Patient Experience of Nursing Quality in a Teaching Hospital in Saudi Arabia

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Introduction

Examining the quality of nursing care from the patient's perspective is an important element in quality evaluation. The extent to which patients' expectations are met will influence their perceptions and their satisfaction with the quality of care received.

Numerous researchers have examined patients' satisfaction with nursing care in general terms as well as patients' perceptions of the quality of nursing care, as two major multidimensional concepts that are used several times interchangeably (3). There seems to be general agreements on what leads to quality care and the literature identifies the following issues. First: identifying what the consumer perceives quality care to be helps create a measure for good service (4, 5). Second: understanding patients’ perspectives on the quality of care they receive must precede attempts at measuring
their satisfaction with that care (6). Third: As nursing represents a constant presence in the experience of hospitalized patients, their satisfaction with nursing care is the crucial factor in patients' overall satisfaction or dissatisfaction with their hospital experience (7, 8). The fourth: failure of nurses and other health care providers to take into account factors observed and reported by patients as important to their nursing care is inconsistent with the notion of patient-centered care and patient empowerment (3, 8).

In a qualitative descriptive study the findings showed that 597 comments could be grouped into five themes as characteristics of good nursing care, four of them within interpersonal aspects of care, "providing for my needs", "treating me pleasantly", "caring about me", "providing prompt care", and one theme within technical care," being competent" (9).

Moreover, in the kingdom of Bahrain it was reported that the five highest ranked services were "the employees are caring, treat with a warm and caring attitude, the health professionals appeared neat, the cleanliness and hygiene at the hospital were excellent, and the equipment and supplies are available. The five lowest ranked health services provided were "the hospital reception did not answer calls promptly, the hospital did not have qualified personnel over the weekends, did not have up-to-date equipment, and did not have enough visitor parking" (10).

The purpose of this study was to measure patients' perception levels of the quality of nursing care provided at a teaching hospital in Saudi Arabia. The hospital is a teaching hospital affiliated with the College of Medicine of KSU. It offers clinical practice facilities for students who are studying medicine, nursing, pharmacology, and other health specialties.

Study Population
A convenience sample of 448 patients who were adults (18 years or older) and hospitalized at least for three days on adult surgical and medical wards participated in this study. The sample selection criteria were; ability to speak and understand Arabic, not suffering from severe mental or cognitive disorders, able to coherently communicate and conscious, willing to complete a questionnaire, and reasonably well enough to complete the survey. The patients were asked to participate in the semi-structured interview, and verbal consent was obtained at the time of the survey. The study was conducted (between 1st October 2009 and 25 January 2011).

Instrument and Data Collection
After extensive review of literatures, a focus group discussion with 15 males and 15 females from the study hospital was conducted 6 months prior to initiating our study to obtain insights into issues that are important to patients and to assist in item generation for the questionnaire. The discussion, led by a facilitator, was directed at eliciting the patients' reactions to various components of care. The emphasis was on responses to questions developed from the list of common themes, which represented the most significant areas determining the patients' perception in the adults' wards of KKUH.

The questionnaire was divided into 2 parts, with one collecting demographic data and the other concerning patients' perceptions of nursing care. The selected scale items were translated from English to Arabic, and the translation was verified by a specialist to assure the reliability of the scale. The instrument comprised 42 items assessing six dimensions of patient perception of nursing care as follows:

1) Caring behavior (11 items): e.g., the way the nurse shares the patient's feelings.
2) Information (5 items): e.g. the information from nurses about how to use the medication, and its effects.
3) Nurse Characteristics (4 items): e.g. the politeness of the nurse.
4) Availability and continuity of care (8 items): e.g., the way the nurse watched over me, day and night.
5) Nurse competency and technical care (11 items): e.g. the proficiency of the nurse at the technical aspects of the patient's care.
6) Environment (3 items): e.g. the way the nurse controlled unnecessary noise.

Validity and reliability tests through an expert panel, statistical tests, and a pilot study were completed prior to the data collection. The scales were sent to a panel of 7 nationally recognized experts in nursing care who reviewed the questionnaire for appropriateness, usage of words, item structure, and who examined whether each item was assigned to the appropriate scale. The questionnaire was then modified, incorporating the experts' comments. Internal consistency reliability was tested using Cronbach’s alpha (0.78). Stability reliability was tested using the test-retest procedures. The structured interview questionnaire was piloted on 15 males and 15 females who were not included in the sample. They were asked to complete the questionnaire, and to comment on its structure, clarity of items, and ease of completion. All responded that the questionnaire was easy to understand and that it was representative of their needs.

The data were collected in comfortable conditions, taking into consideration the place, emotions, and condition of each patient, so that their responses were as independent and accurate as possible. Each questionnaire took approximately 20 minutes to complete. The questionnaires started by using encouraging statements such as "your opinion is important to advanced the quality of nursing care provided to patients", "we want to know how you feel about the nursing care provided to you", or "we want to investigate the level to which your needs were met or not". The data collectors explain any inquiry related to questions to ensure the comprehension of the participants.

The patients rated their perception on a 4-point Likert scale consisting of the following ratings: highly agree, agree, disagree, and highly disagree. These responses were scored as 4, 3, 2, and 1 respectively and the perception level was calculated.

Confidentiality
All the subjects willing to participate in the study received a brief explanation of the aim of the study prior to interview. They were de-identified and the data kept confidential. All data obtained in this study were used in a manner that did not allow public disclosure of the subjects' identities.

Data Analysis
The data was coded, entered, and analyzed using the Statistical Package for Social Science (SPSS). The statistical scores associated with nursing care of each dimension and the grand all perception scores were calculated. Descriptive analysis with frequencies and percentages, were generated to describe the patients' demographic profiles and their perception levels. Inferential statistics tests were used to determine the relationship between patients' perception level scores and their demographic attributes.

Results

Demographic Characteristics of Respondents
A total of 448 patients participated in this study about their perception levels of nursing care. The mean age of the sample was 39.2, with a range from 18 to 73 years. The sample included 250 males (55.8%) and 198 females (44.2%) who had been admitted to the hospital.

The majority of the responded patients were married (n=332, 74.1%), and had school level education (n=294, 66%).

The average length of stay was 7.3 days and most of them (n=202, 45.1%) had stayed from 7-10 days. As for department been admitted, most of the sample (n=194, 43.3%) had admitted to surgical departments (Table 1).
Table 1: Demographic characteristics of respondents (n= 448)

| Variable                  | n  | %  |
|---------------------------|----|----|
| Gender                    |    |    |
| Male                      | 250| 55.8|
| Female                    | 198| 44.2|
| Age (year)                |    |    |
| ≤20                       | 66 | 14.7|
| 21-40                     | 198| 44.2|
| 41-60                     | 110| 24.6|
| 61+                       | 74 | 16.5|
| Marital Status            |    |    |
| Married                   | 332| 74.1|
| Single                    | 116| 25.9|
| Educational Level         |    |    |
| School Education          | 294| 65.7|
| High School Education     | 154| 34.3|
| Length of Stay (days)     |    |    |
| 3-6                       | 154| 34.4|
| 7-10                      | 194| 43.3|
| 10+                       | 100| 22.3|
| Department                |    |    |
| Medical                   | 204| 45.5|
| Surgical                  | 244| 54.5|

Descriptive statistics were used to evaluate the 42 structured response questions. The threshold established for these items was a mean perception of 3 which was the agree level, the grand mean of all items was 3.07.

As for the level of perception for the six dimensions, patient scored the lowest mean to dimension variables: information (2.59), environmental needs (2.87), and nurse competency and technical care (2.95) (Table 2).

Table 2: Patients' perception means by dimensions

| Item                         | Means scores |
|------------------------------|--------------|
| Caring                       | 3.22         |
| Informational needs          | 2.59         |
| Availability and Continuity of care | 3.52     |
| Nurse characteristics         | 3.27         |
| Competency and Technical care | 2.95         |
| Environmental needs          | 2.87         |
| Total                        | 3.07         |

Each of the 42 items on the survey was ranked from the highest to lowest in terms of its mean score (Table 3 and 4).

The aspects of care that showed the highest mean score were as follows: the way the nurses respect patient's beliefs, values, and his/her own culture (3.65); neat-appearance of the nurses (3.57); the way the nurses respected and welcomed the patient(3.49); the patience of the nurses (3.48); the proficiency of the nurses at the technical aspects e.g. inserting IV needle (3.40); the privacy provided to patients (3.37); the way the nurse responded promptly to patient request or needs (3.32); the safety measures provided to patients (3.31); the effectiveness of nursing care the patient received after each nurse visit (3.29); and the happy and friendly atmosphere made in the unit by nurses (3.29).

Table 4 shows the aspects of care with the lowest means of perception were as follows: the information from the nurses about how the patient could help himself or herself (2.81); the information about the results of lab. investigations, x-rays, and other examinations (2.76); the way the nurses shared the patient's feelings (2.72); the way the nurses allowed patient to express his/her feeling (2.69); the way the nurses understanding the patient's needs in his/her own language (2.68); the way the nurses sharing information with the patient's family (2.68); the suggestions from the nurses on how the patient could cope with stress (2.61); the way the nurses involved the patient in making a decision related to care provided for his/her disease, and its prognosis (2.59); the orientation given to the patient about the unit facilities and staff at the time of admission (2.33).

The relationship between overall level of perception score and the demographic characteristics of patients is shown in Table 5. The findings of this study revealed no significant relationship between the variables, marital status, age, and length of stay.
Table 3: Aspects of care with highest perception mean scores

| Aspects of care                                                                 | Mean score | SD  |
|--------------------------------------------------------------------------------|------------|-----|
| Respect for patients’ beliefs, values, and his/her own culture                  | 3.65       | 0.56|
| Neat appearance of the nurse                                                   | 3.57       | 0.67|
| Welcoming and respectful of the patient                                         | 3.49       | 0.71|
| Patience of the nurse                                                           | 3.48       | 0.72|
| Proficiency of the nurse at the technical aspects of care e.g. inserting IV needle | 3.40       | 0.76|
| Privacy provided to the patient                                                 | 3.37       | 0.78|
| Responding promptly to the patient's requests                                   | 3.32       | 0.80|
| Safety measures provided to the patient                                         | 3.31       | 0.77|
| Effectiveness of nursing care provided                                         | 3.29       | 0.64|
| Happy and friendly atmosphere made in the unit                                  | 3.29       | 0.67|

Table 4: Aspects of care with the lowest perception mean scores

| Aspects of care                                                                 | Mean score | SD  |
|--------------------------------------------------------------------------------|------------|-----|
| Information to patient to help himself/herself                                 | 2.81       | 0.71|
| The information about the results of investigations                           | 2.76       | 0.77|
| Sharing the patient's feelings                                                  | 2.72       | 1.11|
| Encouraging the patient to express his/her feelings                            | 2.69       | 0.70|
| Understanding the patient's needs in his/her own language                      | 2.68       | 1.07|
| Sharing information with the patient's family                                  | 2.68       | 0.91|
| Suggestions to the patient to cope with stress                                 | 2.61       | 1.05|
| Involving the patient in making decisions related to his/her care              | 2.60       | 1.80|
| Discussing with the patient about his/her disease, and its prognosis           | 2.59       | 1.09|
| Orientation about the unit facilities and staff at the time of admission        | 2.33       | 1.16|

However, a significant relationship was found between overall perception and the variables, "gender" (P=0.01). Females perceived the nursing care provided to them more positively than the males; and the “type of department” (0.004). Those were admitted to "other departments" marked their levels of perception higher than those admitted to either the medical or surgical departments.

**Discussion**

Insight into patients’ perceptions of nursing care will help nurses to understand better how to address these patients needs and expectations more appropriately. Although we found most generally scored their perceptions a little bit above the established threshold (3.07) as reported in (Table1), there was a room for improvements. The dimensions of care where their mean scores were less than the predetermined threshold were: "information", "environmental needs", and "nurse competency and technical care". These low means of perception give nurses a big hint that patients are knowledgeable about themselves and their needs, so they feel very strongly about these dimensions and appear to take them into account when evaluating the quality nursing care they have received.
Table 5: Relationship between demographic variable and scores of perception level

| Variable                  | n   | %   | Mean | SD  | Significance |
|---------------------------|-----|-----|------|-----|--------------|
| Gender                    |     |     |      |     |              |
| Male                      | 250 | 55.8| 2.88 | 0.48| t = - 5.6    |
| Female                    | 198 | 44.2| 3.31 | 0.67| df = 444    |
| Age (year)                |     |     |      |     |              |
| ≤ 20                      | 66  | 14.7| 3.17 | 0.54| P = 0.01*    |
| 21-40                     | 198 | 44.2| 3.09 | 0.58| df = 4,442 |
| 41-60                     | 110 | 24.6| 3.09 | 0.69| P = 0.29    |
| 61+                       | 74  | 16.5| 2.89 | 0.60|              |
| Marital Status            |     |     |      |     |              |
| Married                   | 332 | 74.1| 3.07 | 0.63| t = - 0.06   |
| Single                    | 116 | 25.9| 3.06 | 0.53| df = 444    |
| Educational Level         |     |     |      |     |              |
| School Education          | 294 | 65.7| 3.13 | 0.56| t = 2.32    |
| High School Education     | 154 | 34.3| 2.93 | 0.67| df = 444    |
| Length of Stay(days)      |     |     |      |     |              |
| 3-6                       | 154 | 34.4| 3.01 | 0.67| f = 0.65    |
| 7-10                      | 194 | 43.3| 3.11 | 0.68| df = 4,442 |
| 10+                       | 100 | 22.3| 3.06 | 0.60| P = 0.5     |
| Department                |     |     |      |     |              |
| Medical                   | 204 | 45.5| 2.93 | 0.61| f = 9.48    |
| Surgical                  | 244 | 54.5| 3.01 | 0.56| df = 4,442 |

The items with the lowest mean of perception were as follows: "the information from the nurses about how the patient could help himself/herself"; "the information about the results of lab. investigations, x-rays, and other examinations"; "the way the nurses shared the patient's feelings"; "the way the nurses allowed the patient to express his/her feeling"; "the way the nurses shared the patient's feelings"; "the way the nurses understanding the patient needs in his/her own language"; "the way the nurses shared information with the patient's family"; "the suggestions from nurses on how the patient could cope with stress"; "the way the nurses involved the patients in making a decision related to care provided to his/her disease, and its prognosis"; "the orientation given to the patient about the unit facilities and staff at the time of admission". Most of these items are related to the information dimension. This finding confirmed by the results of many reviewed studies (11-13), which confirmed the importance of information which tailored to patient preference as a crucial indicator of quality of nursing care in patient satisfaction. Other aspects of nursing care that showed the lowest means of perception, "the way the nurses shared the patients feelings; the way the nurses understanding the patients' needs in his/her own language", are related to caring dimension. The caring behavior of the nurses reported as the most notable factor in patients' perception and satisfaction (14). The patients of this study lacked a common native language with their nursing caregivers because the vast majority of nurses working in the hospital were non Arabic speakers. Difficulty in communication due to language skills raises questions about possible patient care, caring, and safety issues (2).
One other important aspect of care among the lowest perception mean scores was "involving the patients in making decisions related to care provided to him/her". This finding suggests that the sampled patients felt that they were involved in decision making and care inappropriately. Studies related to patient-centered care acknowledge the importance of patients' participation and involvement in health care which is considered essential to nursing practice. The findings of one study lend support to the fact that involvement of patients in making decisions facilitates their taking responsibility for themselves (15).

The findings of this study revealed no significant relationship between the variables of age, marital status, and length of stay. However, significant relationships were found between overall satisfaction and the variables, gender, and the type of department.

Regarding gender, the females perceived the nursing care provided to them more positively than the males. This finding could be explained by because the majority of sampled patients are males and their level of education is higher than females, so their knowledge toward their needs, rights, and quality of nursing care they will received is higher than females.

Concerning department type, the patients of "other departments had a higher mean score than who admitted to medical or surgical department. The probable explanation for these findings was that those admitted to medical departments mostly admitted with more serious conditions, worse prognosis, and highly exposed to stressful and anxious situation, their perception level influenced by "hallo effect" of these factors which made it low.

Nurse Managers could share the positive and negative results of this study with their staff at unit meetings. Generalizing the issues and alternatives in a problem-solving manner may serve, as a useful means of handle the negative comments, while sharing the positive results will increase staff nurse satisfaction with their provision of a high quality of nursing care.

Continuing education programs in the form of mandatory courses in Arabic, and in Saudi culture for non-native nurses as a part of their orientation are essential to facilitate communication with their patients. Knowledge of patient and family values, beliefs, and cultural backgrounds should be incorporated into the planning and delivery of care.

The findings of this study provide a framework for both nurse managers and unit nurse managers to seriously when planning for steps to take towards implementing patient centered health care.

**Study limitations and future studies**

A limitation of the research is the convenience sampling of this study as it affects the ability to generalize the findings. More studies with large random sample are needed a cross multiple hospitals. In addition longitudinal studies are needed to evaluate the impact of quality of nursing care interventions.

**Ethical considerations**

Ethical issues (Including plagiarism, Informed Consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc) have been completely observed by the authors.

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