A quality indicator for the evaluation of nursing care: determination of patient satisfaction and related factors at a university hospital in the Mediterranean Region in Turkey

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ABSTRACT

Aim: The aim of this study was to determine the patient satisfaction levels as a quality indicator for the evaluation of nursing care in a university hospital in the Mediterranean Region in Turkey.

Methods: This study was designed as a descriptive study and was conducted between February 2, 2015 and March 3, 2015. The study sample consisted of 400 patients. For data collection, the study used the Newcastle Satisfaction with Nursing Scale, which included two subscales: the Experience of Nursing Care Scale and Satisfaction with Nursing Care Scale.

Results: The mean total 'Satisfaction with Nursing Care Scale' score was 62.08 ± 20.94, and the mean total 'Experience of Nursing Care Scale' was 71.97 ± 11.97. When the items were examined in both subscales, the highest satisfaction items were reported as 'the skilfulness of nurses' and 'the nurses' respect for the patients' privacy'. However, the lowest scores were given to 'the nurses' efforts to make the patients feel at their home' and 'the way the nurse comforted your relatives and friends'.

Conclusions: Considering the study results, patients require more individualised care from nurses regarding education, communication and comfort.

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1. Introduction

Rapid technological advances in specialisation, increasing costs, demographic changes and shifting patient expectations necessitate continuous updates to today's healthcare systems. There is increasing interest in evaluation of patient healthcare perceptions to develop healthcare systems that are capable of meeting the needs and preferences of all patients (World Health Organization [WHO], 2007; Suhonen et al., 2012). National and international health organisations emphasise continuous monitoring of service and the evaluation of patient care to raise the quality of care (Türkiye Cumhuriyeti Sağlık Bakanlığı-Republic of Turkey Ministry of Health [TCSB], 2003; WHO, 2003; Joint Commission International [JCI], 2010). One of the most important tools for monitoring healthcare quality in hospitals is the assessment of patient satisfaction (Otani et al., 2009; JCI, 2010). Although patient satisfaction is closely related to expectations and perceptions, it is the most widely used metric of healthcare quality. Therefore, patient satisfaction is an important assessment tool for determining whether a system is capable of meeting patient values, expectations and requirements (Oyvind, Ingeborg, & Hilde, 2012; Sreenivas & Suresh Babu, 2012; Suhonen et al., 2012; Al-Abri & Al-Balushi, 2014). From the time of admission until discharge, patient satisfaction is correlated with perceptions of nursing care relative to patient expectations (Milutinović, Simin, & Brkić, 2012). The nursing care provided by nurses is regarded as the most important factor in patient assessments of their satisfaction with health care (Johansson, Oleni, & Fridlund, 2002). Nurses spend more time with hospitalised patients compared to other healthcare professionals and nurses interact with patients more often than any other healthcare personnel in a hospital. Therefore, nurses have a significant impact upon patients' perceptions about their hospital experience

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(Samina, Quadri, Tabish, Samiya, & Riyaz, 2008; Koç, Sağlam, & Şenol, 2011). When patient requirements and expectations are met through nursing care, the individual feels valued and strives for compliance with the treatment (Tuğut & Gölbaşı, 2013). As a result, patient satisfaction contributes to improving health and quality of life. Evaluation of patient satisfaction data can lead to continuous improvements to the quality of care (Wolf, 2012; Freitas, Silva, Minamisava, Bezerra, & Sousa, 2014). Therefore, it is important to evaluate patient satisfaction on a regular basis and to share the results of the satisfaction with health professionals. This research was designed as descriptively with the aim to determine the level of satisfaction of the patients with nursing care.

2. Study design and methods

2.1. Setting

This study was designed as a descriptive evaluation and was conducted between February 2, 2015 and March 3, 2015 at a university hospital in the Mediterranean Region in Turkey. This hospital treats approximately 20,000–30,000 inpatients annually, with a bed capacity of 1080. Seven hundred nurses serve in the hospital. It is a regional hospital specialising in complex organ and tissue transplant cases. There are 11 intensive care units, 2 organ transplantation units and 2 stem cell transplantation units within the hospital. The number of patients per nurse in the surgical and medical clinics is 12.31 ± 2.10 between 8 am and 4 pm, 18.25 ± 3.24 from 4 pm to 12 pm and 18.25 ± 3.24 from 12 pm to 8 am. The quality management department of the hospital conducts patient satisfaction assessments annually. Assessments of nursing services are conducted by the nursing department.

2.2. Data collection

The population of the study was calculated as approximately 20,000 inpatients over the prior year (using the formula $n = N t2 \alpha/d2 (N-1) + t2 \alpha$. In the formula, the symbols represent the following: (n) the sample size; (N) the size of the population; (t) the standard error rate at 95% confidence interval (1.96) and (α) an estimated prevalence (70%) (Akın & Erdogan, 2007) and (d) a desired precision (0.05). The study sample consisted of 400 patients with a 95% confidence interval, 0.05% standard error and the proportion of patient satisfaction was 70% (Kumar et al., 2014; Akın & Erdogan, 2007). The sample group consisted of patients selected randomly from patients who met the inclusion criteria. The study inclusion criteria included admission to the hospital as inpatients staying in the hospital for >48 h, those who are older than 18 and willing to participate in the study. The exclusion criteria of the study were patients admitted to the intensive care unit, pediatrics or the psychiatry wards. Before gathering the study data, patients were informed about the purpose of the study and all study participants provided verbal consent to participate. Participating patients completed a questionnaire during their hospital stay. Patients without literacy completed the questionnaire via face-to-face interviews with the researcher.

The Personal Information Form included patient age, sex, marital status, education, clinic where the patient was admitted, income status, presence of a chronic disease, whether he/she had been informed about the disease/treatment and if he/she had been informed, who provided this information (Johansson et al., 2002; Kelarijani, Jamshidi, Heidarian, & Khorshidi, 2014). In addition, the Newcastle Satisfaction with Nursing Scale (NSNS) was completed by all patients. The NSNS was developed by Thomas, McColl, Priest, Bond, and Boys (1996). The Turkish version of the scale was tested for its validity and reliability by Akın and Erdogan (2007). The

NSNS includes two subscales: the Experience of Nursing Care Scale (ENCS) and the Satisfaction with Nursing Care Scale (SNCS). These two subscales can be applied either together or separately. In this study, the ENCS and SNCS were applied together. The SCNS consists of a total of 19 items using a 5-point Likert scale. The scoring for assessing the degree of satisfaction is as follows: 1: not at all satisfied, 2: barely satisfied, 3: quite satisfied, 4: very satisfied and 5: completely satisfied. Patient responses across all items are summed and transformed to yield an overall satisfaction score of 0–100, in which 100 denotes complete satisfaction with all aspects of nursing care.

The ENCS was developed to evaluate patient experiences regarding nursing care services during their hospital stay. In this scale, a series of 26 statements on aspects of nursing are presented and respondents are asked to indicate how representative each was of their own experience using a 7-point Likert scale. The statements presented in scoring are as follows: 1: disagree completely, 2: disagree a lot, 3: disagree a little, 4: neither agree nor disagree, 5: agree a little, 6: agree a lot and 7: agree completely. To avoid affirmation bias, a mixture of 15 positively and 11 negatively worded statements are included. Scores of the negatively worded statements are recoded in an inverted way, so that 1 has a score of 0 and 7 has a score of 6. Responses across all items were summed and transformed to yield an overall experience score with a potential range of 0–100, where 100 represents the best possible experience.

2.3. Measures and analysis

In this study the Cronbach's alpha internal consistency coefficient was 0.92, which is consistent with the results reported previously (0.96) by Akın and Erdogan (2007). Mean and percentile values were calculated. The independent samples t-test, ANOVA and Cronbach's alpha coefficient were applied.

2.4. Institutional Review Board approval

Written approval was obtained from the institution and verbal approval was obtained from the patients. This study was approved by Akdeniz University Research Ethics Committee.

3. Results

3.1. Patient characteristics

Of the participant patients, 53.3% were male, 88% were married and 52% were primary school graduates; 50.7% of the participating patients were inpatients in medical clinics, 54% had a current chronic disease and 90. 5% of patients had family relatives. Family relatives are friends, relatives or neighbors, who provide assistance to the patient in the hospital but are unpaid for those services. About 75.2% were informed about their disease during their stay at the hospital and 33% received this information from the nurse. Participating patients had a mean age of 55.18 ± 17.08 and the duration of the hospital stay varied between 2 and 180 days, with a mean of 11.72 ± 17.46 days. The hospital length of stay of inpatients in medical clinics (an average of 17 days) was longer than that for surgical inpatients (an average of 9 days).

SNCS–ENCS score and related factors: The mean total SNCS score of the participating patients was 62.08 ± 20.94, and mean total ENCS score was 71.97 ± 11.97. As shown in Fig. 1, regarding nursing care, patients reported the highest satisfaction for 'the skilfulness of nurses' and 'their respect for privacy'. Patients were least satisfied with 'the nurse's efforts to make them feel at home' and 'the way nurses tried to comfort their relatives and friends'. There was a significant association between SNCS scores and the clinics where patients were admitted ($P < 0.05$). Patients admitted in