undergraduate nursing curricula by targeted opioid education, simulation, and clinically-oriented teaching is a critical measure to equip future nurses to offer safe, balanced, and empathetic pain care and reduce the risks of misuse and addiction.

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