

✧ RESEARCH PAPER ✧

Predictors of patients' experiences of nursing care in medical-surgical wards

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The purposes of this study were to explore patients' opinions of nursing care and to identify predictors of patients' experiences of nursing care in medical-surgical wards. The sample of the study was 225 adult patients in medical-surgical wards in a major teaching hospital in Jordan. The experiences of nursing care total score in this study was relatively high. The findings showed that the majority of the participants had positive experiences regarding the time nurses spent with them as well as the respect nurses provided to patients' relatives and friends. Although the amount of information nurses provided to patients was found to be a significant predictor of patients' experiences, the provided information was perceived by the majority of the patients as inadequate. Identifying factors that enhance patients' experiences of nursing care is crucial as it assists nurses to provide better care.

Key words: experiences, Jordan, nursing care, opinions.

INTRODUCTION

Patients' opinions about the care they receive are highly influenced by their experiences during hospitalization. Understanding consumers' views is essential for any service to be developed or improved.¹ It is not desirable for health-care professionals to be the sole judges of the care provided.² Patients' opinions about the nursing care they receive have been found to be an important outcome indicator for quality nursing care.^{3,4} However, outcomes identified by professionals were found to differ from those addressed by patients.^{5,6}

There is a scarcity of research where patients' experiences of the individuality of care in hospital settings is con-

cerned.⁷ The patient should be viewed as an active and accountable participant in nursing care.⁸ Examining patients' experiences of nursing care would help nurses to reflect on the care they provide and assist them to plan appropriate modifications to the services offered by their institutions. When the patient has a positive experience with the nursing care, this will be positive for the nurse and the entire health organization as well. The purposes of the current study were to: (i) explore patients' opinions of nursing care; and (ii) identify predictors of patients' experiences of nursing care in medical-surgical wards

Literature review

Patients' opinions in evaluating and improving the quality of health care have gained greater prominence in western societies.⁹ Consumers have become more critical of the health care provided and are being active participants in

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planning and evaluating health care services.¹⁰ In developing countries, quality of health care usually is defined by health care providers from a technical perspective; however, recent literature has emphasized the importance of the patient's perspective in assessing quality of health care.¹¹ Moreover, other researchers reported that the patients' perspective is increasingly being viewed as the meaningful indicator of health services quality and might represent the most important perspective.¹²

There are negative assumptions made by health professionals. They presume that surveys will uncover widespread dissatisfaction whereas, in practice, often the opposite is true.⁹ It is vital to listen to patients if defects in nursing care are to be identified and improved. However, because patients have no basis to compare with, they might have difficulty in evaluating what nurses provide to them.¹³ Furthermore, the assessments of quality of health care represent a complex mixture of needs, expectations of care and the experience of care.^{9,14}

Nurses and patients have different priorities and expectations about care.^{15,16} For example, an acceptable standard for the speed of nurse response to patient call and/or the time the nurse spends with the patient is likely to be defined differently by nurses and patients. How this gap between nurses' and patients' vision is reflected as a predictor of outcomes of nursing care has not been adequately explored.

It has been hypothesized that patients' experiences of the care they receive might depend upon certain characteristics, such as gender, age and educational level. A meta-analysis reported by Hall and Dornan concluded that sociodemographic characteristics are a minor predictor of patients' experience with the received care.¹⁷ Furthermore, these variables, along with the other demographic variables in the study, are rarely assessed in relation to patients' experiences.

The perception that patients have about nursing care they receive is considered an important attribute in nursing theory.¹⁸⁻²⁰ The theoretical system for interpersonal relationships taken from Rogers' client-centred therapy embraces the main postulates that underpin this study.²¹ These postulates include:

1. The patient has within himself the capacity to experience and understand those aspects of his life and himself which are causing him malfunction and pain.
2. The patient has the capacity and tendency to recognize himself and his relationship to life in the direction of optimal functioning and health.

3. In order to establish a suitable psychological climate, the nurse should establish a relationship with the patient, be genuine in the relationship, experience unconditional positive regard for the patient and respect the patient as a person who is capable of understanding his situation.

This study aims to answer the following research questions:

1. What are the patients' opinions of selected dimensions of nursing care?
2. What are the predictors of patients' experiences of nursing care in medical-surgical wards?

METHODS

To determine the sample size, Cohen's technique for power analysis was used. As data on the effect size of the relationship between the predictors in this study and patients' experiences of nursing care were not available, a medium effect size was considered.²² According to Polit and Sherman, 0.15 is the medium effect size in a multiple regression test.²³ The sample size for correlation and multiple regression analysis was computed for an α of 0.05, a power of 0.80, a medium effect size of 0.15 and 10 independent variables. It was expected that the 10 independent variables accounted for $0.15/(1 + 0.15) = 13\%$ ($R = 0.36$) of the dependent variable variance in the population samples. A sample size of 127 was the minimum sample size necessary to avoid the type II error. It was obtained based on the following formula:²²

$$N = \lambda / f^2 + K + 1 \quad (1)$$

where λ from Cohen's chart = 17.4, the effect size (f^2) = 0.15 and the independent variables = 10. The sample size in this study was 225 participants. They were recruited from medical-surgical wards at a major teaching hospital in Jordan.

The mean age of the participants was 38 years with a range between 18 years and 87 years. The male to female ratio was almost equal (49% female). Length of stay ranged between 2 and 54 nights (mean = 7). More than half of the participants (51.6%) were admitted to third class rooms. The classes of admission mainly differ in the number of beds in each class and not in the type of services. Third class rooms contain the most number of beds (six). The participants represented a range of educational levels; 123 participants (55%) had not completed high school education, 33 participants (15%) had a diploma degree and 69 participants (30%) had a bachelor degree and above.

Measures

Patients' experiences were measured in the current study by using the Experiences of Nursing Care Scale, which is considered to be a subscale of the Newcastle Satisfaction with Nursing Scale (NSNS).¹ The scale consists of 26 items asking patients to state the degree of agreement with various positive and negative statements about the care they received. All items are scored on a 7-point Likert scale (1 = disagree completely to 7 = agree completely). In addition, a one-item scale measuring the patients' overall experiences with nursing care is included. Participants were asked to circle the number which best describes their experience of nursing care. A mixture of positively and negatively worded items (15 and 11 items, respectively) is included. All negatively worded items were reversed on analysis, then responses across all items were summed and transformed to yield an overall experience score of 0–100, where 100 corresponds to the best possible experience. The Experiences of Nursing Care Scale is considered parsimonious and empirically supported as the scale was found to be valid and reliable.^{24–26} The Cronbach α of the scale in the current study was 0.85. Furthermore, Pearson product-moment correlation coefficient between the percentage score of patients' experiences of nursing care (26-item) and the one-item scale measuring the patients' overall experiences with nursing care was 0.59 ($P < 0.001$).

Procedure

Five research assistants from outside the hospital were recruited and trained to collect data. Research assistants' roles were to recruit patients who met the eligibility criteria, obtain informed consent, and deliver and collect the completed questionnaires. Participation in the study was voluntary and based on the patient's ability to give informed consent. Ethical approval was granted by the research ethics committee of the involved hospital. Data was collected from the relevant wards over three months.

Data management

Data were managed using the Statistical Package for the Social Sciences/Personal Computer (SPSS, Chicago, USA). A standard multiple regression analysis was conducted to examine the effects of independent variables (education, length of stay, age, gender, class of admission, time nurse spent with patients, speed of response, information, relatives and friends, and awareness of the

patients' needs) on the prediction of patients' experiences of nursing care.²⁷

Assumptions of multiple regression analysis were tested by examining normal probability plots of residuals and scatter diagrams of residuals versus predicted residuals. No violations of normality, linearity, homoscedasticity or residuals were detected. However, according to case-wise diagnostics, two cases were deleted.

RESULTS

Patients' experiences of nursing care were fairly positive. Only 3.1% of patients had a rating of $\leq 50\%$ (Table 1).

Table 2 presents the participants' opinions on particular dimensions of nursing care as identified by the NSNS. Although 63% of the participants considered the time nurses spent with them as adequate, the provided information was perceived by patients as inadequate. The speed of nurses' response was considered by participants as quick (61%). The awareness of patients' needs as well as the help received by relatives and friends were considered to be adequate (67%, 83%, respectively) by the participants.

Multiple regression analysis revealed that the model significantly predicted a sizeable proportion of variance in patients' experiences of nursing care ($F(10, 214) = 27.50, P < 0.001$). The R^2 for the model was 0.56, and adjusted R^2 was 0.54. Table 3 displays the unstandardized regression coefficients, standard error, standardized regression coefficients and t -statistics for each variable.

Patients' levels of education, length of stay in the hospital and class of admission were not found to be significant predictors for patients' experiences of nursing care. However, seven variables have significantly

Table 1 Distribution of scores of patients' experiences regarding nursing care

Range of scores (%)	N	%
40–49	7	3.1
50–59	22	9.8
60–69	39	17.2
70–79	81	36.0
80–89	56	24.9
90–100	20	9.0

Mean = 74.08%.

Table 2 Participants' opinions of nursing care related to potential predictors of patients' experiences ($n = 225$)

Item	N	%
Time spent with patient		
Not adequate	83	36.9
Adequate	142	63.1
Speed of response		
Not quick	87	38.7
Quick	138	61.3
Information provided		
Not adequate	141	62.7
Adequate	84	37.3
Helping relatives and friends		
Not adequate	38	16.9
Adequate	187	83.1
Awareness of the patient's needs		
Not adequate	74	32.9
Adequate	151	67.1

Table 3 Predictors of patients' experiences of nursing care ($n = 225$)

Variable	<i>B</i>	SE <i>B</i>	β^{\dagger}	<i>t</i>
Education	-0.11	0.49	-0.01	-0.22
Length of stay	0.01	0.06	0.01	0.26
Age	-0.16	0.04	-0.20	-3.93**
Gender	-3.22	1.15	-0.14	-2.81*
Class of admission	0.39	0.74	0.03	0.53
Time nurse spent with you	5.55	1.33	0.23	4.18**
Speed of response	6.39	1.23	0.27	5.19**
Information	4.56	1.28	0.19	3.57**
Relatives and friends	5.50	1.64	0.18	3.36**
Awareness of patient's needs	4.10	1.25	0.17	3.29**

$\dagger R^2 = 0.56$; $\Delta R^2 = 0.54$; $F = 27.78$; $P < 0.001$; SE, standard error.

* $P = 0.01$; ** $P = 0.001$.

explained a considerable amount of the variance in patients' experiences of nursing care. Patients had a positive experience of nursing care when the speed of the nurses' response to the patient's call was quick ($B = 0.27$, $P < 0.001$), the time nurses spent with

Table 4 Items rated the highest and the lowest in the experiences of nursing care ($n = 225$)

Items	Mean (out of 7)
The highest	
Nurses told me at the next shift what was happening with my care	6.56
Nurses took no interest in me as a person	6.32
Nurses made sure that patients had privacy when they needed it	6.23
I saw the nurses as friends	6.09
The lowest	
Nurses explained what was wrong with me	3.31
Nurses had time to sit and talk to me	2.99

patients was adequate ($B = 0.23$, $P < 0.001$), patients' age was younger ($B = -0.20$, $P < 0.001$), the amount of information nurses gave to patients was adequate ($B = 0.19$, $P < 0.001$), the help that nurses provided to families and friends was adequate ($B = 0.18$, $P < 0.001$), nurses' awareness of patients' needs was adequate ($B = 0.17$, $P < 0.001$), and when patients' gender was male ($B = -0.14$, $P < 0.01$).

Examining not only the total scores of patients' experiences with nursing care but also the relative ratings that participants gave to individual items on the scale was important in order to know how patients perceived specific aspects of care. Items most positively (highest) rated and items most negatively (lowest) rated emerged, as shown in Table 4.

DISCUSSION

The importance of this study on patients' experiences with nursing care stems from the scarcity of similar studies in Jordan. The treatment of each individual as a unique person is a cherished value in nursing care.⁷ However, meeting the needs of all clients is a challenge for the nurse as clients come to hospital with different life experiences.

Patients' perception of nursing care could vary as a function of patients' personality and sociodemographic characteristics, such as age, gender, education and past experiences with health care.²⁸ However, other researchers assumed that patients' perceptions about the degree to which their needs are met should not be affected by demographic, personal and situational variables because they do not require consideration of expectations.^{13,29}

In the current study, young patients tended to have a positive experience of nursing care more than elderly patients. This finding contradicts previous studies in which older patients rated their experiences of nursing care more positively.^{1,6,30,31} This discrepancy could be related to the difference in the respondents' ages in different studies. For example, in a study by Thomas *et al.*, the mean age was 59.8 years with nearly half of the sample (46.6%) ≥ 65 years. In the current study, only 5% of the sample was > 65 years of age (mean = 38 years). In Jordan, one of the few studies that is considered relevant to the current study and was conducted to measure patients' satisfaction with nursing care found that age was not a significant predictor for patients' satisfaction with nursing care.³² However, it is not conclusive to say that age can have this trend of prediction in all countries.

The results of this study support findings of previous research on the differences between male and female patients with nursing care they receive. Male patients tended to have a positive experience of nursing care more often than female patients.^{30,33} Male patients were mostly more satisfied with nursing care. The majority of nurses are female, in addition to the possibility of the presence of a form of flirtation between male patients and nursing staff.³⁰ However, this assumption is not always accurate when we consider the distribution of nurses in relation to patients in the sample of this study. In medical-surgical wards in Jordan, female patients are usually cared for by female nurses, while male patients are cared for by male and female nurses.

The level of education was not a significant predictor for patients' experiences with nursing care in this study. This finding is inconsistent with other studies where higher levels of education were associated with a reduced level of satisfaction with nursing care.^{9,32} However, and consistent with a study by Larson *et al.* on the relationship between meeting patients' information needs and their satisfaction, the amount of provided information and the time nurses spend with patients were found to be significant predictors of patients' experiences.³⁴

It was interesting to find in this study that class of admission was not a significant predictor for the experience of nursing care. This finding that some patients might not be able to distinguish between nursing care and hotel service might contradict what others found.⁶ This could be explicated by saying that patients in the current study were not highly influenced by the non-health services and/or nurses were able to be unprejudiced in the

care they provided regardless of the patient's class of admission.

As would be expected, nurses' respect and cooperation with relatives and friends contributed to patients' positive experiences with nursing care. Suhonen *et al.* reported that a dissatisfied experience with nursing care was found when the provided care included lack of respect for patients and relatives.⁷

In addition to examining the total scores for patients' experiences with nursing care, the relative ratings given to individual items are a valuable guide to how patients perceive specific aspects of care. The participants had positive experiences with nursing care when nurses told them what to expect in the next shift, took interest in them as persons, provided them with privacy and perceived them as friends. This finding is mostly consistent with previous studies where it has been reported that the best aspects of patients' experiences with nursing care were a happy atmosphere, patients' privacy and individualized care.²⁶

Examining items with low ratings revealed that participants had negative experiences when nurses did not explain what was wrong with them and did not take advantage of the time they spent with them. The importance of giving patients enough time to talk, listening to them and keeping them well-informed has been a major theme in nursing research.^{4,24,34}

Although overall ratings for patients' experiences with nursing care in the current study were relatively high (74%), it is crucial to mention that having a high score in the study might not indicate that the care was 'good' but simply that nothing 'extremely bad' occurred. Thus, further studies are needed to explore the relationship between patients' experiences with nursing care and other factors related to the process of care.

CONCLUSION AND IMPLICATIONS

Identifying factors that promote positive patient experiences of nursing care will assist nurses to provide better quality care. The findings of this study will provide nurses with evidence to either maintain currently favoured practices or change unfavoured practices. Nurses can enhance patients' experiences with nursing care by taking advantage of the time they spend with patients by providing more information to them, empowering them to enhance their privacy and maintain their individuality, being aware of patients' needs and responding to such needs, and providing respect and support to patients' family and friends.

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