Original Article :

Head Nurses' Perceptions of Factors Affecting Quality of Nursing Care in the Riyadh Region: A Cross-sectional Study

Abdulrhman Albougami[1]
1. Department of Nursing Administration, College of Nursing, Majmaah University, Al-Majmaah 11952, Saudi Arabia.

Received on Sep 04, 2024, accepted for publication on Oct 17, 2024, dx.doi.org/10.5455/mjhs.2025.02.005

Corresponding author:
Abdulrhman Albougami, Associate Professor, Department of Nursing Administration, College of Nursing, Majmaah University, Al-Majmaah 11952
Saudi Arabia, Email: a.albougami@mu.edu.sa

OPEN ACCESS Distributed under Creative Commons CC BY-NC-ND 4.0

Abstract

Background and Aims:
Delivering quality nursing care is an important priority for nursing heads worldwide. This study explored the perceptions of head nurses regarding factors affecting the quality of nursing care in the Riyadh region.

Methods:
This cross-sectional study used a convenience sampling technique to randomly select head nurses from 10 hospitals (n=220). Eligible participants were asked to complete a 22-item online questionnaire on socio-demographics and rated factors affecting the quality of nursing care on a 5-point Likert scale. Data analysis was conducted using descriptive statistics and bivariate (two-tailed) Pearson's correlations with SPSS software (version 27.0).

Results:
This study included 176 head nurses, mostly males (65.3%), aged 30 or older (73.9%), married (57.4%), with a bachelor's in nursing (43.2%), and extensive nursing and leadership experience. Significant positive associations were observed between age and marital status (p=0.027), education level (p<0.001), years of nursing practice (p<0.001), and years of nurse leadership (p<0.001). Key factors impacting nursing care quality included work experience (mean, standard deviation [SD]: 3.040 [1.341]), satisfaction (3.006 [1.263]), and work-related burnout (3.006 [1.320]). Workload, resources, location, and language barriers had minimal impact.

Conclusion:
This study found a significant association between socio-demographic factors and the quality of nursing care. Head nurses perceived that work experience, satisfaction, and work-related burnout were the key factors affecting the quality of nursing care. Furthermore, organizational support was key to improving the quality of nursing care. Collaboration between government and facility managers may serve as a potential approach to improving nursing care standards in the Riyadh region.

Keywords:
Factors, head nurses' perception, quality of nursing care, Riyadh region

Introduction:

Nursing care is the most important component of the healthcare system. Studies indicate that the quality of nursing care varies significantly across different countries, resulting in suboptimal care for many patients.[1] As a result, improving the quality of nursing care is crucial for enhancing patient outcomes and is a priority for healthcare systems around the world.[1,2] Several studies have reported various personal, professional, and workplace-related factors that influence the quality of care.[2–6]

Nursing professionals play a pivotal role in providing high-quality care and improving healthcare values.[7,8] A qualitative case study conducted in Peshawar identified several factors affecting the quality of nursing care in intensive care units (ICUs), including aspects related to nurses, patients, their families, administration, the working environment, and ICU resources.[9] Similarly, a study involving 784 registered nurses from three hospitals in China found that the nursing practice environment, psychological empowerment, and work engagement positively impacted the quality of nursing care, with the practice environment having the most significant effect.[10] This highlights the importance of supportive work settings for nurses to enhance care quality.

Head nurses are pivotal in steering organizations toward growth, achieving goals, and promoting excellence in the nursing field by providing high-quality care.[11] Moreover, their direct involvement in patient care and nursing experience enables them to evaluate the quality of care and stay informed about global nursing developments.[12] Previous studies have explored the quality of nursing care from the perspective of patients, nursing professionals, and physicians,[4,7,13] but none have focused on the factors influencing care quality from the perspective of head nurses. This research gap underscores the necessity to understand the head nurses' insights on the quality of nursing care. Therefore, this study sought to explore the factors affecting the quality of nursing care as perceived by head nurses practicing in the Riyadh region.

Methods:

Study Design and Setting:

This descriptive cross-sectional study was conducted in 10 public hospitals within the Riyadh region.

Study Population:

This study included head nurses with a diploma, bachelor's, master's, or doctorate who had a minimum of one year of nursing practice and leadership experience and who expressed their willingness to participate. A total of 220 head nurses were randomly selected from 10 hospitals using conveni-

ence sampling, with the number of nurses from each facility varying from 10 to 20 based on the workforce size and availability. This sampling method was used to eliminate selection bias and ensure a balanced representation of profile variables, including age, sex, experience, and education, for each participant.

Survey Questionnaire:

A 22-item survey questionnaire was developed after an extensive literature review to explore factors influencing the quality of nursing care . This instrument was specifically designed to obtain valuable insights into the factors affecting the quality of nursing care, as perceived by head nurses in Riyadh. Participants' perceptions towards the individual questions were recorded using a five-point Likert scale, ranging from 1 (strongly agree) to 5 (strongly disagree). Experts (i.e., researchers, nursing educators, nurses, and nurse leaders) confirmed the instrument's validity. The revised items were subsequently administered to a group of 10 nurses for reliability assessment, and three nursing experts further analyzed the responses. The final questionnaire had Cronbach's alpha of 0.863, indicating its suitability for research purposes. The questionnaire was administered online to all the study participants and required approximately 8 to 15 minutes to complete.

Outcome Measures:

The survey questionnaire was used to collect data on socio-demographic characteristics (age, sex, marital status, education level, work experience, and years of nurse leadership). Additionally, it collected head nurses' perceptions on factors affecting the quality of nursing care, and their recommendations for an improvement action plan.

Statistical Analysis:

The socio-demographic characteristics of the study participants were analyze using descriptive statistics. Categorical variables were presented as frequencies and percentages, while continuous variables were summarized using means and standard deviations (SDs). Bivariate (two-tailed) Pearson's correlation coefficients were used to measure the significance of the relationships between the factors. The data analyses were conducted using the Statistical Package for Social Sciences (SPSS) version 27.0 (IBM Corporation, New York, USA). A p-value of less than 0.05 was considered statistically significant.

Ethical Statement:

The protocol and the questionnaire used for the study were reviewed and granted an exemption by the Institutional Review Board (IRB number: D21-423E). All participants were provided with explanations about the aim of the study and were assured

of anonymity, privacy, safety, and confidentiality, as well as their right to withdraw from the study at any time. All individuals provided their written informed consent before participation.

Results:

Overall, 220 head nurses were recruited for the study. Of these, 176 (80%) head nurses responded to the questionnaire. Most participants were male (65.3%), aged 30 years and above (73.9%), and married (57.4%). Among head nurses, 43.2% held a bachelor's degree in nursing, 73.9% had nursing experience of 10+ years, and 69.8% had 5+ years of leadership experience (Table 1).

Table 1: Socio-demographic Characteristics of Participating Head Nurses:

Characteristics	Total participants (N=176)
Age group (in years), n (%)	
24–29	46 (26.1%)
30–34	71 (40.3%)
35–39	49 (27.9%)
≥40	10 (5.7%)
Sex, n (%)	
Male	115 (65.3%)
Female	61 (34.7%)
Marital status, n (%)	
Married	101 (57.4%)
Single	60 (34.1%)
Divorced	15 (8.5%)
Education level, n (%)	
Nursing diploma	47 (26.7%)
Bachelor's	76 (43.2%)
Master's	49 (27.8%)
Doctorate	4 (2.3%)
Work experience (in years), n (%)	
1–9	46 (26.1%)
10–19	100 (56.8%)
20–30	28 (15.9%)
>30	2 (1.1%)
Years of nurse leadership, n (%)	
1–4	53 (30.1%)
5–9	76 (43.2%)
10–14	40 (22.7%)
15–20	7 (4.0%)

Correlation between Socio-demographic Variables:

Pearson's correlation analysis revealed that age was positively associated with marital status (p=0.027), education level (p<0.001), years of nursing practice (p<0.001), and years of nurse leadership (p<0.001). Education level was positively correlated with both years of nursing practice (p<0.001) and nurse leadership (p<0.001). Additionally, years of nursing practice was positively associated with nurse leadership (p<0.001) (Table 2).

Table 2: Correlation between Socio-demographic Variables (N=176):

		Sex	Age	Marital status	Education level	Years of nursing practice	Years of nurse leadership
Sex	Pearson Correlation	1	-0.013	-0.022	0.023	-0.020	-0.077
	Sig. (2-tailed)	–	0.861	0.772	0.762	0.790	0.310
Age	Pearson Correlation	-0.013	1	-0.166*	0.396**	0.451**	0.480**
	Sig. (2-tailed)	0.861	–	0.027	<0.001	<0.001	<0.001
Marital status	Pearson Correlation	-0.022	-0.166*	1	-0.111	-0.011	-0.037
	Sig. (2-tailed)	0.772	0.027	–	0.141	0.886	0.625
Education level	Pearson Correlation	0.023	0.396**	-0.111	1	0.356**	0.344**
	Sig. (2-tailed)	0.762	<0.001	0.141	–	<0.001	<0.001
Years of nursing practice	Pearson Correlation	-0.020	0.451**	-0.011	0.356**	1	0.466**
	Sig. (2-tailed)	0.790	<0.001	0.886	<0.001	–	<0.001
Years of nurse leadership	Pearson Correlation	-0.077	0.480**	-0.037	0.344**	0.466**	1
	Sig. (2-tailed)	0.310	<0.001	0.625	<0.001	<0.001	–

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

Factors Affecting the Quality of Nursing Care:

Participants identified work experience, satisfaction, and burnout as key factors influencing the quality of nursing care (Table 3).

Table 3: Factors Affecting the Quality of Nursing Care (N=176):

	Mean (SD)
Experience is necessary in enhancing the quality of care	3.040 (1.341)
Dissatisfied nurses are more likely to deliver low quality of care	3.006 (1.263)
Work burnout is more likely to lead to medication errors and patient dissatisfaction	3.006 (1.320)
A time-constrained nurse is not likely to meet all patients' needs	2.898 (1.247)
Lack of development infrastructure denies nurses the chance of professional development	2.875 (1.308)
A lack of appropriate regulatory measures contributes to poor nurse performance	2.869 (1.301)
Lack of effective communication with patients impairs service provision	2.852 (1.288)
A huge workload makes it difficult for a nurse practitioner to provide patient-centered care effectively	2.750 (1.290)
Scarcity of resources compromises service delivery	2.682 (1.224)

Remoteness negatively affects accessibility of patients by community nurses	2.580 (1.178)
Language barrier leads to poor communication with patients, and this affects the quality of care offered by a nurse	2.511 (1.260)

SD, Standard deviation.

Relationship between Socio-demographic Variables and Factors Affecting the Quality of Nursing Care:

Bivariate correlation analysis revealed significant positive associations were observed between age and marital status (p=0.027), education level (p<0.001), years of nursing practice (p<0.001), and years of nurse leadership (p<0.001) (Table 4).

Table 4: Bivariate Correlations between Socio-demographic Variables and Factors Affecting the Quality of Nursing Care (N=176):

	Sex	Age	Marital status	Education level	Years of practice	Years of leadership
Remoteness	0.723	<0.001**	0.022*	0.088	<0.001**	0.235
Huge workload	0.312	<0.001**	0.079	0.020*	0.011*	0.792
Time constraint	0.267	<0.001**	0.020*	0.009**	0.028	0.048*
Lack of effective communication	0.712	<0.001**	0.157	<0.001**	0.020	0.033*
Language barrier	0.784	<0.001**	0.269	0.934	0.421	0.541
Scarcity of resources	0.838	<0.001**	0.005**	0.015*	0.256	0.402
Experience	0.512	<0.001**	0.408	0.002**	0.014*	0.042*
Lack of development infrastructure	0.160	0.009**	0.223	0.303	0.597	0.788
Dissatisfaction	0.648	<0.001**	0.335	0.504	0.052	0.720
Burnout	0.215	<0.001**	0.312	0.671	0.732	0.023*
Lack of regulatory measures	0.901	<0.001**	0.238	0.010**	0.299	0.827

*Correlation is significant at the 0.05 level (-2tailed).

**Correlation is significant at the 0.01 level (-2tailed).

Recommendations to Improve Quality of Nursing Care:

Most head nurses perceived that organizational support was key to improving the quality of nursing care followed by advancement of training, clinical supervision, and nurse motivation (Table 5).

Table 5: Recommendations to Improve Quality of Nursing Care (N=176):

	Mean (SD)
Organizational support is important in influencing positive nursing practice	3.040 (1.285)

There is the need for advanced training to develop professional skills among nurses	2.994 (1.316)
I believe that clinical supervision can play an important role in enhancing the quality of nursing practice	2.983 (1.379)
There are low chances of adverse events involving highly motivated nurses	2.932 (1.263)
Cooperation between the government and facility managers greatly improves patient outcomes	2.7723 (0.831)

SD, Standard deviation.

Discussion

This study is the first to report the factors affecting the quality of nursing care as perceived by the head nurses practicing in the Riyadh region. Findings indicate a strong association between socio-demographic factors and the quality of nursing care. Factors such as work experience, job satisfaction, and work-related burnout were perceived as primary factors impacting the quality of nursing care. Additionally, participants perceived that organizational support is the key to improving the quality of nursing in the Riyadh region.

Quality of nursing care involves providing safe, effective, patient-centered, and efficient cares, making it a crucial focus for healthcare systems worldwide.[2,8] Several studies have explored the quality of nursing care from the perspective of patients, nursing professionals, and physicians.[4,7,13] In a study of 142 Jamaican adults, high satisfaction was reported with nursing care in the emergency department.[4] In another study, nurses from Iran positively ratedvarious dimensions (psychosocial, physical, and communication) of the quality of nursing care.[13] Similarly, an Ethiopian study of 117 nurses and 51 physicians highlighted substandard quality of nursing care and emphasized the need for a supportive environment and improved nurse-physician relationships to enhance the quality of nursing care.[7] Taken together, the evidence indicates that high-quality nursing care is essential for improving patient care and serves as a critical performance indicator for hospitals and healthcare organizations.

Head nurses play a crucial role in managing nursing staff and improving the quality of care.[11] Understanding the specific factors that influence the quality of nursing care can provide valuable insights for improving the standard of care delivered by nursing professionals.[14] Therefore, this study examined the individual factors that affect the quality of nursing care from the perspective of head nurses. This study found that most head nurses were middle-aged males with significant nursing and leadership experience. The study also revealed significant positive correlations between age and factors such

as marital status, education level, nursing practice years, and nurse leadership. This is not surprising, as individuals with more experience in nursing are more likely to take leadership roles, highlighting the link between socio-demographic factors and leadership positions in nursing. The head nurses in this study perceived that work experience, satisfaction, and work-related burnout significantly impacted the quality of nursing care. However, factors like workload, resource limitations, remoteness, and language barriers had a minimal impact. These findings are consistent with those of previous studies.[2,8,15] For example, a survey of 510 Chinese nurses reported that work environment, work-related burnout, and job satisfaction influenced the overall quality of nursing care.[2] A recent cross-sectional study of 218 registered nurses in Myanmar reported work environment, nurse staffing, work experience, and job satisfaction as significant predictors of the quality of nursing care.[8] Similarly, another study of 140 nurses and 15 head nurses noted heavy workloads, time constraints, low nurse-to-patient ratios, and the minimal impact of documentation on career advancement as critical factors affecting the quality of nursing documentation in Iran.[15] Overall, these insights underline the importance of addressing the emotional and experiential aspects of nursing to enhance the quality of care.

The exploration of the association between socio-demographic factors and individual characteristics that affect the quality of nursing care revealed a significant relationship between the age of head nurses and factors impacting nursing care quality. A vital link was found between other socio-demographic variables (i.e., marital status, education, nursing experience, and years in leadership roles) and most of the identified factors. These findings emphasize the importance of socio-demographic variables in influencing the quality of nursing care. Additionally, most head nurses emphasized the significant roles of organizational support, training, clinical supervision, and nurse motivation in improving the quality of nursing care in the Riyadh, Saudi Arabia. These insights are consistent with previous studies highlighting the importance of these factors in enhancing the quality of care among nurses.[16–20]

Implications of the study:

This study offers important insights for various healthcare stakeholders in Saudi Arabia, including hospital administrators, practitioners, decision-makers, and policymakers. Addressing the concerns raised by head nurses, particularly related to nurse experience, job dissatisfaction, and burnout, can help improve the quality of nursing care. This could involve implementing

strategies like providing skill and knowledge development training, boosting motivation, promoting better work-life balance, improving time management, and enhancing communication skills to create a positive work environment. Furthermore, this study establishes a strong empirical foundation for future research.

Limitations:

The results of this study should be interpreted with caution due to potential limitations. Since this study was cross-sectional, it was not possible to establish any cause-and-effect relationships. This study was conducted on a small sample of head nurses from the Riyadh region, excluding those from the private hospitals, which could influence the overall results. It focused on socio-demographic variables affecting the quality of nursing care, potentially overlooking other influencing factors. The exclusion of junior nurses and healthcare practitioners limits the generalizability to the broader nursing population in Riyadh and other regions of Saudi Arabia.

Strengths:

Nevertheless, this study does have significant strengths. To our knowledge, this is the first study to report the potential factors influencing the quality of nursing care, as perceived by the head nurses practicing in the Riyadh region. This study randomly selected head nurses from various hospitals to gather diverse insights into their experiences and practices. This methodology ensured that the study population was representative of the head nurses practicing in the Riyadh region. This approach ensured that the study's participants represented the head nurses practicing in the Riyadh region. Additionally, the study effectively fills a crucial knowledge gap by offering valuable insights into the relationship between socio-demographic variables and the factors that impact the quality of nursing care.

Conclusion:

In summary, this study found a significant association between socio-demographic variables and factors affecting the quality of nursing care. Head nurses perceived that work experience, satisfaction level, and work-related burnout were the primary factors affecting the quality of nursing care. Furthermore, organizational support was key to improving the quality of nursing care. Collaboration between government and facility managers may serve as a potential approach to improving nursing care standards in the Riyadh region. Further multicentric studies are necessary to validate the findings in the Saudi healthcare setting.

References:

1. De Raeve P, Davidson PM, Bergs J, Patch M, Jack SM, Castro-Ayala A,

et al. Advanced practice nursing in Europe-Results from a pan-European survey of 35 countries. J Adv Nurs. 2024;80(1):377–386.

2. Liu Y, Aungsuroch Y. Factors influencing nurse-assessed quality nursing care: A cross-sectional study in hospitals. J Adv Nurs. 2018;74(4):935–945.
3. Goh ML, Ang EN, Chan YH, He HG, Vehviläinen-Julkunen K. A descriptive quantitative study on multi-ethnic patient satisfaction with nursing care measured by the Revised Humane Caring Scale. Appl Nurs Res. 2016;31:126–131.
4. Buchanan J, Dawkins P, Lindo JL. Satisfaction with nursing care in the emergency department of an urban hospital in the developing world: A pilot study. Int Emerg Nurs. 2015;23(3):218–224.
5. Alsaqri S. Patient satisfaction with quality of nursing care at governmental hospitals, Ha'il City, Saudi Arabia. JBAH. 2016;6(10):128–142.
6. Karaca A, Durna Z. Patient satisfaction with the quality of nursing care. Nurs Open. 2019;6(2):535–545.
7. Weldetsadik AY, Gishu T, Tekleab AM, Asfaw YM, Legesse TG, Demas T. Quality of nursing care and nurses' working environment in Ethiopia: Nurses' and physicians' perception. Int J Afr Nurs Sci. 2019;10:131–135.
8. Zin TP, Abhicharttibutra K, Wichaikum OA. Factors predicting quality of nursing care among registered nurses in Myanmar: A cross-sectional study. Pacific Rim Int J Nurs Res. 2023;28(3):496–508.
9. Khan A, Muhammad D. Perspective of nurses regarding factors affecting quality of nursing care in intensive care units: A qualitative study. Rehman J Health Sci. 2022;4(2):121–130.
10. Xue X, Kunaviktikul W, Abhicharttibutra K, Wichaikhum OA. Causal modelling of factors influencing quality of nursing care in China. PRIJNR [Internet]. 2023;27(3):417–430.
11. Abdallah SAE, Mostafa SAM. The influence of head nurses' leading role and assertiveness on staff nurses' achievement motivation: A comparative study. Egypt J Health Care. 2021;12(3):690–709.
12. Abugre D, Bhengu BR. Nurse managers' perceptions of patient-centred care and its influence on quality nursing care and nurse job satisfaction: Empirical research qualitative. Nurs Open. 2024;11(1):e2071 (doi: 10.1002/nop2.2071).
13. Jebeli MA, Shahriari M, Moeini M. Nurses' viewpoint: The quality of nursing care. Pharmacophore. 2017;8(6S):e-1173330.

14. Stavropoulou A, Rovithis M, Kelesi M, Vasilopoulos G, Sigala E, Papageorgiou D, et al. What quality of care means? Exploring clinical nurses' perceptions on the concept of quality care: A qualitative study. Clin Pract. 2022;12(4):468–481.
15. Shahverdi M, Nasiri A. Comparing nurses' and head nurses' perspectives on the factors behind the quality of nursing documentation. Mod Care J. 2018;15(4):e86615 (doi: 10.5812/modernc.86615).
16. Gunawan NPIN, Sri Hariyati RT, Gayatri D. Motivation as a factor affecting nurse performance in Regional General Hospitals: A factors analysis. Enferm Clin. 2019;29(S2):515–520.
17. Ahmad MS, Baratucci M, Ramayah T, Ramaci T, Khalid N. Organizational support and perceived environment impact on quality of care and job satisfaction: A study with Pakistani nurses. Int J Workplace Health Manag. 2022;15(6):677–693.
18. Assiri SM, Shehata SF, Assiri MM. Relationship of job satisfaction with perceived organizational support and quality of care among Saudi Nurses. Health. 2022;12:828–839.
19. Zhou F, Long K, Shen H, Yang Z, Yang T, Deng L, et al. Resilience, organizational support, and innovative behavior on nurses' work engagement: A moderated mediation analysis. Front Public Health. 2023;11:1309667 (doi: 10.3389/fpubh.2023.1309667).
20. Nyelisani M, Makhado L, Luhalima T. A professional nurse's understanding of quality nursing care in Limpopo province, South Africa. Curationis. 2023;46(1):e1–e7.