

Adult Patient Satisfaction with In-patient Nursing Care in a Referral and Teaching Hospital in Southern Nations Nationalities and Peoples' Region (SNNPR), Ethiopia

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Abstract

Back ground: Knowing patients' satisfaction with nursing care is important for any healthcare agency as nurses and nursing care comprise the majority of the healthcare provision in hospitals throughout a 24 hour day.

Objectives: This study was aimed to assess adult inpatient satisfaction with nursing care and its determinant factors in the study area.

Methods: A cross-Sectional Survey was conducted at Hawassa University specialized and teaching hospitals (HUSTH) in Ethiopia from April 1-30, 2014. The study population consisted of patients who were admitted to the study wards at the time of data collection. Patients aged >18, admitted at least for two days and able to communicate. Data was collected using a modified 'Newcastle Satisfaction with Nursing Scale' (NSNS). EPI –data version 3.1 and SPSS version 16 were used for data entry and analysis respectively. Bivariate and multivariate linear regression analysis was conducted for identifying the predictors of satisfaction. Summary tables were used for presenting the result. Ethical approval was obtained from Jimma University

Results: A total of 406 patients participated in the study. The study showed that the mean satisfaction score of the patients was 47%. Multivariate linear regression indicated that perceived need and expectation of care were independent predictors of the patients' satisfaction.

Conclusions: This study revealed that the satisfaction level of patients with the inpatient nursing care they received was low. It was influenced by their perceived need and expectation of care from their providers. Thus, we recommend that the hospitals managers should frequently assess its patients' satisfaction status and provide tailored on-job training to its nurses in order to improve their skill for enhancing patients' satisfaction.

Keywords: Nursing care; Patient satisfaction; In-patient care; Hawassa; Ethiopia

Abbreviations: DEV/ODG: Development and Overseas Development Group; HUSTH: Hawassa University Specialized and Teaching Hospital; IPSQ: Interviewing Patient Satisfaction Questioner; NSNS: Newcastle Satisfaction with Nursing Scale; PMSS: Percentage of Maximum Scale Score; SNNPRS: Southern Nations, Nationalities and Peoples Regional State; SPSS: Statistical Program for Social Sciences; WHO: World Health Organization

Introduction

The on-going improvement in the quality of healthcare has become a daily objective for healthcare professionals and healthcare systems as a whole. Patient satisfaction that constitutes an important dimension of quality care and patients' outcomes, complementing measures of institutional performance and clinical outcome have proven to be a valuable, relatively cheap and conventional way to assess the provision of quality care to patients. Patient satisfaction has been used in various situations for assessing the superiority of one treatment, pattern of care and one healthcare system over another [1].

Satisfied patients are more likely than unsatisfied ones to continue using the health care services, maintaining their relationships with specific health care providers and complying with the care regimens [2].

The way patients perceive nursing care largely depends on their social status, age, educational level, cultural background and previous hospital experiences. Support and respect from nurses, constant availability of nurses and appropriately given responses are the main indicators of satisfaction [3].

A critical challenge for health service providers in developing

countries is to find ways to make them more client-oriented. Improving service in the health care require hospitals to measure their own performance in order to improve upon current system of service delivery. Well designed health care delivery system can reduce re-hospitalization, improve quality of life and the health care provided [4].

The health care providers in developing countries seem to be ignoring the importance of patients' perceptions regarding health services [5].

Assessing patient satisfaction with nursing care is important in evaluating whether patients' needs are fulfilled and subsequently facilitating in the planning as well as implementing appropriate nursing interventions for patients. Determining those factors that contribute most to patient satisfaction can further assist nurses in improving the quality of nursing care [6].

In Ethiopia, the federal Minister of health is making different efforts that are still on process to fulfil the hospitals with the right manpower,

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medical equipment and other facilities to meet the needs of the patient. However although these efforts are undergoing to improve the service delivery, the needs of the patient have not yet been adequately met [7].

Methods

A cross-Sectional Survey was conducted at Hawassa specialized and teaching hospital in Ethiopia from April 1-30, 2014. The study participants were adult patients aged 18 years and above, who were admitted to the medical, surgical, gynecology and ophthalmological wards. The Sample size was determined by single population proportion formula with assumption of p = 50%, 95% confidence interval, 5% marginal error and 10% of non-response rate making the total calculated size 423. The sample size was proportionally allocated to each ward based on the total number of patient admitted and all adult inpatient wards were included in the study.

The dependent variable of measurement was patients' satisfaction while the independent variables were: socio demographic factors (age, sex, religion, occupation, marital status, ethnicity, education, and income), hospital conditions (admission ward, duration of admission, particular nurse giving care), patients' conditions (disease, history of previous admission) and nursing care provided (perceived need and expectation of care).

Data was collected using Inpatients Patients Satisfaction Questionnaire (IPSQ) adapted from Newcastle Satisfaction with Nursing Scale (NSNS) [8,9]. IPSQ included three parts: socio-demographic and personal characteristics that had 12 items, Perceived patient satisfaction with nursing care measured using a five level Likert scale that had 19 items and nurse patient interaction with 10 items in a five points Likert Scale (1 = strongly disagree, 5 = strongly agree). The items were internally consistent with Cronbach's alpha value of 0.80.

The questionnaire was translated into Amharic by two language experts to ease its administration. It was pretested in a nearby hospital (Adare hospital taking 5% of the sample and slight modification was made. The data was collected by six trained nurses and one supervisor. Data was checked for completeness and consistency, edited, entered into computer & analyzed using SPSS window version 16. Cross tabulation was made & presented using tables & graphs and narrative description. The relationship between Patient satisfaction status and independent variables was assessed using bivariate followed by multivariate linear regressions. The overall level of patients' satisfaction was measured by the mean of the percentage of maximum scale score (PMSS) as calculated by the following formula.

$$PMSS = \frac{(\text{Actual score} - \text{potential minimum score})}{\text{Potential Maximum score} - \text{potential minimum score}} \times 100$$

Ethical clearance was obtained from ethical Review committee of College of Public Health and Medical Sciences, Jimma University. The regional health bureau and other respective offices were informed by letters while verbal consent was obtained from respondents during data collection.

Results

Socio-demographic characteristics

A total of 406 participants were included in the study giving a response rate of 96%. From the total patients, 213 (52.5%) were female. The mean age of respondents was 39.88 (± 15.850). A larger proportion of the respondents, 123 (30.3%), were in the age group > 44years followed by 115 (28.3%) from 25-34 years of age. More than

half of the respondents, 237 (58.4%), were from urban area. Three hundred thirteen (77.1%) of study subjects were married. Concerning educational status, 102 (25.1%) of the respondents could not read and write, 157 (38%) of the participants were protestant in religion, and most of the respondents, 97 (32.9%) were Sidama by ethnicity (Table 1).

The hospital's conditions

The duration of hospitalization varied from two nights to more than seven nights, with 55.9% being in hospital for more than two nights. With regards to previous hospitalization experience, 79.1% of the respondents experienced first time admission to a hospital while

Variables	Frequency (n=406)	percent
Sex		
Male	213	52.5
Female	193	47.5
Age		
15-24	60	14
25-34	115	28.3
35-44	108	26.6
>44	123	30.3
Residence		
Urban	237	58.4
Semi urban	66	16.2
Rural	103	25.4
Religion		
Orthodox	125	30.8
Muslim	124	30.5
Protestant	157	38.7
Ethnicity		
Oromo	129	31.8
Sidama	97	32.9
Amhara	59	14.5
Wolayta	57	14
Gurageh	36	8.9
Others*	28	6.9
Marital Status		
Single	68	16.7
Married	313	77.1
Divorced	10	2.5
Widowed	15	3.7
Educational status		
Could not read and write	102	25.1
Primary	117	28.8
Secondary	76	18.7
College	54	13.3
Degree and above	57	14.0
Occupation		
Government worker	132	32.5
Merchant	79	19.5
Farmer	89	21.9
Student	21	5.2
House wife	69	17
Others**	16	3.9

Table 1: Socio demographic characteristics of patients in Hawassa university specialized and teaching hospital SNNPR, Ethiopia, June 2014; Others* (Kambata, Hadiya and Silte), others** (private worker and daily labourers).

20.9% of them had previous hospital admissions. Majority of the respondent, 386 (95.1%), had no other medically diagnosed diseases other than admission case. Regarding the admission wards 41.6% of the

Variable	Frequency	Percent
Duration of hospitalization		
>seven night	80	19.7
Seven night	99	24.4
Two night	227	55.9
Frequency of hospital admission		
New admission	321	79.1
Repeated admission	85	20.9
Other disease		
Yes	20	4.9
No	386	95.1
Ward of admission		
Medical	130	32.0
Gynecology/Obstetrics	169	41.6
Surgical	76	18.8
ophthalmological	31	7.6

Table 2: Duration of hospitalization, wards of admission and disease status of patients in Hawassa university specialized and teaching hospital, SNNPR, Ethiopia, June 2014.

patients were admitted in Gynecology/Obstetrics ward while 7.6% were admitted to ophthalmological ward (Table 2).

Patients need and expectation

Regarding patients perceived need and expectation, more than three fourth of the participants positively reported that the nurse checked their ID cards prior to administering medication. A significant proportion (42.9%) of the respondents agreed that the nurses maintain and respect their needs. Similarly 44.6% of the respondents responded that nurses provided them clean and quite environment. About half of the subjects said that the doctors and the nurses work in collaboration for giving services and a little less than half said that nurses perform their services without waiting for doctors. On the other hand 43.8% of the participants said that nurses were careless on their duty (Table 3).

Overall patients' satisfactions with nursing care

Overall level of patient satisfaction (percentage mean score) with nursing care was 47% with a maximum score of 90% and a minimum of 19%. Percentage mean satisfaction score was calculated based on percentage of maximum scale score (Table 4).

Factors associated with patient satisfaction

We assessed the association of dependent and independent variable by using bivariate regression model followed by multivariate regression

Patients' needs	Strongly disagree	Disagree	Neutral	Agree	Strongly disagree
The nurse checks my ID prior to administering medication	21 (5.2%)	21 (5.2%)	65 (16.0%)	175 (43.1%)	124 (30.5)
The nurse maintains my rights & needs	29 (7.1%)	88 (21.7)	65 (16%)	174 (42.9%)	50 (12.3%)
The nurse monitors my safety & security	102 (25.1%)	109 (26.8%)	51 (12.6%)	112 (27.6%)	32 (7.9%)
The nurse provides me clean & quite environment	33 (8.1%)	101 (24.9%)	43 (10.6%)	181 (44.6%)	48 (11.8%)
The nurse takes defective equipment from my environment	28 (6.9%)	56 (13.8%)	44 (10.8%)	218 (53.7%)	60 (14.8%)
Doctors and nurse work together	26 (6.4%)	52 (12.8%)	53 (13.1%)	202 (49.8%)	73 (18%)
Nurses doing their job without waiting for doctors	25 (6.2%)	49 (12.1%)	59 (14.5%)	193 (47.5%)	80 (19.7%)
Patients' expectation					
The nurse give health education	163 (47.5%)	67 (16.5%)	93 (22.9%)	37 (9.1%)	46 (11.3%)
Nurses help all patients equally	91 (22.4%)	181 (44.6%)	55 (13.5%)	64 (15%)	15 (3.7%)
Nurses are careless on their duty	14 (3.4%)	78 (19.2%)	32 (7.9%)	178 (43.8%)	104 (25.6)

Table 3: Need and expectation of the participants on nursing care in Hawassa University specialized and teaching hospital SNNPR, Ethiopia, June 2014.

Items	Mean	Std. Deviation
1. The amount of time nurses spent with you	3.00	1.140
2. How capable nurses were at their job	3.05	1.068
3. Always a nurse is around when you needed one	2.99	1.134
4. The amount nurses knew about your care	2.99	1.113
5. How quickly nurses came when you called for them	2.98	1.166
6. The way the nurses made you feel at home	2.94	1.162
7. The amount of information nurses gave you about your condition and treatment	2.89	1.195
8. The frequency nurses checked to follow patients' wellness	2.96	1.190
9. Nurses' helpfulness	2.99	1.134
10. The way nurses explained things to you	3.03	1.123
11. How nurses helped accompanied relatives or friends	2.94	1.172
12. Nurses' manner in while carrying out their work	3.05	1.126
13. Nurses' treat you as an individual	3.23	1.191
14. How nurses listened to your worries and concerns	3.00	1.224
15. The amount of freedom you were given on the ward	3.31	1.151
16. How willing nurses were to respond to your requests	3.03	1.173
17. The amount of privacy nurses gave you	2.93	1.161
18. Nurses' awareness of your needs	2.95	1.177
Total mean score of all items	3.01	0.986

Table 4: Patient satisfaction with nursing care in Hawassa University specialized and teaching hospital SNNPR, Ethiopia, June 2014; Note. Statements: 5 = completely satisfied, 4 = very satisfied, 3 = quite satisfied, 2 = barely satisfied, 1 = not at all satisfied.

Item	Non standardized Coefficients	Standardized Coefficients	P-Value	95% CI for B
	B	Beta		
Constant	2.676		0.000	-1.444-3.834
Sex	0.140	0.058	0.404	0.043-0.323
Age	-0.003	-0.042	0.669	-0.009-0.003
Educational status	-0.021	-0.029	0.901	-0.082-0.041
Occupation	-0.046	-0.055	0.780	-0.118-0.027
Frequency of admission	-0.128	-0.043	0.426	-0.077-0.333
Duration of hospitalization	-0.277	-0.193	<0.001*	-0.383-0.179
Other disease	-0.280	-0.050	0.965	-0.111-0.669
Particular care giving nurse	0.120	0.037	0.637	-0.110-0.350
Expectation score	0.419	0.345	<0.001*	0.334-0.499
Perceived need score	0.672	0.562	<0.001*	0.581-0.758

Table 5: Independent predictors of patient satisfaction in Hawassa university specialized and teaching hospital, SNNPR, Ethiopia, June 2014; R = 0.740, R square = 0.548, Adjusted R square = 0.536.

model. First we analyzed each independent variable and then we put all variables those showed p-value of < 0.5 into multiple logistic regression model to rule out confounder/s. The result of multivariate analysis showed that age, sex, educational status, occupation, frequency of admission, duration of hospitalization, other disease, particular care giving nurse were not significantly associated. The results showed that significant predictors of patient satisfaction with nursing care were perceived need, expectation and duration of hospitalization.

A unit score increase in perceived need score will lead to 0.562 increments in patient satisfaction with nursing care (95% CI = 0.581, -0.758). A unit score increase in expectation score will lead to 0.345 increments in patient satisfaction with nursing care (95% CI = 0.334, -0.499) and a day increase in duration of hospital stay will lead to 0.193 decrease in patient satisfaction with nursing care (95%CI = -0.383-0.179) (Table 5).

Discussion

Patient satisfaction is an important indicator of quality of healthcare in a hospital setting. The measurement of patients' satisfaction with nursing is particularly important since nursing care is often a primary determinant of overall satisfaction during a hospital stay [3].

This study revealed that the overall satisfaction level of the patients with nursing care was 47% (M = 3.01, SD = 0.986). This level of patients' satisfaction was low compared to other study. A study conducted in Kenyatta National Hospital Nairobi, on the level of patients' satisfaction with nursing care study revealed that 67.8% patients were satisfied [10]. The deference may be due to difference in setting and duration of stay, need and expectations in Nairobi hospitals. On the other hand, the level of satisfaction in this study was higher than study conducted in Ghana teaching hospital where about 33% of respondents were fully satisfied with their nursing care [4].

Concerning patients' socio-demographic characteristics, the results of this study showed no significant associations with patient satisfaction. These findings similar with the findings of Mustard, who studied improving patient satisfaction through the consistent use of scripting by the nursing staff and pointed out that demographic characteristics seem to be unimportant [11].

The results of this study also showed a significant positive association between perceived need and expectation of care with patient satisfaction score during hospital stay. Perceived need was one of the predictor in the final model. A unit score increase in Perceived need will lead to 0.562 increments in the patient satisfaction (95% CI =

0.581-0.758). If the perceived needs of the patient fulfilled they would have been more satisfied with nursing care they received. The other predictors were expectation of care score and duration of hospital stay.

A unit increase in expectation of care score will lead to 0.345 increases in the patient satisfaction score (95% CI = 0.334, 0.499). If they get what they expected nursing care service they will be more satisfied. This study also in line with finding in Iran, which showed that nearly all patients were satisfied by meeting their needs & expectations [3]. The study conducted in Ghana teaching hospital showed that patients' satisfaction is influenced by his/her expectation of care which revealed that majority (73%) were expecting to be treated with love and dignity [4].

Patients who stayed more than seven nights had 0.193 unit lower satisfaction score as compared to those who stayed for two nights (95% CI = -0.383,-0.179). This may be due to the nurse give more attention to new admitted and critical patients rather than those stayed for long time. Similarly, a study conducted in Kenya public hospital on evaluation of nursing care pointed out that Satisfaction was also related to duration of hospitalization, (81.8%) of the patients hospitalized between 2 to 5 days were more satisfied than those stayed more than two weeks [12].

Also this study found that 169 (41.6%) of the participants strongly disagree with that the nurse give health education and one hundred seventy eight (43.8%) of the participant strongly agree with that the nurse are careless on their duty. This lead to be patient not satisfied with nursing care.

Conclusions

The overall level of patient satisfaction as measured by the mean of percentage of maximum scale score was low. The need and expectation of a significant proportion of patients has been found to be met as perceived by the patients. In addition, the longer duration of hospitalization led to dissatisfaction with the nursing care. Perceived need, expectation and duration of hospitalization were found to be independent predictors of in-patients satisfaction with nursing care. Most of the participants strongly disagreed with that nurses were giving health education and majority of them strongly agreed with that the nurses are careless in their duty. Thus, we recommended that the managers of the hospital should devise a mechanism to improve the performance of nurse and monitor the implementation process in order to take appropriate improvement actions. Moreover the hospital should perform periodic surveys on patients need, expectations and hospital so as to design the nursing care accordingly.

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References

1. Charalambous A, Efstathiou G, Adamakidou T, Tsangari H (2013) Adult cancer patients satisfaction of nursing care : a cross-national evaluation of two Southeastern European countries 2: 37-39.
2. Aldebasi YH, Ahmed MI (2011) Patients' Satisfaction with Medical Services in the Qassim Area. *Journal of Clinical and Diagnostic Research* 5: 813-817.
3. El-Nagger NS, Ahmed SM, Elsayed LA, Khamis HM (2013) Patients' Satisfaction Regarding Nursing Care Provided in Different Hospitals in Makkah AL Mukramah Nahed. *Life science journal* 10: 421-419.
4. Dzomeku VM, Atinga Ba-Etilayoo TP, Mantey RE (2013) In-Patient Satisfaction with Nursing Care: A Case Study at Kwame Nkrumah University of Science and Technology. *Int J Res Med Heal Sci* 2: 1-6.
5. Ahmad MM, Alasad JA, Nawafleh H (2010) Nursing care and quality of life among Jordanian patients with cancer. *Leadership in Health Services* 23: 1-11.
6. Eng HS, Kaur G, Wafa SR, Zulkifli S, Zakaria S, et al. (2011) Post-Cardiac Surgery Patient Satisfaction with Quality Nursing Care at Institute Jantung Negara (IJN). *Medicine and Health* 1: 14-9.
7. Facilities P, Services D, Services D (2012) A study on patient satisfaction in hospitals.
8. Facilities HC (1999) A Study of Patient Satisfaction in Outdoor Services of Private Health Care Facilities. 24: 76-78
9. Westat, Rockville M, Joann S, Veronica N. Study of satisfaction of patients admitted in a tertiary care hospital. 37-39.
10. Ndambuki J (2013) The level of patients' satisfaction and perception on quality of nursing services in the Renal unit, Kenyatta National Hospital Nairobi, Kenya. *OJN* 3: 186-194.
11. Hajifathali A, Ainy E, Jafari H, Moghadam NM (2008) In-Patient Satisfaction and Its Related Factors in Taleghani University Hospital, Tehran, Iran. *Pak J Med Sci* 24: 6-9.
12. Akhtari-Zavare M (2010) Patient Satisfaction : Evaluating Nursing Care for Patients Hospitalized with Cancer in Tehran Teaching Hospitals, Iran. *Global J of Health Science* 2: 117-126.