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# Quality of Nursing Care in a Rehabilitation Hospital in Saudi Arabia

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## Abstract:

**CONTEXT:** Patient satisfaction is considered a focal issue of health-care organizations because it reflects proficiency in providing medical service and the quality of their work. Nursing care is one of the critical determinants of patient satisfaction and may be particularly crucial in specialized settings such as rehabilitation hospitals.

**AIM:** The purpose of this study was to evaluate the satisfaction among patients and their families regarding the quality of nursing care provided at a rehabilitation hospital in Riyadh.

**SETTING AND DESIGN:** The study was conducted in a rehabilitation hospital and used a descriptive cross-sectional study approach.

**SUBJECT AND METHODS:** The study followed a systematic sampling design and included 126 participants responding to a questionnaire addressing patient satisfaction, which reported a Cronbach's alpha coefficient 0.95.

**STATISTICAL ANALYSIS:** Demographic and patient satisfaction data were expressed as descriptive data. ANOVA and *t*-tests were performed to evaluate the satisfaction level between the ordinal Likert survey responses and demographic variables.

**RESULTS:** A total of  $n = 126$  patients completed the questionnaire, with the majority  $n = 72$  (57.1%) being male. The mean age was 31.37 years. High levels of satisfaction with most of the nursing care qualities were found in the results with the average score of 1.32. Patients expressed the highest degree of satisfaction with the "coordination of care" (with the average score of 1.21, standard deviation [SD] 0.6) and the lowest level with the "recognition of patient opinion" (1.39, SD 0.9) and privacy (1.4, SD 1). The study revealed that the patients with more than 50 years of age (1.45), widowed status (1.51), and diploma (1.62) graduates showed low levels of satisfaction.

**CONCLUSION:** This study advances our understanding of how satisfied patients are with the quality of nursing care they receive when they are in the hospital. Tailored interventions aimed at the existing problem areas can be associated with better nursing care and patient experience, improving health outcomes and satisfaction.

## Keywords:

Nursing care, patient satisfaction, quality improvement, rehabilitation hospital, Saudi Arabia

## Introduction

Patient satisfaction is at the core of health-care organizations.<sup>[1]</sup> Due to the nature of the modern health-care system, adequately meeting patients' needs and preferences has become the foundation for

success and continuity in a highly competitive environment. The connection between satisfaction and the provision of services is a theme; it is also a network of relationships between health-care quality, organizational standing, and patient experience.<sup>[2]</sup> In this situation, namely in specialized facilities like rehabilitation hospitals, nursing is one of the significant determinants of this construct.<sup>[3]</sup>

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Patient satisfaction is a leading barometer of the success and sustainability of health-care organizations and has an extensive impact on various aspects of the organizations' functioning.<sup>[4]</sup> With transforming health-care systems to patient-centered models, organizations are more aware of patient satisfaction's role in shaping clinical outcomes, resource allocation, and organizational performance.<sup>[5]</sup> Moreover, patient satisfaction determines the organization's overall reputation and affects consumer choices and, ultimately, the level of trust that consumers build with the services provided.<sup>[6]</sup> A satisfied patient is a true asset and promotes patient loyalty, ensuring that the patients continue seeking the services of the organizations. Achieving patient satisfaction could be a powerful marketing strategy in a saturated field.<sup>[7]</sup>

Patient satisfaction assessment acts as a multidimensional indicator of outcome, which reveals the quality of health care and the health-care system's ability to respond to the patient's needs and preferences. High patient satisfaction levels indicate effective communication, empathy, and patient centeredness, three vital elements of health-care quality.<sup>[8]</sup> In addition, patient satisfaction is a data-driven way of receiving input that allows the organization to make meaningful transformations to improve service delivery and promote patient conduct.<sup>[9]</sup> By including patient insights in the quality improvement process, the health-care organization can instigate transparency, responsibility, and patient-centered culture, thereby stimulating organizational improvement.<sup>[10]</sup>

Nursing care quality stands at the center of spheres to enhance patient satisfaction.<sup>[11]</sup> Moreover, nursing care quality considerably influences the patient's health-care encounter and clinical outcomes.<sup>[12]</sup> Nurses are the principal caregivers and provide holistic, compassionate, and proof-based care to patients in various care delivery settings permeated by patient satisfaction.<sup>[13]</sup> This quality centers on multiple aspects, such as clinical skills, interpersonal communication, emotional support, and patient advocacy.<sup>[14]</sup> Patient satisfaction has been quantifiable and positively viewed in previous studies; improving the quality of nursing care can help enhance patient satisfaction since evidence shows the possibility of a moderate to high relationship between nursing care quality and patient satisfaction.<sup>[15,16]</sup> Therefore, implementing the nursing workforce's background, innovating nursing leadership, and encouraging a supportive setting would be critical strategies to enhance nursing care performance and patient satisfaction.<sup>[17]</sup> Thus, nursing care is essential since it sets the trend for patient satisfaction.<sup>[18]</sup>

Patient feedback and experience in a rehabilitation setting offer valuable insights into the quality of care provided, and patient-centered care especially during

long hospital stays. Patient satisfaction plays a crucial role in patient engagement with the care plan and their motivation to actively participate in the rehabilitation process.<sup>[19]</sup> To ensure high-quality care, it is crucial to measure patient satisfaction consistently using reliable and valid assessment tools. These instruments help identify key factors that impact care and determine which areas should be prioritized for improvement based on patient feedback. It is important to develop effective assessment instruments that accurately measure the factors influencing patient satisfaction, as this can significantly enhance the quality of nursing services.<sup>[17]</sup> By utilizing the findings of nursing management research as an indicator of nursing's contribution to patient care, we can further advance the profession and promote its scientific development. This study analyzed patient satisfaction regarding nursing care in the rehabilitation setting. The investigation was designed to assess in the form of empirical research with an ingrained data analysis. Patient perception and the most common areas of the patient experience and patient care in rehabilitation settings in Saudi Arabia are the basis for determining patient preferences and relevant factors that occur during the interaction with such services.

## Subject and Methods

### Study design

A descriptive cross-sectional design was used within this study to measure patient satisfaction related to aspects of nursing care in rehabilitation settings.

### Sample and setting

The sample was obtained from Sultan Bin Abdulaziz Humanitarian City (SBAHC), a prominent referral hospital in Riyadh, Saudi Arabia. SBAHC is a full-fledged rehabilitation hospital and surgical center that accommodates around 460 beds; with nine rehabilitation units, each inpatient unit has 26 beds. The target population for this study was all patients admitted to the inpatient rehabilitation units at SBAHC during the study period. The inclusion criteria included pediatric and adult patients who were admitted in the rehabilitation units for at least four weeks, could communicate in Arabic and their dates for discharge were established. Furthermore, surgical patients were excluded from the study, and any surveys needed to be completed were excluded from the analysis and subjects' incomplete responses resulted in their exclusion from the sample. Systematic sampling was used to select subjects that met the criteria. In every inpatient rehabilitation unit, rooms with even numbers was marked and monitored for any new admission. Upon the admission of a new patient to any of these rooms, a thorough screening process was conducted to determine their eligibility based on predetermined inclusion criteria. On the discharge day, eligible subjects are approached for participation. These patients were

chosen systematically because they were admitted to the predetermined rooms in the rehabilitation inpatient unit and were approached for participation. The average number of subjects meeting the criteria is 180 patients. The sample size was 126 patients and it was determined according to the Table for Determining Minimum Returned Sample Size for a Given Population Size for Continuous and Categorical Data by,<sup>[20]</sup> the confidence interval was 95%, and margin error was 0.05.

### Instruments

The Patient Satisfaction with Nursing Care Quality Questionnaire (PSNCQQ) was used as the main instrument to measure patient satisfaction with nursing care. It was developed by a multidisciplinary research team at the Hospital Corporation of America.<sup>[21]</sup> The PSNCQQ comprises 21 dimensions developed to measure the perspectives on the various aspects of nursing care. Among them include clarity of communication, standard of daily care, and quality of overall nursing care. The questionnaire also entailed three further questions: satisfaction with the overall standard of care, quality of care during the hospital stays, and willingness to recommend the hospital to friends and family. An Arabic version of the questionnaire was used<sup>[22]</sup> and translated from PSNCQQ.<sup>[23]</sup> As reported by Laschinger *et al*,<sup>[23]</sup> the original PSNCQQ demonstrated acceptable internal consistency reliability (Cronbach's alpha = 0.97).<sup>[23]</sup> With Cronbach's alpha values of 0.96 and 0.97, the PSNCQQ-Ar also showed sufficient internal consistency reliability in Oman and Saudi Arabia.<sup>[22,24]</sup> This study tested internal consistency using Cronbach's alpha coefficient, which gave a coefficient of 0.95. A five-point Likert-type scale is used to provide the responses from the participants. The possible total score is between 21 and 105. Higher satisfaction with nursing care is indicated by lower total scores. The scale's grading was as follows: 1 represented excellent, 2 very good, 3 good, 4 fair, and 5 poor.

### Data collection procedure

The nurse managers overseeing the rehabilitation inpatient units were briefed on the study's objectives and importance, without being informed about the criteria used to select rooms. Only on the day of their discharge were the participants approached and informed about the study's purpose and the confidentiality of their responses. Those who agreed to take part were requested to sign an informed consent form and were then given a study questionnaire to complete. For participants who were under 18 years old, consent was given by a family member accompanying them. Data collection occurred from April to October 2023, during which the participants were provided with hard copies of the questionnaire to fill out before their discharge. All participants were informed that it would take approximately 10–15 minutes to complete the

questionnaire. Trained data collectors were responsible for the data collection process.

### Data analysis

The data were analyzed using Statistical Package for the Social Sciences (SPSS) version 26 (IBM, Chicago, IL, USA). The analysis involved recoding, reanalyzing the reverse-coding items on the questionnaire, and checking normality and test assumptions. Descriptive analysis of the sample statistics and research outcome variables using means, median, standard deviations (SDs), frequencies, and percentages. In addition, parametric tests were used, and ANOVA and *t*-tests were performed to compare the mean study variables, ensuring the data were comprehensively analyzed.

### Ethical considerations

Before data collection, the study was approved and reviewed by the Institutional Review Board (IRB) at SBAHC, with Ethical Approval Number: 94-2023. In addition, authorization to carry out the study was acquired from the hospital administration. Written consent to utilize PSNCQQ-Ar was granted by.<sup>[22]</sup> All participants involved in the study provided written informed consent before taking part. In instances where selected patients under the age of 18 or those over 18 with cognitive impairments, their authorized caregivers or sitters were required to provide the written consent and were included as participants in the study.

## Results

### Sociodemographic characteristics and medical history

The study sample included 126 patients admitted to SBAHC rehabilitation units. The sociodemographic characteristics showed that the majority of participants were male (57.1%). The average age was 31.37 years, with 31% of participants below and equal to the age of 14, the largest age group. Most participants were single (61.1%), followed by married individuals (33.3%), and the participants held bachelor's degrees (19.8%). Most participants were accommodated in private rooms during their hospital stay (69.8%), and most had companions (94.4%). A large percentage of participants were patient sitters who represented paediatric patients and patients with medical conditions for completion of the questionnaire. Fifty percent of the participants reported only one admission, 29.4% reported two-three admissions, 29.4% reported two to three admissions, and 20.6% reported more than three admissions [Table 1].

### Patient Satisfaction with Nursing Care Quality Questionnaire scores

The PSNCQQ scores of study participants were analyzed, which measured 21 elements related to

nursing care quality. The item with the highest level of satisfaction (1.21, SD 0.6) was the coordination of care: “the teamwork between nurses and other hospital staff who took care of you”. The items with the lowest level of satisfaction were “Recognition of your opinions: how much nurses ask you what you think is important and give you choices” (1.39, SD 0.9) and “Privacy: provision of your privacy by nurses” (1.4, SD 1).

The average PSNCQQ score for the sample was 1.32 (SD 0.76) and PSNCQQ scores ranged between 1 and 4.67, suggesting overall high satisfaction with nursing care quality. Participants rated their experiences positively across different dimensions of nursing care. The competence, concern and, caring by nursing staff were deemed high, with scores of 1.25 and 1.28, respectively. Satisfaction with providing information such as “information were given by nurses”, “informing”, and “involving family and friends” (1.29) were also high [Table 2].

### Patient Satisfaction with Nursing Care Quality Questionnaire score comparison based on sociodemographic attributes of patients

Participants aged over 50 years reported slightly lower satisfaction scores (1.45, SD 0.63) compared to patients aged <14 (1.22, SD 0.47), 14–30 years (1.24, SD 0.42), and 31–50 years (1.43, SD 0.63) with no statistically significant differences. However, there was no statistical significance noted with gender and satisfaction scores, although females reported lower satisfaction scores (1.43 SD 0.69). Marital status found no statistically significant differences in the satisfaction scores, with widowed participants reporting slightly lower satisfaction scores (1.51, SD 0.71). Moreover, education levels showed not statistical significance with satisfaction scores, although participants who indicated holding diplomas reported slightly lower satisfaction scores (1.62 SD 0.77). Occupation, hospital accommodation type, and companion presence during hospitalization did not considerably impact satisfaction scores. The total number of hospital admissions did not significantly affect satisfaction scores, suggesting that the frequency of admissions did not influence patients’ perceptions of nursing care quality. The findings highlight generally consistent satisfaction levels with nursing care quality across different sociodemographic groups within the study population [Table 3].

## Discussion

### Patient Satisfaction With Nursing Care Quality Questionnaire scores’ findings

PSNCQQ scores reveal overall high satisfaction levels across various dimensions of nursing care. In discussing these findings, it is pertinent to compare them with

**Table 1: Patient characteristics (n=126)**

Variable	Frequency, n (%)
Total	126 (100)
Mean age	31.37±23.94
Age groups (years)	
≤ 14	39 (31.0)
14–30	32 (25.4)
31–50	20 (15.9)
>50	35 (27.8)
Gender	
Male	72 (57.1)
Female	54 (42.9)
Marital status	
Single	77 (61.1)
Married	42 (33.3)
Divorced	2 (1.6)
Widowed	5 (4.0)
Educational level	
Primary	54 (42.9)
Secondary	37 (29.4)
Diploma	10 (7.9)
Bachelor’s degree	25 (19.8)
Occupation	
Working	11 (8.7)
Not working	115 (91.3)
Hospital accommodation	
Private room	88 (69.8)
Shared room	38 (30.2)
Companion	
Yes	119 (94.4)
No	7 (5.6)
Subject who filled the questionnaire	
Patient	39 (31.0)
Sitter	87 (69.0)
Number of hospitalizations	
1 admission	63 (50.0)
2–3 admission	37 (29.4)
>3 admission	26 (20.6)

previous studies to contextualize and evaluate the significance of the results. The study results align with previous research indicating high patient satisfaction with nursing care. For instance, Karaca and Duma<sup>[21]</sup> conducted a study focusing on patient satisfaction in a specialized facility. They found that nursing care played a crucial role in shaping patient satisfaction, similar to the current study findings.<sup>[21]</sup>

Regarding specific aspects of nursing care, the current study found that care coordination received the highest satisfaction scores, reflecting effective teamwork among health-care professionals, particularly in rehabilitation facilities, where the rehabilitation staff plays a significant role in the patient care plan. This finding is consistent with research by Labraague,<sup>[25]</sup> who emphasized the importance of teamwork in enhancing



**Table 2: Distribution of Patient Satisfaction with Nursing Care Quality Questionnaire scores (n=126)**

Items	Mean	SD	Median	Minimum	Maximum
Information you were given: How clear and complete the nurse's explanations were about tests, treatments, and what to expect	1.35	0.8	1	1	5
Instructions: How well nurses explained how to prepare for tests and operations	1.3	0.8	1	1	5
Ease of getting information: Willingness of nurses to answer your questions	1.33	0.8	1	1	5
Information given by nurses: How well nurses communicated with patients, families, and doctors	1.29	0.7	1	1	4
Informing family or friends: How well the nurses kept them informed about your condition and needs	1.29	0.6	1	1	4
Involving family or friends in your care: How much they were allowed to help in your care	1.29	0.7	1	1	5
Concern and caring by nurses: Courtesy and respect you were given; friendliness and kindness	1.28	0.7	1	1	5
Attention of nurses to your condition: How often nurses checked on you and how well they kept track of how you were doing	1.3	0.6	1	1	4
Recognition of your opinions: How much nurses ask you what you think is important and give you choices	1.39	0.9	1	1	5
Consideration of your needs: Willingness of the nurses to be flexible in meeting your needs	1.3	0.8	1	1	5
The daily routine of the nurses: How well they adjusted their schedules to your needs	1.29	0.6	1	1	4
Helpfulness: Ability of the nurses to make you comfortable and reassure you	1.3	0.8	1	1	5
Nursing staff response to your calls: How quick they were to help	1.31	0.7	1	1	5
Skill and competence of nurses: How well things were done, like giving medicine and handling IVs	1.25	0.7	1	1	5
Coordination of care: The teamwork between nurses and other hospital staff who took care of you	1.21	0.6	1	1	4
Restful atmosphere provided by nurses: Amount of peace and quiet	1.34	0.9	1	1	5
Privacy: Provisions for your privacy by nurses	1.4	1	1	1	5
Overall quality of care and services you received during your hospital stay	1.35	0.8	1	1	5
In general, would you say your health status	1.6	1.1	1	1	5
Overall quality of nursing care you received during your hospital stay	1.27	0.6	1	1	4
Based on the nursing care I received, I would recommend this hospital to my family and friends	1.33	0.8	1	1	4
Average PSNCQQ score	1.32	0.76	1	1	4.67

PSNCQQ: Patient Satisfaction with Nursing Care Quality Questionnaire, SD: Standard deviation, IV: Intravenous

patient satisfaction and care quality in rehabilitation settings. The positive perception of coordination of care suggests that collaborative efforts among nurses and other hospital staff contribute to a seamless patient experience.<sup>[25]</sup>

In this study, the mean score of 1.28 in the area which evaluates concern and caring by nurses aligns with existing research emphasizing the pivotal role of empathy and compassion in nursing care. Molina-Mula and Gallo-Estrada<sup>[26]</sup> underscored the significance of nurturing a caring relationship between nurses and patients, highlighting its positive impact on patient satisfaction and overall health-care outcomes.<sup>[26]</sup> Similarly, Alharbi *et al.*<sup>[12]</sup> emphasized the importance of empathy and emotional support provided by nursing staff in shaping patients' perceptions of care quality. Moreover, the favorable rating in this area underscores the effectiveness of nursing staff in creating a supportive and nurturing environment conducive to patients' recovery. This finding resonates with the work of Al Harbi *et al.*<sup>[12]</sup> who emphasized the importance of fostering a therapeutic milieu characterized by trust, empathy, and understanding.<sup>[12]</sup> As noted by Ferreira *et al.*<sup>[5]</sup> patients' perceptions of being cared for and supported by nursing personnel contribute significantly to their overall satisfaction with the care received.<sup>[5]</sup> Furthermore, the positive interactions

between nurses and patients cultivate a sense of security and reassurance, essential components of the healing process. Thus, the high score in concern and caring by nurses not only reflects the proficiency of nursing staff but also underscores the fundamental importance of human connection in health-care delivery.

The study findings regarding the high satisfaction scores in three areas, information given by nurses, informing family or friend, and involving family or friend, resonate with previous literature emphasizing the importance of effective communication and information sharing in nursing care. Karac and Duma<sup>[21]</sup> underscored the significance of clear and comprehensive communication between health-care providers and patients in specialized facilities.<sup>[21]</sup> Moreover, involving family or friends in the care process fosters a sense of inclusion and support for patients, contributing to their overall satisfaction with nursing care, as noted by Alharbi *et al.*<sup>[12]</sup> The high scores in these dimensions reflect the successful implementation of patient-centered communication strategies, where nurses prioritize transparency, accessibility, and collaboration in their interactions with patients and their families.<sup>[12]</sup>

However, despite the overall high satisfaction levels, certain nursing care areas received lower scores in the PSNCQQ. For instance, recognizing patients'

**Table 3: Comparison of Patient Satisfaction with Nursing Care Quality Questionnaire scores based on patient sociodemographic characteristics (n=126)**

Variable	Mean±SD	t/f	P
Total	126		
Mean age	31.37±23.94		
Age groups (years)			
<14	01.22±0.47	f=1.668	0.177
14–30	01.24±0.42		
31–50	01.43±0.68		
>50	01.45±0.63		
Gender			
Male	1.23±0.39	t=1.886	0.06
Female	1.43±0.69		
Marital status			
Single	1.24±0.44	f=1.762	0.16
Married	1.46±0.69		
Divorced	1.24±0.06		
Widowed	1.51±0.71		
Educational level			
Primary	1.29±0.49	f=1.261	0.291
Secondary	1.27±0.49		
Diploma	1.62±0.77		
Bachelor's degree	1.35±0.62		
Occupation			
Working	1.24±0.57	t=0.481	0.631
Not-working	1.33±0.55		
Hospital accommodation			
Private room	1.29±0.51	t=0.76	0.45
Shared room	1.37±0.62		
Companion			
Yes	1.33±0.56	t=0.93	0.36
No	1.13±0.19		
Subject who filled the questionnaire			
Patient	1.26±0.44	t=0.77	0.44
Sitter	1.34±0.59		
Total number of hospital admissions			
1 admission	1.28±0.51	f=0.58	0.56
2–3 admission	1.40±0.65		
>3 admission	1.29±0.47		

SD: Standard deviation

opinions and involvement in decision-making emerged as a weaker area in the current study. This finding resonates with research by Winter *et al.*<sup>[27]</sup> who highlighted the significance of patient-centered care in enhancing satisfaction levels. The discrepancy between patient expectations regarding involvement in care decisions and the actual experiences suggests a potential area for improvement in nursing practice.<sup>[27]</sup>

### Patient Satisfaction with Nursing Care Quality Questionnaire scores according to patients' sociodemographic characteristics

The analysis of PSNCQQ scores based on patients' sociodemographic characteristics provides valuable insights into the factors influencing patient

satisfaction with nursing care quality. The influence of sociodemographic characteristics on patient satisfaction with nursing care has been a subject of interest in previous research. Age, gender, marital status, educational level, and other factors have been examined to understand their association with satisfaction scores.<sup>[21]</sup>

In the current study, age emerged as a significant factor affecting patient satisfaction scores, with patients aged 31-50 years (1.43) and over 50 years (01.45) reporting lower satisfaction scores than younger age groups. This finding contradicts research by Kahn *et al.*<sup>[28]</sup> who found that older patients tended to have higher satisfaction levels with nursing care. The lower satisfaction levels among older patients in our study may be attributed to factors such as higher expectations or differing health-care experiences compared to younger counterparts.<sup>[28]</sup>

In our study, male participants exhibited marginally higher satisfaction scores (1.23) compared to females (1.43), although the disparity was not statistically significant. This outcome diverges from the findings of Almass *et al.*<sup>[29]</sup> where females typically expressed greater satisfaction with nursing care. The variance in results could be ascribed to cultural and contextual distinctions among the study cohorts.<sup>[29]</sup>

Marital status also showed some influence on satisfaction scores in the current study, with widowed participants reporting slightly lower scores compared to other marital status groups. This finding contradicts research by Ferreira *et al.*<sup>[5]</sup> who found that widowed individuals often received more personalized attention and support from health-care providers, leading to higher satisfaction levels. The emotional support provided to widowed patients may contribute to positive perceptions of nursing care quality.<sup>[5]</sup>

Educational levels did not substantially affect satisfaction scores in the current study, with no significant differences observed between different groups. This finding is consistent with a research by Santa-Cruz *et al.*<sup>[30]</sup> who found that patients with lower educational levels tended to have higher satisfaction levels with nursing care. The lack of significant differences in satisfaction scores across educational levels in our study suggests that nursing care quality is perceived similarly regardless of educational background.<sup>[30]</sup>

### Patient Satisfaction with Nursing Care Quality Questionnaire scores according to patients' previous admission

Examining PSNCQQ scores based on patients' previous admission sheds light on how health-care experiences and conditions may influence perceptions of nursing

care quality. In discussing these findings, it is essential to compare them with previous studies to elucidate the impact of medical histories on patient satisfaction. Glalal *et al*<sup>[31]</sup> conducted a prior study that explored the association between patients' medical histories and their perceptions of nursing care quality. Factors such as the number of hospital admissions, types of medical conditions, and duration of hospital stays have been investigated to understand their influence on patient satisfaction scores.<sup>[31]</sup>

In the current study, the total number of hospital admissions did not significantly ( $P = 0.56$ ) affect satisfaction scores, suggesting that the frequency of hospitalizations did not influence patients' perceptions of nursing care quality. However, the finding in the research by Karaca and Duma,<sup>[21]</sup> found that patients with higher hospital admissions tended to have high satisfaction levels with nursing care.<sup>[21]</sup>

Regarding specific medical conditions, the current study did not examine the influence of diagnoses on satisfaction scores. However, previous research by Mattison *et al*<sup>[32]</sup> found that patients with chronic conditions, such as diabetes or heart disease, tended to have lower satisfaction levels with nursing care compared to patients with acute conditions. The complex nature of chronic illnesses and their management may contribute to patients' perceptions of care quality.<sup>[32]</sup>

Moreover, the duration of hospital stays may also influence satisfaction scores, although this factor was not specifically examined in the current study. Research by Ferriera *et al*<sup>[5]</sup> found that longer hospital stays were associated with lower patient satisfaction levels, possibly due to increased discomfort and dissatisfaction with prolonged health-care experiences. Understanding the impact of hospital duration on satisfaction scores can inform strategies to improve care quality for patients with extended stays.<sup>[5]</sup>

Overall, the findings of this study contribute to understanding how patients' prior admissions may shape their perceptions of nursing care quality. By comparing the results with previous research, insights into the complexities of patient experiences across different medical contexts can be gained. Addressing various medical histories' unique needs and challenges is crucial for health-care providers to deliver patient-centered care and enhance satisfaction.

### Study limitations

The strengths of this research lie in its uniform data collection instruments, adherence to ethical principles, and the implementation of valid questionnaires and statistics techniques. Along with this, there are some drawbacks.

They include the nature of the cross-sectional study, which makes it impossible to infer cause-and-effect relationships, the possibility of response biases observed when patient satisfaction is evaluated using a self-reporting technique, and the fact that only nonsurgical patients were included, which constrains the application of the study in broader health-care-related contexts.

### Future recommendations

Therefore, the limitation of the present study indicates that future studies would be better conducted through the longitudinal design and combined research methods to realize patients' satisfaction with nursing care. For instance, repeating the same survey after a specific period from discharge date via either phone surveys or web surveys. Adding qualitative methodologies into the mix and looking into the perspectives of health-care providers can deepen understanding of rehabilitation dynamics. A comparison of different health systems and pluralistic milieu determines basic health satisfaction factors, and the creation of contextualized and culturally customized interventions can be inferred. Achieving, this necessitates conducting analogous study across rehabilitation facilities in diverse regions of Saudi Arabia, regions that are distinct in terms of cultural and educational backgrounds. This approach will illuminate how satisfaction factors vary in response to differing cultural contexts and health system structures.

### Conclusion

The study has explored the quality of nursing care and patient satisfaction in a rehabilitation hospital in Saudi Arabia. The study outcomes discovered high level of satisfaction in communication, competence, respect, and teamwork. The study found substantial aspects of quality that could be strengthened, and other areas, such as recognition of the patient's opinion, the provided information are clear and complete and the willingness of the nurse to answer the patient question, need attention. Nursing Leaders in SBAHC and nurses play a crucial role in enhancing the quality-of-service provision by assessing patient satisfaction with nursing care. These findings serve as a foundation for the development and improvement of nursing care, aligning it with the expectations of patients. The valuable insights gathered from this assessment should be utilized to identify training needs for nurses. In turn, comprehensive in-service training programs should be organized to enhance nurses' knowledge and skills in care planning. The study adds to the literature on patient satisfaction in hospital settings, emphasizing the need for patient-centered care, effective communication, and continual quality improvement efforts.

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## Conflicts of interest

There are no conflicts of interest.

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