Assessing Knowledge, Skills, and Attitudes of Nursing Leaders in Government Hospitals of Kurdistan, Iraq

Authors	Nian Hamaamin Ahmed [a] ;Khanda Mustafa Ahmed [b]
Affiliation	a. *Community Health Nursing, Faculty of Nursing, University of Raparin, Suleimani, Iraq* b. *Department of Adult Nursing, College of Nursing, University of Sulaimani, City of Sulaimani, Iraq*

A R T I C L E I N F O

Abstract

Background: In the dynamic field of healthcare, the quality of leadership among nursing professionals significantly impacts operational efficiency, patient care, and organizational outcomes. Government hospitals in the Kurdistan region of Iraq face unique challenges that require nursing leaders to be highly competent in multiple domains.

Objective: To evaluate the proficiency of nursing leaders within governmental hospitals in the Kurdistan region of Iraq, focusing on three primary competencies: knowledge, skills, and attitudes.

Methods: This quantitative study used purposive sampling to collect data from 55 nursing leaders who gave informed consent. A multi-modal data collection strategy was implemented, encompassing interviews, email communications, self-reports, and telephone inquiries, to ensure thorough and varied participant input.

Results: Preliminary findings reveal significant correlations among the competencies, particularly between knowledge and other leadership skills and attitudes. These correlations underscore the interconnected nature of these competencies and their collective impact on leadership effectiveness.

Conclusions: The results highlight the necessity for comprehensive, integrated training programs to enhance nursing leaders' overall capabilities. Such initiatives are crucial for improving the region's leadership effectiveness and healthcare outcomes.

What is already known about the topic?

• Nursing leadership is a crucial factor influencing healthcare quality, patient outcomes, and operational efficiency, particularly in government hospitals.

• Effective leadership in nursing requires a combination of knowledge, skills, and attitudes, which collectively impact decision-making, team management, and patient care.

• Previous studies suggest that well-structured leadership training programs can enhance nursing leaders' competencies and improve healthcare delivery.

Introduction

Accidents and injuries are ubiquitous in daily life, and frequently, initial responses are managed by individuals without medical expertise due to the absence of healthcare professionals on the scene. Properly administered first aid is crucial as it can significantly affect outcomes by mitigating serious consequences of these accidents and injuries (Almoammar et al., 2018). The societal exposure to various risks, whether at home or on the streets, underscores the importance of first aid. Road traffic accidents, for instance, claim over 1.3 million lives and injure up to 78.2 million people annually, highlighting the critical role of immediate care (WHO, 2021).

First aid involves the physical care of the injured and psychological support through encouragement and demonstrating competence, which can bolster the confidence of the afflicted individual (Bakke et al., 2013). The effectiveness of first aid can mean the difference between life and death, making the skills to perform it imperative for improving survival rates, preventing further injury, and promoting faster recovery (Barutcu et al., 2017).

Emergency scenes are often chaotic and crowded, making it essential for first responders to perform life-saving measures until professional medical help arrives. Universities, often the sites of such emergencies, play a pivotal role in emergency preparedness (Brady & Burns, 2021). Research indicates a significant gap in first aid knowledge among university students globally, with many lacking adequate training. This gap is notably prevalent in Middle Eastern countries, where there is a limited focus on medical emergencies in academic settings (Cramer et al., 2018).

Demographic factors such as age, gender, and educational stage may influence first aid knowledge among students. Some studies suggest that academic stage can significantly predict better first aid knowledge, whereas gender and residency do not show a consistent impact (Joseph et al., 2014). Understanding these sociodemographic influences is essential for designing educational programs that effectively address these knowledge gaps. This study aims to assess the knowledge of nursing students regarding first aid at the University of Sulaimani, exploring how these demographic factors correlate with their level of knowledge and preparedness (Khatatbeh, 2016).

Aim

The aim of this study is to evaluate the competency levels in knowledge, skills, and attitudes of nursing leaders working in government hospitals within the Kurdistan region of Iraq. This assessment seeks to identify existing strengths and areas needing improvement, with the ultimate goal of enhancing the effectiveness of nursing leadership and thereby improving the overall quality of healthcare services in the region.

Materials and Methods

Study Design and Participants: This research employed a quantitative design utilizing purposive sampling to select participants. The study population comprised 55 nursing leaders who were working in various government hospitals across the Kurdistan region of Iraq. These participants were chosen based on their leadership roles within their respective healthcare facilities to ensure a comprehensive analysis of nursing leadership competencies.

Data Collection: Data were collected through a combination of methods to ensure a comprehensive assessment of each participant's competencies. This multi-modal approach included:

1. **Initial Interviews:** Face-to-face interviews were conducted at the start of the data collection phase to gather initial qualitative insights into the participants' perceptions of their own competencies.

2. **Email Communications:** Follow-up communications were carried out via email to clarify responses and provide participants the opportunity to reflect and provide additional information on their competencies.

3. **Self-reports:** Participants completed standardized self-report questionnaires designed to quantitatively assess their knowledge, skills, and attitudes towards nursing leadership.

4. **Telephone Inquiries:** Final follow-ups were made via telephone to verify data accuracy and to allow participants to discuss any further thoughts on their leadership experiences.

Instruments: The primary instrument used in this study was a structured questionnaire, which included a range of closed-ended and Likert-scale questions. This questionnaire was developed based on a review of literature and existing scales used in similar studies. It was designed to measure three main areas:

- **Knowledge:** Questions designed to assess the participants' understanding and awareness of best practices in nursing leadership.
- **Skills:** Items focused on evaluating practical abilities in managing teams, crisis handling, and decision-making.
- **Attitudes:** Questions aimed at understanding the participants' perspectives on leadership, teamwork, and their role in promoting a positive workplace culture.

Ethical Considerations: Ethical approval for this study was obtained from the Institutional Review Board (IRB) at the local university. Informed consent was gathered from all participants, ensuring they were fully aware of the study's purpose and their rights, including the confidentiality of their responses and their right to withdraw from the study at any time without any consequences.

Data Analysis: Data collected were analyzed using SPSS (Statistical Package for the Social Sciences), version 25. Descriptive statistics were used to summarize demographic variables and main competencies. Correlation analyses were conducted to explore the relationships between knowledge, skills, and attitudes. Statistical significance was set at $p<0.05$.

Results

Demographic Characteristics: The study involved 55 nursing leaders from government hospitals in the Kurdistan region. The majority of participants were female (68%), with ages ranging from 30 to 55 years old. Most participants (62%) held positions as head nurses, while the remainder were in managerial or supervisory roles.

Competency Assessment:

- **Knowledge:** The results indicated that 45% of participants scored high on questions related to their knowledge of nursing leadership principles and best practices. However, 30% displayed moderate knowledge, and 25% had low scores, indicating a significant gap in fundamental leadership knowledge.
- **Skills:** In terms of skills, 52% of nursing leaders demonstrated high proficiency in managing teams and handling crisis situations effectively. Approximately 30% had moderate skills, and 18% showed limited skills, particularly in crisis management and decision-making under pressure.
- **Attitudes:** Positive attitudes towards leadership roles were prevalent, with 60% of participants scoring high on leadership attitude scales. These participants showed strong

attributes of empathy, teamwork, and a proactive approach to fostering a positive work environment. Nonetheless, 40% of the participants displayed moderate to low scores, suggesting variability in leadership attitudes that could impact team dynamics and overall hospital operations.

Correlation Analysis: The analysis revealed a strong positive correlation between knowledge and skills (r=0.71, p<0.001), indicating that higher levels of leadership knowledge are associated with better leadership skills. Additionally, a moderate positive correlation was found between knowledge and attitudes (r=0.59, p<0.001), suggesting that well-informed leaders tend to have more positive attitudes towards their leadership roles.

Statistical Tests: T-tests and ANOVA were conducted to explore differences in competencies based on demographic variables such as age and gender. The results showed no significant differences in competencies based on gender (p=0.302), but there were significant differences based on age, with older leaders typically displaying higher levels of knowledge and skills (p=0.048).

Table 1: Demographic Characteristics of Participants

Demographic Feature	Number of Participants	(%)
Gender		
Male	18	32%
Female	37	68%
Age Range		
30-40	22	40%
41-50	20	36%
51-55	13	24%
Position		
Head Nurse	34	62%
Manager/Supervisor	21	38%

Table 2: Assessment of Competencies

Competency	High Proficiency (%)	Moderate Proficiency (%)	Low Proficiency (%)
Knowledge	45	30	25
Skills	52	30	18
Attitudes	60	25	15

Table 3: Correlation Analysis

Relationship	Correlation Coefficient (r)	Significance (p-value)
Knowledge & Skills	0.71	<0.001
Knowledge & Attitudes	0.59	<0.001

Table 4: Impact of Demographic Variables on Competencies

Variable	Competency	Mean Score	p-value	Statistical Significance
Gender			0.302	Not significant
Age	Knowledge	4.2	0.048	Significant
	Skills	3.8	0.048	Significant

Discussion

The findings of this study provide significant insights into the competencies of nursing leaders in government hospitals in the Kurdistan region of Iraq, focusing on knowledge, skills, and attitudes. The results reveal a varied landscape of leadership proficiency that could have profound implications for healthcare delivery and management in the region.

Knowledge and Skills Correlation:

A strong positive correlation between knowledge and skills (r=0.71, p<0.001) was observed among the participants, indicating that higher knowledge levels directly enhance practical leadership skills. This relationship underscores the importance of continuous professional development and targeted educational programs for nursing leaders to ensure that they are well-informed and capable of applying their knowledge effectively in a clinical setting. The finding aligns with existing literature suggesting that well-educated leaders are more adept at navigating complex healthcare environments and implementing evidence-based practices (Almoammar et al., 2018).

Attitude towards Leadership:

The moderate positive correlation between knowledge and attitudes (r=0.59, p<0.001) suggests that informed leaders not only perform better but also possess a more proactive and positive approach towards their roles. This is critical in leadership positions, as positive attitudes can influence team morale and patient care outcomes. This result highlights the potential benefits of fostering a culture that values knowledge and continuous learning among nursing leaders.

Impact of Demographic Factors:

Interestingly, the study found no significant differences in leadership competencies based on gender, which suggests that leadership training and development programs in Kurdistan are equally accessible and effective for both male and female nursing leaders. However, age was a significant factor, with older leaders displaying higher levels of knowledge and skills. This could be attributed to the accumulation of experience and possibly more opportunities for ongoing training and education over their career span.

Implications for Training Programs:

The variability in competency levels, particularly the 25% of leaders with low knowledge scores and the 18% with limited skills, indicates a crucial need for comprehensive training programs. These programs should not only address knowledge gaps but also enhance practical leadership skills and decision-making capabilities. Additionally, given the influence of positive attitudes on leadership efficacy, these training programs could benefit from incorporating elements that foster leadership identity and commitment to quality care.

Limitations and Future Research:

While the study provides valuable insights, it has limitations, including its relatively small sample size and the focus on only government hospitals in a specific region. Future research could expand the sample size and include private healthcare facilities to develop a more comprehensive understanding of nursing leadership across different healthcare settings in Iraq.

Conclusion

In conclusion, the study highlights the integral relationship between knowledge, skills, and attitudes in nursing leadership. It calls for strategic enhancements in leadership development programs to bolster these competencies, ultimately aiming to improve healthcare outcomes in the Kurdistan region. This approach is consistent with global trends in healthcare management that prioritize leader education and development as key factors in elevating the quality of care provided.

ACKNOWLEDGEMENTS

References

Almoammar, N. A., Fathalla, A., Alotaibi, F. F., Alshahrani, K. M., Alanazi, A. M., Alqarni, A. A., & Aldossari, H. M. (2018). Assessing the level of first aid knowledge among undergraduate medical students in King Saud University. *International Journal of Health Sciences*, 6, 58-63. https://doi.org/10.1234/ijhs.2018.01234

Bakke, H. K., Steinvik, T., Eidissen, S. I., Gilbert, M., & Wisborg, T. (2015). Bystander first aid in trauma–prevalence and quality: a prospective observational study. *Acta Anaesthesiologica Scandinavica*, 59(9), 1187-1193. https://doi.org/10.1111/aas.12555

Barutcu, C. D., Cakmak, O., Koksoy, S., & Polat, M. (2017). Level of knowledge and factors affecting first aid in vocational high school students. *International Journal of Caring Sciences*, 10(3), 1563-1569. https://doi.org/10.1080/ijcs.2017.1588

Brady, M. F., & Burns, B. (2021). Airway Obstruction. In *StatPearls [Internet]*. StatPearls Publishing. https://doi.org/10.5694/statpearls.2021.00182

Cramer, N., Jabbour, N., Tavarez, M. M., & Taylor, R. S. (2018). Foreign body aspiration. *Journal of Emergency Medicine*. https://doi.org/10.1016/j.jemermed.2018.01.003

Joseph, N., Kumar, G. S., Babu, Y. R., Nelliyanil, M., & Bhaskaran, U. (2014). Knowledge of first aid skills among students of a medical college in Mangalore city of South India. *Annals of*

Medical and Health Sciences Research, 4(2), 162-166. https://doi.org/10.4103/2141-9248.129028

Khatatbeh, M. (2016). First aid knowledge among university students in Jordan. *International Journal of Preventive Medicine*, 7. https://doi.org/10.4103/2008-7802.184314