

Assessment of Nursing Care Experience and Associated Factors Among Adult Inpatients in Black-Lion Hospital, Addis Ababa, Ethiopia : An Institution-Based Cross-Sectional Study

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Abstract

Introduction: Patient experience has been used as an indicator to measure the quality of health care provided by nurses. However, this information is rarely available in countries like Ethiopia without which improving the quality of service and demonstrating the benefits of changes in nursing practice is usually difficult. The aim of this study was to assess nursing care experience and associated factors among adult inpatients in Black-Lion hospital, Addis Ababa, Ethiopia from March to April 2012.

Method: An institution-based cross-sectional study was employed among 374 adult patients admitted to Medical, Surgical and Gynecologic wards in Black-Lion hospital, Addis Ababa. Patients admitted during the study period was considered and convenient sampling was used. A modified Newcastle Experience with Nursing Scales (NENSs) was used as data collection tool. Data were entered with Epi Info version 3.5.1 and cleaning and analysis was done by using SPSS version 16. Frequencies distribution, binary and multiple logistic regressions were done. Odds Ratio and 95% confidence interval was computed.

Result: A total of 374 adult patients from medical, surgical and gynecological wards were approached from the study hospital with 100% response rate. About 90% of patients had rated the experience above the mean. Number of nights the patient spent in the ward (AOR: 0.26) and occupation (AOR: 2.90) were found to be significant predictors of patients' better nursing experience.

Conclusion and Recommendation: Nine out of ten patients had rated nursing experience above the mean which is relatively higher magnitude. Patients who should stay longer have to be given insight to better boost the nursing experience.

Keywords: Patients' experience; Nursing care; Inpatients; Ethiopia

Introduction

Something that satisfies will adequately fulfill expectations, needs or desires and, by giving what is required, leaves no room for complaint [1]. Patient satisfaction with nursing care is the degree of convergence between the expectations patients have of ideal care and their perception of the care they really get [2,3]. And it has a vital role in the effectiveness of care, in increasing patient compliance with medication, advice and in making patients more likely to return for their follow up appointments [4,5]. Though patient satisfaction is a patient's judgment on the quality of care in all aspects, but the interpersonal process, the patient experience, is the major concern. Patient experience is related to technical and interpersonal behavior, partnership building, immediate and positive non-verbal behavior, more social observation, courtesy, consideration, clear communication and information, respectful treatment, frequency of contact, length of consultation, service availability and waiting time [6].

Patient experience has been, therefore, used as an indicator to measure the quality of health care provided by nurses. However, this information is rarely available in countries like Ethiopia without which improving the quality of service and demonstrating the benefits of changes in nursing practice is usually difficult.

The aim of this study was therefore i) to determine nursing care experience among adult inpatients in Black-Lion Hospital, Addis Ababa, Ethiopia from March to April 2012. ii) To identify associated factors among adult inpatients in Black-Lion hospital, Addis Ababa, Ethiopia from March to April 2012.

Materials and Methods

Study area and period

The study was conducted in Addis Ababa, the capital city of Ethiopia and seat of African Union & United Nations World Economic Commission for Africa. Addis Ababa has a population size of over 3 million. Its average elevation is 2,500 m above sea level, and hence has a fairly favorable climate and moderate weather conditions.

The city has 48 hospitals. Thirteen are public hospitals of which, 5 are under Addis Ababa Regional Health Bureau (AARHB) and 5 are specialized referral (central) hospitals. And this study was conducted in Black lion specialized referral teaching hospital which is under Addis Ababa University. The hospital has about 500 beds, seven X-ray, nine surgical and two laboratory diagnostic rooms.

The hospital is providing medical services in the internal medicine, gynecological & obstetrics, Surgical, pediatrics & emergency departments. In addition, the hospital has special units (Referral clinics): Chest, Renal, Neurology, Cardiology, Dermatology & S.T.D, Gastro intestine, Infectious diseases, Orthopedics, General surgical, gynecologic & obstetrics, Diabetic, Hematology, Medical ICU, Surgical ICU Units. The study was conducted from March 25, 2012 to April 28, 2012

Study design, population and sampling

An institution-based cross-sectional study was used to assess patient experience of nursing care among adult patients admitted in medical, surgical and Gynaecology wards, for more than two days, in Black Lion Hospital. Patients who were admitted in ICU, Emergency, Paediatrics, oncology units and those in patients who had cognitive problem and unable to communicate during data collection time were excluded in the study.

The sample size for the study was calculated using single population proportion formula using the assumption that the proportion of patient satisfaction to be 67%, 95% CI, 5% marginal error, and 10% none response rate, a total of 374 inpatients were required for the study.

Number of patients needed from each ward was proportional allocated based on the number of beds there was in medical, surgical and gynaecology ward. Then, convenient sampling was used to select study participants and collect data. Patients who were admitted during data collection were included in the study and new patients who were admitted after we initiated data collection were interviewed after two days of admission. Finally 87,111 and 66 patients were interviewed from gynaecologic, medical and surgical wards, respectively.

Data collection tool

The data were collected according to the Newcastle Experience with Nursing Care Scales (NENSs) users' manual. Questionnaires were translated in to Amharic and back to English to check for consistency. For each ward, one literate non health professional was recruited as data collector to avoid bias and one professional supervisor. Face to face interview was used to collect data. The NENS were developed by Thomas et al. [7] by measuring patients' experiences, based on their perspective. The scales are incorporated into an interview questionnaire, which comprises two sections: (I) experiences of nursing care scale, and (II) demographic information section. The questionnaires were both open and close-ended questions. The scores were categorized into the following levels and this is adopted from the research done in Jordan in 2009 [8].

Criteria for classification of experience score

- Good level and Above good level of experience >60%(those who answer 16 and above)
- Below good level of experience ≤ 60%(those who answer 15 and less)

Data quality control

Training was given to data collectors. The data collectors interviewed the inpatient without wearing gown in order to reduce the social desirability bias and then the quality, clarity and consistency of the questionnaire. The translated questionnaire was pre-tested in 20 patients in St. Paul.

Data analysis, presentation and interpretation

Data were entered using EPI info version 3.5.1 statistical software and cleaning and analysis was made using SPSS version 16. Cleaning was made using frequencies. The open ended questions were coded before entry. Univariate was done to describe dependent and independent variables; percentages, frequency distributions and measures of central tendency and measures of dispersion were used for describing data. Then binary logistic regression was made to see the crude significant relation of each variable with dependant variables. Finally, independent variables found significant were entered to multivariate logistic regressions to control the effect of confounding. Stepwise backward LR was used for multiple logistic regressions. Odds ratio with 95% confidence interval to ascertain association between independent and dependent variable was used.

Ethical considerations

Ethical clearance was obtained from institutional review board of Addis Ababa University. Informed consent was sought from all the study participants and they were reassured that they would be anonymous. Names or any personal identifiers were not recorded. Respondents were clearly told about the study and the variety of information needed from them. They were given the chance to ask anything about the study and made free to refuse or stop the interview at any moment they want if that was their choice.

Results

Socio demographic characteristics

A total of 374 adult inpatients' who had spent two or more days in black lion hospital were included in this study with 100% response rate. The mean age of participants was 40.3(SD=1.55) and the minimum age was 18 and the maximum age was 86 (Table 1).

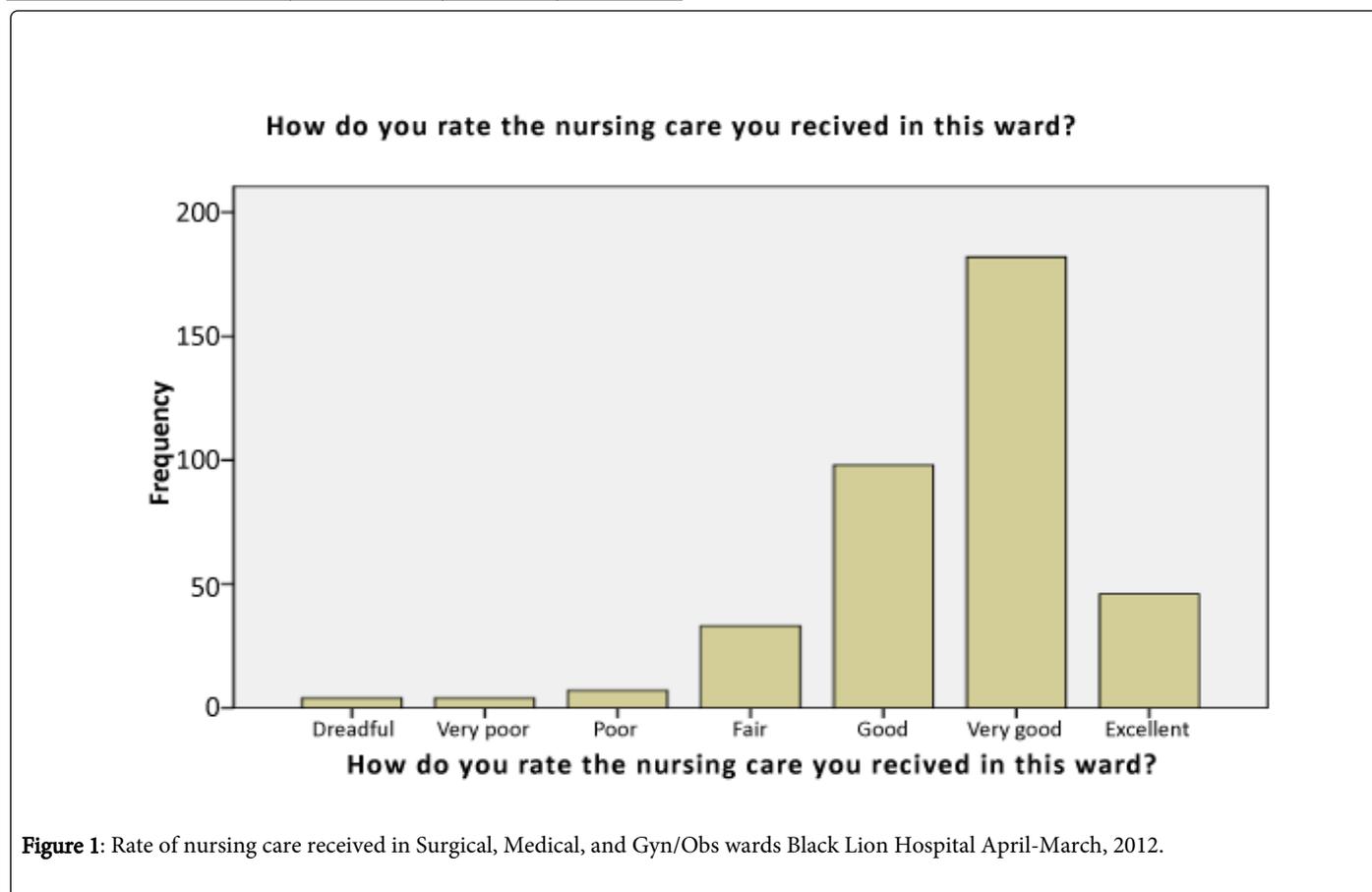
Variable	Category	Frequency	Percent (%)
Age M(SD)	≤50 years	275	73.5%
	>50 years	99	26.5%
	40.3 (SD=1.55)		
Sex	M	174	46.5%
	F	200	53.5%
Educational Status	Illiterate	72	19.3%
	Literate	302	80.7%
Religion	Orthodox	246	65.8%
	Muslim	85	22.7%
	Others	43	11.5%

Marital Status	Living together	95	25.4%
	Never married	279	74.6%
Nights in the ward M(SD)	0-10	235	62.8%
	11-21	97	25.9%
	>=22	42	11.2%
	13.56 (SD=19.92)		
History of previous Admission	Yes	99	26.5%
	No	275	73.5%
Occupation	Employed	48	12.8%
	Not Employed	326	87.2%

Ethnicity	Amhara	157	42.0
	Tigrie	39	10.4
	Gurage	103	27.5
	Oromo	45	12.0
	Others	30	8.0

Table 1: Participants' characteristics who had been admitted in Black lion Hospital April to March, 2012

The median length of stay was 7 days. Among all respondents, 48.7% of inpatients rated nursing care they receive in the ward very good but 1.1% rate, as it was dreadful (Figure 1).



Majority of the respondents, 357 (95.5%), said nurses had good communication and interpersonal skill and 354 (94.7%) inpatients would recommend this hospital to the people they know who might seek medical care in the future.

Patient experience

About 91% (340/374, 95% CI: 87.67%, 93.52%) of the respondents rated their nursing care experience good and above.

Women admitted in Gyn/Obs ward (94.28%) had the highest proportion of "Good and Above Good" scores compared to other wards (surgical (91.48%) and medical (87.38%).

The mean of experience with nursing care for the total sample was 3.64 (SD=1.43). Participants in Surgical wards had a better experience with nursing care (mean=3.72; SD=1.45) when compared with participants in medical and Gyn/Obs ward (Table 2).

Item	Medical	Gyn/OBs	Surgical
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	Mean	SD	Mean	SD	Mean	SD
It was easy to have a laugh with the nurses	5.57	1.39	5.93	1.08	5.89	1.18
#2. Nurses favored some patients over others	1.29	1.19	1.18	0.77	1.22	0.98
#3. Nurses did not tell me enough about my treatment	2.45	2.16	1.38	1.13	1.71	1.61
#4. Nurses were too easy going and laid back	1.52	1.48	1.31	1.03	1.49	1.36
#5. Nurses took a long time when they were called	2.22	1.92	1.51	1.13	1.83	1.68
Nurses gave me information just when I needed it	5.27	1.46	5.48	1.50	5.80	1.19
#7. Nurses did not seem to know what I was going through	1.74	1.59	1.37	1.05	1.62	1.60
#8. Nurses turned the lights off too late at night	2.46	2.49	2.09	2.32	1.49	1.53
#9. Nurses made me do things before I was ready	1.11	0.65	1.17	0.89	1.37	1.29
No matter how busy nurses were, they made time for me	5.10	1.60	5.51	1.18	5.28	1.50
I saw the nurses as friends	5.01	1.58	5.47	1.33	5.53	1.41
Nurses spent time comforting patients who were upset	5.25	1.47	5.52	1.29	5.65	1.41
Nurses checked regularly to make sure I was okay	5.29	1.51	5.82	1.18	5.90	1.07
# 14. Nurses let things get on top of Them	1.32	1.04	1.32	1.08	1.38	1.04
#15. Nurses took no interest in me as a person	1.74	1.78	1.41	1.35	1.88	1.98
Nurses explained what was wrong with me	4.86	1.82	5.23	1.72	5.43	1.71
Nurses explained what they were going to do to me before they did it	4.84	1.80	5.47	1.41	5.43	1.59
Nurses told the next shift what was happening with my care	3.69	2.45	3.76	2.50	4.09	2.47
Nurses knew what to do without relying on doctors	4.32	2.16	4.07	2.33	4.47	2.40
#20. Nurses used to go away and forget what patients had asked for	1.90	1.69	1.64	1.55	1.91	1.89
Nurses made sure that patients had privacy when they needed it	6.13	1.50	6.29	1.21	6.28	1.23
Nurses had time to sit and talk to me	1.37	1.10	1.80	1.62	1.38	1.09
Doctors and nurses worked well together as a team	5.33	1.50	6.01	0.79	6.06	1.12
#24. Nurses did not seem to know what each other was doing	1.43	1.22	1.18	0.67	1.38	1.24
Nurses knew what to do for the Best	5.63	0.93	6.03	1.17	6.15	0.96
There was a happy atmosphere in the ward, thanks to the nurses	5.90	1.41	6.43	1.10	6.16	1.18
Average	3.57	1.53	3.63	1.32	3.72	1.45

Table 2: Mean and Standard deviations for patient’s Experience of nursing care in Black-Lion hospital, Addis Ababa, Ethiopia from March-April 2012.

#All these negative items were reversed during analysis to be positive items

Factors found associated with inpatients’ nursing care experience

After applying bivariate and multiple logistic regressions two variables were found to be significantly associated with inpatients

nursing care experience in Black-Lion hospital, Addis Ababa. These were the number of nights they spent in the ward (95%CI, AOR: 0.26(0.12, 0.57)) and occupation of the inpatients (95%CI, AOR: 2.90(1.10, 7.62)). People who spent 10-22 days are less likely to have a good and above good level of experience than those patients who spent <10 days. People who were not employed had a better experience than those who were employed (Table 3).

Variable	Category	Experience of patient with Nursing		COR (95% CI)	AOR (95% CI)
		Below good level of experience	Good & above level of experience		
Sex	Male	21	153	1.00	1.00
	Female	13	187	1.97(0.96,4.07)	1.99(0.79,5.02)
Age	<=50 years	22	253	1.00	1.00
	>50 years	12	87	0.63(0.30,1.33)	0.50(0.20,1.21)
Ward	Surgical	15	161	1.00	1.00
	Medical	14	97	0.65 (0.30,1.40)	0.61(0.26,1.44)
	Gynecology	5	82	1.53 (0.54,4.35)	0.70(0.18,2.74)
Nights in ward	2-10	14	221	1.00	1.00
	11-21	18	79	0.28(0.13,0.59)	0.26(0.12,0.57)*
	>=22	2	40	1.27(0.28,5.79)	1.34(0.28,6.40)
Religion	Orthodox	21	225	1.00	1.00
	Muslim	12	73	0.59(0.27,1.21)	0.46(0.20,1.06)
	Others	1	42	3.92(0.51,29.4)	3.19(0.40,25.18)
Occupation	Employed	8	40	1.00	1.00
	Not employed	26	300	2.31(0.98,5.44)	2.90(1.10,7.62)*

Table 3: Factors affecting experiences of patients' with nursing care in BLH April to March 2012

*Significantly associated (p<0.05, **highly significantly associated (P<0.001)

Discussion

The result of our study revealed that the proportion of patients who experienced good or above nursing care was 91%. Number of nights the patient spent and occupation of the patients were found to be the independent predictors of nursing care experience among the adult inpatients.

The 91% good and above experience of nursing care among inpatients was high in magnitude when compared with other studies conducted in Jordan and Japan [9,10]. This might be related with the low awareness of the people on how should be nursing care and the recent movement of Ethiopian Ministry of Health to ameliorate the nursing care.

In this study participants had above the mean level of experiences in different measurements such as Doctors and nurses worked well together as a team, nurses knew what to do for the best, it was easy to laugh with nurses and nurses didn't forget what the patients' had asked for. These findings were consistent with the finding in Newcastle and Jordan [6,9]. Such results indicate the important collaborative role and patients' relationship with nurses and doctors.

Participants of this study had lower experience of nursing care with aspects such as nurses told the next shift what was happening with my care, nurses did not made me do things before I was ready, nurses did not favored some patients over others and nurses did not tell me

enough about my treatment when compared with findings from Jordan and New castle [6,9]. The reason for this might be high workload and lack of knowledge, attitude and practice to those particular issues.

In this study number of nights spent in the ward had a significant relationships with patients' experience of nursing care which was similar with the findings in Japan and Turkey [10,11]. This might be because as the patients stayed for a long period of time it might be related with poor prognosis of their problems and their expectation and frustration might be increased or the nurses might be faded up with low prognosis of patients.

In this study occupation also had an association with patients' experience which contrasts the findings of Jordan, Japan, and Turkey studies [8,9,11]. Those who were not employed had better experience than those who were employed. This might be because those who were employed had better overall health related awareness and might not need the same care as unemployed/poorer people.

This study found that gender, age, ward and religion seemed to have no effect on their experience with nursing care, which was consistent with the findings in Turkey [11].

Conclusion

In this research, the overall patient experiences were 91% and this implied that the nursing care service that provided in Black lion hospital was better. The number of nights spent in the ward and occupation were found to affect patient experience with nursing care.

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