Original Research Article

How the Patient Perceives about Nursing Care: Patient Satisfaction Study using SERVQUAL Model

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ABSTRACT

Background: Nurses are frontline care providers and remain with the patient round the clock. Nursing care is one of the major components of healthcare services. It is the duty of the nurses to provide quality care to satisfy patient's needs. Thus this study aims to determine the patient satisfaction with nursing care.
Methods: Descriptive cross sectional study design was carried out in two larger tertiary hospitals of Kathmandu Valley. Purposively selected116 inpatients (58 from each hospital) were interviewed by using researcher modified version of service quality (SERVQUAL) measurement tool. Researcher used Statistical Packages for Social Sciences (SPSS) version 22 for windows for data analysis and used frequency, percentage, mean and standard deviation to describe the findings. Ethical approval was taken from Institutional Review Committee of Nepalese Army Institute of Health Sciences and respective hospitals.
Results: From the study findings, the satisfaction was rated highest in responsiveness (mean=2.84) and empathy (mean=2.78) dimension where the lowest rating was identified in tangibility (mean=2.56) and assurance (mean=2.64) dimension. In all dimensions, patients were least satisfied in cleanliness of room, nurses' communication with them and providing nursing care i.e., breathing and coughing exercise and assisting in personal hygiene. In comparison to this, they were satisfied in adequate light and ventilation, timing of nurses' work, responding patients cheerfully, communicating in understandable Nepali language and giving attention during delivery of nursing care.

Conclusion: However the overall mean score for patient satisfaction was found good in all dimensions, still there needs some work for improvement of tangible factors as well as improving nurses communication skill to improve the overall satisfaction level.

Key words: nursing care, patient satisfaction, SERVQUAL, tertiary hospital

INTRODUCTION

Curing and caring are the fundamental components of health care services; the doctors focus on the curing issues whereas the nurses take responsibility of caring the patients. Nurses form the largest group of the health workforce. [1] They are the primary caregivers in all health promoting environments, including hospitals, clinics, and community settings. Nursing practice is patient driven and patient centered. Patient satisfaction has been strongly advocated by nursing professionals to be an important indicator of quality of nursing care delivery. [2,3] The patient perspective is increasingly recognized as a central pillar of quality care and frequently included in healthcare planning and evaluation. [4] Patient satisfaction is the patient's perception of care received compared with the care expected. Patients base their expectations on their own encounters with behaviors of nurses. [5-7] Patients evaluate the health-care services as well as the providers from their own subjective point of view. Patient's opinions are important because

dissatisfaction suggests opportunities for improvement. [8]

It is very difficult to assess the technical quality of nursing care by the patients but assessing their experience during hospitalization through the patients' eyes can reveal important information about the quality of care. [6] It is the responsibility of healthcare providers to access and identify patients' experiences among various service quality dimensions and to improve these dimensions for patient satisfaction. [9] Improving and sustaining health care within hospitals continues to challenge practitioners and policy makers. [10] Healthcare service quality is an indicator which can discover those aspects of service quality which require modification to enhance patient satisfaction. [11] Globally, there are many studies found on patient satisfaction regarding nursing care but in the context of Nepal, researcher found limited studies published. Therefore this study was undertaken to assess patient's satisfaction with nursing care using service quality (SERVQUAL) measurement tool.

MATERIALS AND METHODS

Descriptive cross sectional study design was used for this study. The study was conducted in two larger tertiary hospitals of Kathmandu valley i.e., government and teaching hospital as these two hospitals are reputed to handle patients from all classes, all geographical regions and with various health problems. From medical and surgical department of these hospitals, 116 inpatients (58 from each) who were admitted for more than 7 days at the time of data collection were included for the study. Face to face interview was taken from each study participant by using service quality (SERVQUAL) tool. SERVQUAL is an empirically derived method used by service organizations to improve service quality. This method was developed by a group of American authors A. Parasuraman, Valarie A. Zeithaml and Len Berry in 1988. It has proven to be the most popular instrument for measuring service quality. It

aims to measure perceptions of a service across five service quality dimensions composed of tangibility, reliability, responsiveness, assurance and empathy. Where tangibility describes the appearance of physical facilities, personnel and equipment; reliability deals with the ability to perform the promised service dependably and accurately; responsiveness considers the willingness to help patients and provide prompt service; assurance deals about the knowledge and courtesy of employees and their ability to inspire trust and confidence level and empathy describes the ability to provide caring and individualized attention to their patients.

This study used researcher modified version of the SERVQUAL instrument to measure the quality of nursing care in terms of patient satisfaction. Satisfaction level was measured by using 3 item scales namely highly satisfied, moderately satisfied and least satisfied. After data collection, it was edited manually and entered in the software i.e. Epidata and Statistical Packages for Social Sciences version 22 for windows. Then, frequency and percentage to summarize the participant's characteristics and each item of SERVQUAL dimensions were computed. The mean score and standard deviation for each dimension were calculated. According to mean score, it was considered that the highest the mean score, patient were highly satisfied and the least the mean score, patients were least satisfied. Ethical approval was taken from Institutional Review Committee of Nepalese Army Institute of Health Sciences and study hospitals. Verbal informed consent was taken with each participant before interview. They were provided with sufficient information regarding the research purposes. They were assured that all the information collected for the study will be utilized only for the purpose of research and will not be disclosed to anyone outside. Their right to reject or participate in the study was respected. No one was forced to answer the question. Privacy and confidentiality of the participant was

maintained.

RESULTS

The mean age of study participants was 44 years (SD±17.41). More than half participants (57.8%) were male and rest were female. Fifty six percent participants were from medical ward and 44% were from surgical ward. Similarly 63% participants came to the hospital on their will and admitted later where 37% were referred from other hospital for better management. Similarly 71% were suffering from chronic illnesses whereas 29% were suffering from acute illness.

Patient satisfaction level was analyzed in each of five dimensions of SERVQUAL measurement tool namely tangibility, reliability, responsiveness, assurance and empathy. Though the tangibility dimension is indirect measurement of quality of nursing care, it greatly impacts the patient satisfaction. In tangibility dimension, items with three highest mean rating for patient satisfaction were availability of chairs and tools (M=2.67, SD±0.586), adequate light and ventilation (M=2.66, SD±0.0.559) and access of bedpan, urinal and screen (M=2.65, SD±0.636). Similarly three lowest mean rating towards patient satisfaction were cleanliness of room (M=2.40, SD±0.505), space between bed (M=2.49, SD±0.567) and comfortable, bed, blanket and bed sheet (M=2.52, SD±0.625) (see Table 1).

Table 1 Factors contributing to Patient Satisfaction in Tangibility Dimension

Factors contributing to Patient Satisfaction	Mean (M)	Standard Deviation (SD)
Cleanliness of room	2.40	0.509
Adequate light and ventilation	2.66	0.559
Access of bedpan, urinals and screen	2.65	0.636
Comfortable bed, blanket and bed sheet	2.52	0.625
Space between bed	2.49	0.567
Availability of chairs and tools	2.67	0.586

In reliability dimension, highest mean rating for patient satisfaction was reported in 2 factors i.e., nurses provide services within time frame and nurses time their work to avoid disrupting patient's sleep (Mean= 2.91, SD±0.322). The lowest mean rating for patient satisfaction was reported in "nurses provide discharge teaching" (Mean=2.01, SD±0.942) and "nurses tell patients what to do if problems arise after discharge" (Mean=2.03, SD±0.934) (see Table 2).

Table 2 Factors contributing to Patient Satisfaction in Reliability Dimension

Factors contributing to Patient Satisfaction	Mean (M)	Standard Deviation (SD)
Nurses are skillful with the procedures	2.72	0.486
Nurses provide services within time frame	2.91	0.322
Nurses show interest in solving patient's problems	2.87	0.337
Nurses time their work to avoid disrupting patient's sleep	2.91	0.348
Nurses give adequate information about patient's condition	2.49	0.740
Nurses explain about every procedure before doing	2.76	0.599
Patient can rely on nurses for their information	2.85	0.380
Nurses explain when something goes wrong with patient	2.49	0.797
Nurses provide discharge teaching	2.01	0.942
Nurses tell patients what to do if problems arise after discharge	2.03	0.934

Table 3 Factors contributing to Patient Satisfaction in Responsiveness Dimension

Factors contributing to Patient Satisfaction	Mean (M)	Standard Deviation (SD)
Nurses are always willing to answer patient's queries	2.77	0.500
Nurses are willing to help patient all the times if needed	2.82	0.429
Nurses visit patients at appropriate time for vital signs and medications	2.89	0.412
Nurses respond patients immediately upon their query	2.91	0.282

Table 3 indicates the patient satisfaction towards responsiveness dimension. According to participant response, highest mean score was rated in "nurses respond patients immediately upon their query" (M=2.91, SD±0.282) and "nurses visit patients at appropriate time for vital signs and medications" (M=2.89, SD±0.412). Lowest mean rating was found on "nurses are always willing to answer patient's queries" (Mean=2.77, SD±0.500) and "nurses are willing to help patient all

the times if needed" (Mean=2.82, SD±0.429). The overall mean and SD for this dimension is 2.84 and 0.288.

In assurance dimension, patients were highly satisfied in following factors: "nurses watch over and closely monitor her patient regularly" (Mean=2.85, SD±0.401), "nurses respond her patients cheerfully" (Mean=2.84, SD±0.414) and "nurses always provide a clear explanation before performing any procedure" (Mean=2.84, SD±0.449) according to its mean rating. Similarly, they were least satisfied in these factors i.e., "nurses always provide a clear explanation in health promotion activities" (Mean=2.07, SD±0. 961), "nurses encourage her patients to ask questions regarding their condition" (Mean=2.26, SD±0. 886), and "nurses encourage to use proper technique of breathing, coughing and positioning" (Mean=2.42, SD±0. 804) (see Table 4). The overall mean rating for this dimension is 2.64.

Table 4 Factors contributing to Patient Satisfaction in Assurance Dimension

Factors contributing to Patient Satisfaction	Mean (M)	Standard Deviation (SD)
Nurses alleviate any fears related to patient's condition	2.53	0.740
Nurses encourage to use proper technique of breathing, coughing and positioning	2.42	0.804
Nurses check regularly to her patients if they are all right	2.73	0.580
Nurses watch over and closely monitor her patient regularly	2.85	0.401
Nurses encourage her patients to ask questions regarding their condition	2.26	0.886
Nurses respond her patients cheerfully	2.84	0.416
Nurses make her patients feel that they are in good hands	2.83	0.462
Nurses always provide a clear explanation before performing any procedure	2.84	0.449
Nurses make patient feel safe and confident when providing services	2.83	0.443
Nurses always provide a clear explanation in health promotion activities	2.07	0.961

In empathy dimension, highest mean rating was found in following factor: "nurses always communicate in understandable Nepali language without using medical terms" (M=2.97, SD±0.159), "nurses give full attention during delivery of

patient care" (M=2.92, SD±0.269) and "nurses show respect when talking or providing care to patients" (M=2.92, SD±0.299) whereas lowest rating was found in "nurses assist patients in personal hygiene" (M=2.30, SD±0.771), "nurses provide quiet environment for rest" (M=2.72, SD±0.627) and "nurses address patient by their name or respective words" (M=2.72, SD±0.643) (see Table 5). The overall mean and standard deviation for this dimension is 2.79 and 0.274.

Table 5 Factors contributing to Patient Satisfaction in Empathy Dimension

Factors contributing to Patient Satisfaction	Mean (M)	Standard Deviation (SD)
Nurses always communicate in understandable Nepali language without using medical terms	2.97	0.159
Nurses have a pleasant tone of voice	2.87	0.385
Nurses show sympathy and understanding with what patient is going through	2.77	0.549
Nurses give full attention during delivery of patient care	2.92	0.269
Nurses provide quiet environment for rest	2.72	0.627
Nurses always maintain patient's privacy and confidentiality	2.85	0.422
Nurses address patient by their name or respective words	2.72	0.643
Nurses show respect when talking or providing care to patients	2.92	0.299
Nurses assist patients in personal hygiene	2.30	0.771
Nurses make patients feel that they enjoy taking care of them	2.82	0.409
Nurses show empathetic facial expression	2.89	0.343
Nurses give their patients personal attention	2.78	0.458

DISCUSSION

This study identified the patient satisfaction with nursing care in five SERVQUAL dimensions i.e., tangibility, reliability, responsiveness, assurance and empathy. Although it is very difficult to assess the technical quality of nursing care by the patients but assessing their experience during hospitalization can reveal the important information about the quality of care. Patients are the best source of information about the hospital's physical facilities; care provided by nurses and other health professionals. This information can be used by practitioners and policy makers in improving and sustaining healthcare in

the hospitals. [12]

The study findings indicate that the overall patient's satisfaction with nursing care was found good. Patients were highly satisfied in responsiveness dimension followed by empathy and reliability dimension. This result is consistent with the study done in Ghana where the overall satisfaction of patients concerning the service quality of hospital was good. [13] Study findings are in line with the study from Saudi Arabia where patients were more satisfied in empathy followed by tangibility and responsiveness dimension however, this study explored the satisfaction with all healthcare providers not only nurses. [14] This study suggested that when patient's perceived the nurses cares for them and pays special attention to them; there would be higher level of satisfaction. Contrary to these findings, a study conducted among 250 patients in Iran identified that nearly half were weakly satisfied with nursing care and significant relation to age, gender, level of education, marital status and previous hospitalization. [15]

With the lowest mean rating, patients were least satisfied in cleanliness of room followed by space between beds and comfortable bed, blanket. They were highly satisfied in availability of chairs and tools, adequacy of light and ventilation and accessibility of bedpan, urinals and screen. These findings are in line with the study carried out in Tanzania among OPD patients where they were least satisfied with general cleanliness of OPD [16] and Bangladesh where most of the hospitals were lacking clean and organized appearance of hospital, its premises, rest rooms, equipment, wards and beds thereby attenuating patient satisfaction. [17] However, these are contrary to a study findings done in Malaysia where patient satisfaction was highest in terms of tangible factors particularly accessibility and convenience. [18]

From the study findings, being skillful with the procedures, providing prompt service, showing interest in solving patient's problems, timing their work to avoid disrupting patient's sleep, explaining each procedure before doing (reliability) would make patients more satisfied with nursing care. Similarly patients were least satisfied with information giving aspects i.e., discharge teaching, explaining about patients' condition etc. These findings are consistent with the similar study from Malaysia. [19] In this study, affective support was found to be the domain that contributes highest to the patient satisfaction and the domain of decisional control and health information were found to contribute the least to patient satisfaction.

In this study, overall highest mean rating was identified in responsiveness dimension. Factors those contribute to highest patient satisfaction were nurse's willingness to answer patient's queries and help patient all the time, visiting at appropriate time to assess them and immediate response in case of inconvenience or pain. This finding is contrary to the findings from Tanzania study where patients were least satisfied with OPD staff in respect towards patients [16] and study from UAE, where also responsiveness was perceived as the least important of the five SERVQUAL dimension. [20]

Nurse's knowledge, skill and courtesy can provide a sense of assurance to their patients. In this dimension, patients were highly satisfied with nurse's action to alleviate any fears related to patient's disease condition, their close observation by nurses, nurse's encouragement to clarify patient's doubts, cheerful responses, clear explanation before performing any care, make them feel safe and confident. Similarly they were least satisfied with the explanation given by nurses on health promotion activities, encouragement to ask questions regarding patient's condition and teaching and encouraging to use proper breathing techniques. These findings are supported with many previous studies. [21,22] Similarly in empathy dimension, patients' were highly satisfied with nurses'

communication in simple Nepali language, pleasant tone of voice, giving full attention during care, respecting and paying special attention to their patients. These findings are supported by similar study done in Kuala Lumpur of Malaysia where significant positive correlation was found in empathy shown by nurse and patient's overall satisfaction with nursing care. Similar statements were asked to determine the quality of care in this study also. [23]

CONCLUSIONS

From the study findings, it can be concluded that patients were least satisfied in cleanliness of room where s/he admitted. Among others, satisfaction was found low in communication aspects i.e., explanation in health promotion activities, providing discharge teaching, identification of complications & actions taken if identified and nursing care i.e., encourage to use proper technique of breathing, coughing, positioning & assisting in personal hygiene. In compared to these, they were most satisfied in availability of chairs & tools, providing services within time, responding patient's queries, close monitoring and communication in understandable Nepali language. In all dimensions of SERVQUAL, patients were less satisfied in assurance and reliability factors.

As satisfaction was found low in communication aspects and nursing care aspects, hospital management is responsible to identify those nurses, train them, follow up and take action if they could not perform according to standard. Also hospital should be responsible to take time to orient their staffs after recruitment in this regard.

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