Quality of Nursing Care among in-Patient of Medical-Surgical Ward in Axum St. Marry Hospital, Tigray, Ethiopia 2015

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Abstract

Background: Nurses are the frontline people that patients most likely meet up with, spend the highest amount of time with and rely upon for recovery during their hospitalization. They are a key part of any healthcare team, and the way they perform their jobs has a real impact on healthcare quality.

Objective: Objective is to assess the status of quality of nursing care among inpatient of Medical-Surgical ward in Axum st. marry Hospital Axum town, Tigray, Ethiopia.

Methods: A cross sectional study design was used. The required sample size was taken by using convenience sampling. The study population was adult patients who were admitted into the medical and surgical wards of study Hospitals for at least two nights. The data collection tool was a modified ‘Newcastle Satisfaction with Nursing Scale’ (NSNS) and NDQNI. Ethical clearance was secured from Axum University. The qualitative data was examined by observation.

Result: A total of 110 adult patients from medical and surgical wards were approached from the study hospital. Participants who admitted in medical ward were more satisfied. The overall rating of nursing care quality was 65%. The top aspects of care scored highest were medicine administration and nurses keep personal information confidential. The aspects of care which scored least were patient observation; pressure ulcer prevention and the amount of information nurses give about their condition. The need of improving interpersonal relationship of nurses with their patients and improving their care was recommended.

Keywords: Quality; Nursing care

Introduction

Background

Nurses are the frontline people that patients most likely meet up with, spend the highest amount of time with and rely upon for recovery during their hospitalization. Nursing care plays a prominent role in determining the overall satisfaction of patients’ hospitalization experience [1-3]. Nursing is a profession that ensures the successful implementation of interventions that welcome and nurture life, promotes or restores health, enables the means to a peaceful, dignified and pain-free death.

Nurses are an important part of each patient’s care; they provide continuous care to patients: assessing the patient, answering questions, giving medications and treatments, and assisting with medical procedures.

Nurses have the responsibility to help patients understand the care they will receive and what the patients must do to cooperate in their care. They have the responsibility to explain to patients what they should and shouldn’t do as they go through treatment and recovery, and they must quickly respond to patients in need. They are a key part of any healthcare team, and the way they perform their jobs has a real impact on healthcare quality [4].

Research has shown that some clinical quality measures are strongly related to good nursing care. In addition, patients know that a good relationship with a caring, knowledgeable and competent nurse can significantly improve the comfort and effectiveness of hospital care.

It is known that nursing services are the backbone of the healthcare system in almost all countries in the world. They represent between 60-70% of the health personnel So, it is thus important that we assess quality of nursing care we offer in order to improve on it [5].

Nursing care is one of the major health care services. It contributes a lot to the patient healing process. Even though there are competent physicians present in a given health institution, it would not be adequate without appropriate nursing care. Nurses have 24 hour contact with patients as well as being near to them. Thus, as they are the frontline, the patients expect more from them and nurses should also fulfill patients’ needs with competence and a compassionate approach. If the patient is denied appropriate care, the healing process is obviously compromised. On this line, assessing the quality of nursing care is crucial in order to identify the area of low quality of care and at the same time to improve the nursing services [5].

Nursing care quality is considered as one of the desired outcomes of health quality. Hence, measuring quality has become an integral part of hospital/clinic management strategies across the globe.

Good cares attract, satisfy, and keep clients by offering them the service, supplies, information, and emotional support they need to meet their individual goals.

This assessment is believed to make it possible to identify problems

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that exist in the care to clients and to switch on the solutions, enhance the attraction of clients for the service and also ensure continued use of the service.

**Objectives**

**General objective:** To assess the status of quality of nursing care among inpatient of Medical-Surgical ward in Axum St. Mary Hospital, Tigray, Ethiopia.

**Specific objectives:**
- To describe skills of service providers (nurses) based on National Database Nursing care Quality Indicator.
- To determine the level of satisfaction of clients on the service provision among the study group.
- To describe client-nurse interaction in the nursing care service.

**Methods and Materials**

**Study area**

The study was conducted in St. Merry Aksum general hospital. It is occur at Aksum town. The hospital gives regular health services including inpatient ward. The St. Merry Aksum general hospital is Under-Regional Administration Health Bureau (RAHB) with a total of 95 beds in the medical and surgical ward.

**Source of population**

All adult patients who were admit to medical surgical St. Merry Aksum general hospital and all nurse staff was the source of population.

**Study population**

Patients who was admitted to the study wards in the study hospitals at the time of data collection and met the inclusion criteria: being 18 years or older; being in the ward for two nights or more; and able to communicate is study population.

**Inclusion criteria and exclusion criteria**

Patients was included in the survey if they fulfill the following inclusion criteria of (1) adults, aged 18 years and above; (2) conscious, coherent, and oriented to time, person and place; (3) admitted in the medical and surgical wards for at least two days and (4) willing to give informed consent. All nurse staffs that work in the medical and surgical wards was also include in the study. Those patients who are too seriously ill and unable to communicate was not being included in the study.

**Study design and period**

A cross sectional study was conducted on May 30-June 9 / 2015.

**Sample size determination and technique**

All patients admitted was taking using convenience sampling, in which all adult patients who was admit to medical-surgical ward of St. Merry Aksum general hospital and all service provider to be available at the time of data collection was selected.

**Questionnaire development**

A questionnaire was developed after review of relevant literatures and was assessed based on modified Newcastle Satisfaction with Nursing Scale (NSNS). A number of questions that could address the objective of this study are gathered and adapted.

**Data collection method**

The data collection instrument was an anonymous closed-ended questionnaire to be interviewed by data collectors, which consists of different parts like socio-demographic variables, clients’ satisfactions, and client-provider interaction.

For qualitative parts, structured checklists used for observation of the services provided by the nurses.

**Data quality assurance**

The questionnaire was pre-tested before the actual data collection. Training was given for data collectors and questionnaire are prepared by English language. After extensive revision of the English questionnaire, the final English version was translated to Tigrigna language and again commented by our Advisor, who has good command on both English and Tigrigna languages (local language). This was done because the local language for the study area was Tigrigna (local language) and this makes easier for data collectors to communicate with patients.

Data collectors were instruct to check the completeness of each questionnaire at the end of each interview. The respondents was also given appropriate time when they answer questions.

For qualitative parts, structured checklists used for observation was prepared by English language.

**Operational definition**

**Quality:** Quality in health care means offering a range of service that are safe, effective and that satisfy clients’ needs and want.

- Level of Quality score in percentage
  - Good Quality: 76% and above
  - Fair Quality: 50%-75%
  - Low Quality: 26-49%
  - No Quality at all: 0%-25%

**Quality of nursing care:** Quality of nursing care on some specific indicators like (Falls assessment, Pressure area care, Pain management, Patient observations, Infection prevention and control and Medicine prescribing and administration.) had associated to national guidance and/or emerged from patient complaints and also acknowledged as an process indicator of the quality of nursing care.

**Nursing staff:** It refers to Nurses, Junior Nurses and Health Assistants who worked in hospitals under study.

**Patient satisfaction with nursing care:** It is defined as the patients’ opinion of the care received from nursing staff and is acknowledged as an outcome indicator of the quality of nursing care.

**Interpersonal relations:** personal dimensions for service, principally the received affective contents of exchanges between providers and clients and is acknowledged as a process indicator of the quality of nursing care.

For qualitative study, the observational checklist was developed based on National Database of Nursing Quality Indicators (NDNQI) and implementing quality care indicators.
Dependent and independent variables

Dependent variable:
- Quality of nursing care

Independent variables:
- Nurses competence (skills)
- Socio-demographic variables (age, gender…)
- Nursing care provided
- Admission Ward

Data analysis: Data were analysed using for computing statistics. Frequency distributions and cross tabulation were obtained to check for data entry errors (e.g un-recognized or missing codes).

Ethical consideration: Before the fieldwork, ethical clearance was obtained from Faculty of Health, Aksum University. Then formal letter of cooperation was written from Aksum University to Aksum St. Marry General Hospital. Data collectors inform to clients that they have full right to discontinue or refuse to participate at the beginning or in the middle of the study. A letter of agreement was also attached to questionnaire to obtain the permission of each individual.

Result

Socio-demographic characteristics

A total of 110 adult patients who were admitted in medical and surgical wards of Aksum St. Marry general hospital participated in this research. Table 1 shows the socio-demographic characteristics of respondents. Concerning gender 62% of them were males.

Patients nursing care satisfaction score

The amount of time nurses spent with you is fair (82.7%) and nurses’ perform the procedure with cleanliness (88.2%) were the two top scores that has good quality of nursing care in terms of patient satisfaction whereas There always being a nurse around if you need One (60%) and nurses came quickly when you called for them (63.6%) were the least scores (Table 2).

The total quality of nursing care in terms of patient satisfaction in Axum st. marry Hospital were 72%. w/c is fair quality.

<table>
<thead>
<tr>
<th>Item</th>
<th>Medical Ward (n=52)</th>
<th>Surgical Ward (n=58)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 The amount of time nurses spent with you is fair</td>
<td>47(90.4%)</td>
<td>44(75.9%)</td>
</tr>
<tr>
<td>2 Nurses perform the procedure with cleanliness</td>
<td>47(90.4%)</td>
<td>44(75.9%)</td>
</tr>
<tr>
<td>3 There always being a nurse around if you need One.</td>
<td>47(90.4%)</td>
<td>44(75.9%)</td>
</tr>
<tr>
<td>4 How quickly nurses came when you called for them</td>
<td>47(90.4%)</td>
<td>44(75.9%)</td>
</tr>
<tr>
<td>5 Nurses checked to see if you were okay</td>
<td>47(90.4%)</td>
<td>44(75.9%)</td>
</tr>
<tr>
<td>6 Nurses’ quality of care as an individual</td>
<td>47(90.4%)</td>
<td>44(75.9%)</td>
</tr>
<tr>
<td>7 Nurses helped put your relatives or friends mind At rest.</td>
<td>47(90.4%)</td>
<td>44(75.9%)</td>
</tr>
</tbody>
</table>

Table 2: Satisfaction score of nursing (n=110).

In medical ward

The amount of time nurses spent with you (90.4%), Nurses perform the procedure with cleanliness(90.4%) and Nurses checked to see if you were okay (80.8%) were aspects of care given the good quality of nursing care in terms of patient satisfaction ratings.

In surgical ward

Nurses perform the procedure with cleanliness (86.2%) were the only aspects of care given the good quality of nursing care in terms of patient satisfaction ratings.

Participant’s characteristics towards nursing care satisfaction

A total of 72 (65%) of participants from the study hospital were satisfied to nursing care.

For satisfaction items in which among satisfied 72% of participants, participants in medical ward (73.1%) were more satisfied compared to surgical ward participants (58.6%), male participants (66.2%) were a little bit satisfied compared to female participants (64.3%), participants who are educated with certificate and above (78.6%) were more satisfied than others, and Participants (78%) their age group (18-30) were a little bit satisfied compared to their age group above 30.

Patient-nurse interaction

60% of patients responded that nurses is good and in a friendly, 96(87.3%) said nurses keep their needs and Personal information confidential. But only 48(43.6%) patients responded that nurses gave adequate information about their condition. And the total score of nurse patient interaction is 66% which is good.

In medical ward

Nurses will keep their needs and Personal information confidential (90.4%) was aspects of care given the good quality of nursing care in terms of patient nurse interaction ratings. Whereas Nurses greeting is good and in a friendly (44.2%) and, Amount of information nurses gave about their Condition (38.5%) were aspects of care with poor quality of nursing care in terms of patient nurse interaction ratings.

In surgical ward

Nurses will keep their needs and Personal information confidential (84.5%) was aspects of care given the good quality of nursing care in terms of patient nurse interaction ratings, and Amount of information nurses gave about their Condition (38.5%) were aspects of care with poor quality of nursing care in terms of patient nurse interaction.
ratings similarly with medical ward But Nurses greeting is good and in a friendly (74.1%) was fair contrary to medical ward.

**Observation**

**Provider competence**

The assessments of indicators for quality of nursing care on nurse’s skill were observed for 110 patients. The nursing care routine activities were observed in all nurse staff while they were giving nursing care in two wards.

During medicine administration for almost all patients (96.5%), nurses administer medicine using the 5 rights which is implication of good nursing care quality. Regarding Fall assessment and prevention, nursing care was offered for a total of (50%) patients, from this in medical ward there was fair fall prevention (69%) as compared to surgical ward which had poor score (43.6%).

Pressure area care, patient observation and infection prevention and control were done for only 40%, 30% and 48% patients respectively which was poor. based on the indicators of nursing care quality, Nursing care was offered for total of 54% of patients on the study hospital, in which for 61% of patients in medical ward and for 50% of patients on surgical ward.

**Discussion**

Quality is a popular way of evaluating nursing practice in most developed countries. It has also to be practiced in developing countries like Ethiopia.

This study is the first of its kind in Axum to assess quality of nursing care through examining patients’ satisfaction and process measuring of nursing practice. Adult patients interviewed who were admitted in medical and surgical wards and the nursing care services were also observed to those patients on the study hospital namely, Axum St. marry hospital.

The overall rating of nursing care quality in this study was 65% which was fair quality.

Aspect of care that this study scored highest in the nursing care were medicine administration (96.5%) which were good nursing care, as one study conclude that the Medication administration is acknowledged as a major aspect of patient safety [6].

Regarding pain management Cadogan and associates found that, for less than half (48%) of patients, nurse had ever asked them about their pain [7]. But in this study, nurses ask and check if there is pain for 79% of patients. For pressure ulcer NHS conclude that, Pressure ulcer prevention is as the one of the high impact actions for nursing, which could lead to improved quality of care [8]. But in this study, pressure area care (40%) was among aspects of care with low score. This may be related with negligence of nurses.

A total nursing care patient satisfaction in this study were (72%), similar with study of Bekele (67%).(13) A the study by Walsh (8) showed that, the amount of privacy nurses gave you were (89%); and study by Bekele (5), revealed the amount of privacy nurses gave you (61%). But in this study the amount of privacy nurses gave you were (66.4%), that is low ratings compare to a study by Walsh but somewhat similar with study of Bekele.

A study by Bekele showed: the amount of information nurses gave to you about your condition and treatment were (40%); and in this study also the amount of information nurses gave to you about your condition and treatment were (43.6%). The amount of information nurses gave to patients about their condition and treatment were a major cause of dissatisfaction in this study as well as other studies, for instance one study was concluded that the greatest single defect in hospital care was ‘the barrier to easy exchange of information’ [9]. So Nurses should give attention to the exchange of information in order to elevate patient satisfaction since it is a major cause for dissatisfaction.

Concerning to the characteristics of participants those who were satisfied versus not satisfied, 72 (65%) of participants from the study hospital were satisfied for satisfaction items. Among satisfied patients, 73.1% of participants were from Medical ward, 58.6% were from Surgical ward.

A study of Bekele [5] concluded that there were more female patients (74%) who were satisfied in his study than male patients (69%), however, in this study there were almost similar satisfaction between female patients (64.3%) and male patients (66.2%).

When look participants' educational status, Bekele [5] concludes that, less educated patients have higher satisfaction. But in this study, 78.6% of respondents who had certificate and above were satisfied compared to 54.5% who were illiterate.

**Strengths and Limitation of the Study**

**Strengths**

1. The study utilized a valid and standardized instrument (NSNS, NDNQI and implementing quality care indicators).
2. It dealt with important component of health care services, which is nursing service.
3. Since interview was made with admitted patients, patients who stay for a long period of time were not missed.

**Limitation**

1. The study used a small sample size (n=110), which was due to time constraint and low patient flow at the time of the study.
2. Because of time constraints, the interview was held with admitted patients, since exit interview is preferred, to reduce information biases. Patients may be afraid to say whatever they feel when they were still in the ward. So, the findings of this study might be inflated when we compared to the real findings.
3. Nurses might also increase their care during process care measurement; this might be inflating the findings of the study.

**Conclusion**

Nowadays most patients in our country complain about hospital services. To identify specifically which services cause dissatisfaction requires investigation. The patient may be very satisfied with the nursing care received but not too happy about the hospital food and the attitude of other workers, so nursing has to be separated out from the other aspects of the hospital experience and then broken down into various components, such as communication, comfort and attention to privacy and process measures like nursing care quality. This is why the investigators of this study used NSNS, NDNQI and implementing quality care indicators as an instrument.

This study found that there was a gap nurses to give adequate information to patients that led to patient dissatisfaction and there...
was also a gap on pressure area care, patient observation and infection prevention. This is a common problem for wards of the hospital under study which requires urgent attention to enhance patient satisfaction at the same time to insure quality of nursing care.

References