



PATIENT PERCEPTIONS OF CARING BEHAVIORS OF NURSES IN SAUDI ARABIA: A CROSS-SECTIONAL STUDY

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Abstract

Background: Caring behaviors of nurses are crucial for patient satisfaction and positive health outcomes. This study aimed to assess patient perceptions of caring behaviors of nurses in Saudi Arabia and identify associated factors.

Methods: A cross-sectional survey was conducted among 500 patients from three hospitals in Riyadh, Saudi Arabia. The Caring Behaviors Inventory-24 (CBI-24) and a demographic questionnaire were used for data collection. Descriptive statistics, t-tests, ANOVA, and multiple regression were used for analysis.

Results: The overall mean CBI-24 score was 5.38 (SD=0.78), indicating a high level of perceived caring. "Knowledge and Skill" had the highest subscale score (M=5.54, SD=0.74), while "Positive Connectedness" had the lowest (M=5.21, SD=0.99). Female, older, and more educated patients reported significantly higher scores. Age, gender, and education significantly predicted caring perceptions, explaining 28.4% of the variance.

Conclusion: Nurses in Saudi Arabia generally demonstrate high levels of caring, but there is room for improvement in positive connectedness. Patient characteristics influence perceptions of caring, underlining the importance of personalized and culturally competent care. The findings can inform nursing education and practice to enhance patient experience and care quality in Saudi Arabia.

Keywords: Caring behaviors, nursing, patient perceptions, Saudi Arabia, cross-sectional study

1. Introduction

Caring is the essence of nursing practice and is vital for delivering high-quality, patient-centered care. Caring behaviors of nurses, such as empathy, respect, and attentiveness, have been shown



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to positively impact patient satisfaction, well-being, and health outcomes (Watson, 2019). In Saudi Arabia, the nursing profession has undergone significant development in recent years, with increasing emphasis on patient-centered care and quality improvement (Alboliteeh et al., 2017). However, research on patient perceptions of caring behaviors in this context is limited. Cultural factors, such as language barriers, gender roles, and religious beliefs, may influence patient-nurse interactions and perceptions of caring in Saudi Arabia (Alshammari, 2014). Therefore, this study aimed to assess patient perceptions of caring behaviors of nurses in Saudi Arabian hospitals and identify factors associated with these perceptions.

2. Methods

2.1 Study Design and Setting

A cross-sectional survey design was used. The study was conducted in three public hospitals in Riyadh, the capital city of Saudi Arabia, from January to March 2023.

2.2 Participants and Sampling

A convenience sample of 500 adult patients (aged ≥ 18 years) who were admitted to medical, surgical, or obstetric/gynecology wards for at least 24 hours were recruited. Patients who were critically ill, cognitively impaired, or unable to communicate in Arabic or English were excluded. The sample size was determined using G*Power software, with an effect size of 0.15, power of 0.80, and alpha of 0.05.

2.3 Instruments

The Caring Behaviors Inventory-24 (CBI-24) (Wu et al., 2006) was used to measure patient perceptions of caring behaviors of nurses. The CBI-24 consists of 24 items rated on a 6-point Likert scale (1=never to 6=always). It has four subscales: Assurance of Human Presence, Knowledge and Skill, Respectful Deference to Others, and Positive Connectedness. The CBI-24 has demonstrated good reliability and validity in various settings (Wolverton et al., 2018). In this study, the Cronbach's alpha was 0.92 for the total scale and ranged from 0.80 to 0.88 for the subscales.

A demographic questionnaire was used to collect data on patients' age, gender, education level, marital status, monthly income, length of hospital stay, and prior hospitalization.

2.4 Data Collection

After obtaining ethical approval and access permissions, the researchers approached eligible patients, explained the study purpose, and obtained written informed consent. The questionnaires were administered via face-to-face interviews in the patient's preferred language (Arabic or English). Each interview lasted about 20-30 minutes.

2.5 Data Analysis

Data were analyzed using SPSS version 26. Descriptive statistics (frequency, percentage, mean, standard deviation) were used to summarize the demographic characteristics and CBI-24 scores. Independent t-tests and one-way ANOVA were used to examine differences in CBI-24 scores based on demographic variables. Multiple linear regression was used to identify predictors of caring behavior perceptions, with the overall CBI-24 score as the dependent variable and demographic characteristics as independent variables. Statistical significance was set at $p < 0.05$.

3. Results

3.1 Demographic Characteristics

The mean age of the participants was 38.5 years (SD=12.8), and 58.2% were female. Most participants were married (72.4%), had a secondary education or higher (62.6%), and had a monthly income of 5,000-10,000 SAR (48.2%). The average length of hospital stay was 4.6 days (SD=3.2), and 60.4% had prior hospitalization experience (Table 1).

Characteristic	n (%)
Age (years)	
18-30	152 (30.4)
31-50	261 (52.2)
>50	87 (17.4)
Gender	
Male	209 (41.8)
Female	291 (58.2)
Education level	

Characteristic	n (%)
Primary or lower	187 (37.4)
Secondary	203 (40.6)
Tertiary	110 (22.0)
Marital status	
Single	104 (20.8)
Married	362 (72.4)
Divorced/widowed	34 (6.8)
Monthly income (SAR)	
<5,000	189 (37.8)
5,000-10,000	241 (48.2)
>10,000	70 (14.0)
Length of stay (days)	
1-3	214

Characteristic	n (%)
	(42.8)
4-7	197 (39.4)
>7	89 (17.8)
Prior hospitalization	
Yes	302 (60.4)
No	198 (39.6)

Note: SAR = Saudi Arabian Riyal

Table 1. Demographic characteristics of the participants (N=500)

3.2 Perceptions of Caring Behaviors

The overall mean CBI-24 score was 5.38 (SD=0.78), indicating a high level of perceived caring behaviors. The highest scored subscale was "Knowledge and Skill" (M=5.54, SD=0.74), followed by "Respectful Deference to Others" (M=5.41, SD=0.82) and "Assurance of Human Presence" (M=5.36, SD=0.88). "Positive Connectedness" had the lowest mean score (M=5.21, SD=0.99) (Table 2).

CBI-24 Subscale	Mean (SD)
Assurance of Human Presence	5.36 (0.88)
Knowledge and Skill	5.54 (0.74)

CBI-24 Subscale	Mean (SD)
Respectful Deference to Others	5.41 (0.82)

Table 2. Mean scores of the CBI-24 and its subscales (N=500)

3.3 Differences in Caring Perceptions by Demographic Characteristics

Female patients reported significantly higher overall CBI-24 scores ($M=5.48$, $SD=0.74$) than male patients ($M=5.24$, $SD=0.81$; $t(498)=-3.49$, $p<0.001$). Older patients (>50 years) had significantly higher scores ($M=5.61$, $SD=0.68$) compared to younger age groups ($F(2,497)=10.56$, $p<0.001$). Patients with tertiary education perceived higher levels of caring ($M=5.58$, $SD=0.69$) than those with lower education levels ($F(2,497)=8.42$, $p<0.001$). There were no significant differences based on marital status, income, length of stay, or prior hospitalization ($p>0.05$).

3.4 Predictors of Caring Perceptions

Multiple linear regression analysis showed that age ($\beta=0.24$, $p<0.001$), gender ($\beta=-0.17$, $p<0.001$), and education level ($\beta=0.15$, $p=0.001$) were significant predictors of overall CBI-24 scores, after controlling for other demographic variables. The model explained 28.4% of the variance in caring behavior perceptions ($F(7,492)=27.91$, $p<0.001$, $R^2=0.284$).

4. Discussion

This study found that patients in Saudi Arabia generally perceived high levels of caring behaviors from nurses, with an overall mean CBI-24 score of 5.38 out of 6. This finding is consistent with previous studies that reported positive patient perceptions of nursing care in Saudi hospitals (Alasad et al., 2015; Alshehri et al., 2019). The high scores on the "Knowledge and Skill" subscale suggest that patients valued nurses' technical competence and expertise in providing care. This may reflect the emphasis on clinical skills and specialization in nursing education and practice in Saudi Arabia (Aldossary et al., 2008).

However, the relatively lower scores on the "Positive Connectedness" subscale indicate an area for improvement in terms of nurses' interpersonal skills and emotional support for patients. Previous research has highlighted the importance of effective communication, empathy, and cultural sensitivity in enhancing patient-nurse relationships and care experiences in Saudi Arabia (Alshammari, 2014; Karout et al., 2013). Language barriers, heavy workloads, and cultural norms related to gender and social interactions may challenge nurses' ability to establish positive connections with patients (Almutairi, 2015). Therefore, nursing education and professional development programs should focus on developing nurses' communication and cultural competence skills to better meet patients' psychosocial needs.

The finding that female, older, and more educated patients reported higher perceptions of caring behaviors is consistent with previous studies in other contexts (Azizi-Fini et al., 2012; He et al., 2013). This may be related to differences in expectations, assertiveness, and health literacy among these patient groups (Aljuaid et al., 2016). Nurses should be aware of these differences and adapt their caring approaches to provide personalized and culturally appropriate care for diverse patient populations.

The significant predictive roles of age, gender, and education level in caring perceptions highlight the need to consider patient characteristics in evaluating and improving nursing care quality. Healthcare organizations should collect and analyze patient-reported experience measures (PREMs) to identify disparities and target interventions to enhance equity and patient-centeredness of care (Aljuaid et al., 2022).

5. Limitations and Recommendations

This study has some limitations. The cross-sectional design precludes causal inferences about the relationship between demographic factors and caring perceptions. The convenience sampling and single-city setting may limit the generalizability of the findings to other regions or healthcare settings in Saudi Arabia. Future studies should use longitudinal designs, random sampling, and multi-site recruitment to provide more robust evidence. Qualitative research can also explore patients' experiences and expectations of caring in-depth to complement the quantitative findings.

6. Conclusion

In conclusion, this study provides insights into patient perceptions of caring behaviors of nurses in Saudi Arabia and associated demographic factors. While nurses generally demonstrated high levels of caring, there is room for improvement, particularly in the areas of positive connectedness and interpersonal skills. The findings underscore the importance of patient-centered and culturally sensitive caring practices to enhance patient experiences and outcomes. Nursing education, practice, and policy should prioritize the development of caring competencies and the integration of patient perspectives in quality improvement initiatives.

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