Assessment of Admitted Patients' Satisfaction and Related Factors with the Nursing Care Services Given in Debre Birhan Referral Hospital

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Abstract

Patients' satisfaction measures have developed tremendous attractions in the sector of health care delivery services for the purpose of ascertaining the quality of health care services in general and nursing care in particular. Improving communication and collaboration between admitted patients and nurses can improve patient satisfaction and quality of care. It is everyone's most common experience to witness significant patient/ client complaints and dissatisfactions with respect to hospital healthcare deliveries, particularly nursing care services. To assess patient satisfaction and its related factor with the nursing care given in Debre Birhan Referral Hospital, North Showa, Amhara National Regional State, Ethiopia, 2015 institutional-based cross-sectional study was used. A total of 252 patients are selected from the study wards of the selected hospital using convenient sampling technique. A 19-items questionnaire about patients' view of the nursing care, which involved a 5-point Likert scale, was employed to collect the data. Data was collected by five nursing students from April 5 to May 2, 2015 using pretested structured questionnaires. Data was checked for completeness, consistency, coded and entered into EPI Info (version 3.5.2) and transferred to SPSS version 20.0 for analysis. Bivariate and multivariate logistic regression analysis was computed to test the strength of association and level of significance. P-value <0.05 was considered as statistically significant. The current study revealed 86.5% of satisfaction of patients with the nursing care service provided in DBRH. Capability of nurses at their job (93.7%), presence of a nurse around the patient when patients are in need of them (92.9%), and nurses treatment of patients as an individual (92.5%) were aspects of the nursing care services which were satisfied with the highest proportion of the study participants. On the contrary, the amount (78.2%) and type (82.5%) of information nurses gave to patients about their condition and treatment, the feeling of privacy (78.2%) and nurse's awareness of patients' need (78.2%) were relatively found to be the least satisfaction proportion. Monthly income (p-value=0.03, AOR=7.745), educational status (p-value=0.01, AOR=7.443), and history of previous admission in this hospital (p-value=0.04, AOR=5.388) were identified as statistically significant predictors of patient satisfaction with the nursing care service in multivariate analysis. The findings of this study depicted a high level (86.5%) of satisfaction of patients with the overall nursing care service provided in DBRH. Capability of nurses at their job, presence of nurses around the patient when patients are in need of them, and nurses treatment of patients as an individual without partiality were among the aspects of care which were rated the highest among the respondents. Educational status, monthly income of the respondents, and having history of previous admission were found to be statistically associated with the respondents' satisfaction with the nursing care services.

1. Introduction

1.1. Background

Study conducted on patient expectations and satisfaction with nursing care in Turkey defines patient satisfaction as patients' subjective evaluation of their cognitive and their emotional reaction as a result of interaction between their expectations regarding nursing care and their perception of actual nursing care. It is the combination of

experiences, expectations and needs perceived. The way patients perceive nursing care largely depends on their social status, age, educational level, monthly income cultural background, previous hospital experiences, support, and respect from nurses, constant availability of nurses and appropriately given responses [1].

Patient satisfaction measures have developed tremendous attractions in the sector of health care delivery services for the purpose of ascertaining the quality of health care services in general and nursing care in particular. Several authors in the contemporary health care literature argue that studies on perception of patients's satisfaction have important part, and hence, play pivotal role in the improvement of health care services. It was stressed that a major service that hospitalized patients are exposed to is nursing care, with nursing personnel comprising the largest proportion of the health service community, and since most of the health care in hospitals is nursing care, it most closely influences the patients' satisfaction with the overall quality of care. Therefore, the importance of measuring patient satisfaction with nursing care cannot be emphasized enough. Also, it was indicated that the increase in consumerism in the health service has focused attention on patients' perceptions of, and satisfaction with, the services they receive, particularly nursing care services [2].

Patients' satisfaction with nursing care has been reported as the most important predictor of the overall satisfaction with hospital care and an important goal of any health care organization. Therefore, dissatisfaction with the nursing care services may further lead to lower utilization of the nursing care services by the patients. For this reason, many researchers have acknowledged that patients' satisfaction is not simply a measure of quality, but the goal of health care delivery.

1.2. Statement of the Problem

The concern of patients' satisfaction with nursing care has attracted the attention of researchers across the globe. There have been a number of studies conducted on patients' satisfaction with nursing both in the developed nations and developing countries but no major studies in Ethiopia [4]. In addition to this those studies that are conducted on this area revealed a relatively low satisfaction of patients' with the nursing care service provided [2]. For instance, a study conducted on patients admitted in the medical wards of Pilipino general hospital, Philippines, reported 58.8% of satisfaction of patients with the general nursing care service provided [5]. Another similar study which is conducted on adult patients from medical, surgical and gynecological wards in three government hospitals in Addis Ababa, Ethiopia, reported that the overall rating of satisfaction was 67% [6].

A review of relevant literature supports that assessment of level of patient satisfaction is the tool to determine the level of health care delivery, analyze the existing situation and workout strategy to improve it [7].

From a management perspective, patients' satisfaction with health care services is important. For several reasons, satisfied patients are more likely to maintain a consistent relationship with a specific provider. By identifying sources of patients' dissatisfaction, an organization can address system weaknesses including improving its risk management. Satisfied patients are more likely to follow specific medical regimens and treatment plans. Patient satisfaction measurement adds important information on system performance thus contributing to the organization's total quality management [7].

Recognizing that patient satisfaction has something to do with how nursing care is received and appreciated, this study will look to find out exactly what factors contribute to patient satisfaction with the nursing care in the study hospital.

1.3. Significance of the Study

The importance of this study is to determine patient satisfaction with the nursing care given in DBRH. The study is also important to identify factors determining patient satisfaction with the nursing care given. The result of the study will be used as an input for health care planners, policymakers, and managers to improve the nursing care; to modify their provision of service in order to make their patients' more satisfied with the nursing care given. In addition to this the study will be used as base line information that would enable governmental and non-governmental bodies and health planners to make professional decisions or further study in the area of patient satisfaction.

2. Methodology

2.1. Study Design

Institutional based cross-sectional study was implemented to assess admitted patients' satisfaction and their underlying factors with the nursing care service given in DBRH.

2.2. Study Area and Period

The study was conducted in Debre Birhan Referral Hospital, which is found in Debre Birhan City Administration, North Shewa Administrative Zone in the Amhara National Regional State, Ethiopia, which is located 130 km north of Addis Ababa.

DBRH provides its service for a total of 2.4 million peoples. The hospital has currently 104 administrative staffs and 268 technical staffs; out of these 27 are BSC nurses (11 males and 16 females) and 93 are clinical nurses (33 males and 60 females). This hospital gives inpatient service in medical, surgical, ophthalmological, obstetrics and gynecological, and pediatrics ward including Neonatal Intensive Care Unit, (NICU) through a total of 125 beds: medical ward -38 beds, surgical ward -34 beds, pediatrics ward including NICU -36 beds, obstetrics and gynecological ward -8 beds, ophthalmological ward - 9 beds.

The study was conducted from April 5 to May 2, 2015 at DBRH, North Shewa, Amhara Naional Regional State, Ethiopia.

2.3. Source Population

All patients who are admitted to Debre Birhan referral hospital

2.4. Study Population

All patients who are admitted to medical, surgical, and pediatrics ward of DBRH.

2.5. Inclusion and Exclusion Criteria

Patients' who were included in this study were those that can fulfill the following criteria; patients' who are:

- Adults, aged 18 years and above (care giver or mother for pediatric patients);
- Admitted in the medical, surgical, and pediatrics wards for at least two days; and
- Willing to participate in the study.

Patients who were not included in the study are those seriously ill and unable to communicate due to severe mental and /or physical problem (s).

2.6. Sample Size Determination

The sample size of the study was determined by considering 81.8% of overall patient satisfaction from the study conducted on patients' satisfaction with nursing care services in selected hospitals of Northwest Ethiopia (2). And at a confidence level of 95% and a 5% level of statistical significance for accepting a chance of getting a finding that is not actually in the population. A 10% non-response rate is also considered to determine the final sample size. The sample size is calculated as follows:

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n = (Z\alpha/2)^2p (1-p)/w2

Where n=total sample siz

p=prevalence (proportion), i.e. p=81.8%

w=margin of error, i.e w=5%

z=level of confidence interval=95% CI

Z\alpha/2=1.96

n = (1.96)^2(0.818) (0.182) =228.7 => 229

(0.05)^2
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Finally, after considering a 10% non-response rate; 229 + 23 = 252 is the final sample size.

2.7. Sampling Procedure

By considering the care given and the patient flow to different wards, medical, surgical, and pediatrics wards are selected from all wards in DBRH by using purposive sampling method. As shown above, the total sample size (n=252) was allocated proportionally according to the number of beds in each ward and assigned as follows: 89 from medical wad, 79 from surgical ward, and 84 patients were taken from pediatrics ward. Convenient sampling method was employed and all study patients who stayed in the study wards for at least 2 nights were involved in the study. Data collection was done to cover Monday to Friday and five 4th year nursing students participated in the data collection process.

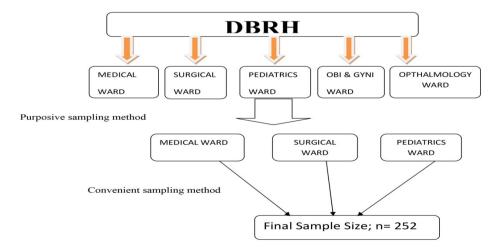


Fig.1: Schematic representation sampling procedure for patient satisfaction with the nursing care in DBRH Amhara National Regional State, North Showa, Ethiopia 2015

2.8. Study Variables

2.8.1. Dependent Variable

Patient satisfaction

2.8.2. Independent Variables:

- age,
- Gender,
- Language,
- race/ethnicity,
- Income.
- education levels.
- marital status.
- Patients' degree of

involvement in decision making,

- Communication and information given to the patient,
- Interpersonal relationship between patient and the nurse,
- Dignity and privacy of the patient,
- Professional nursing care given,
- Nurses professional and technical skills,
- Length of stay in the hospital.

2.9. Data Collection Instrument

Data was collected using structured questionnaire which is a standardized tool, Newcastle Satisfaction with Nursing Scale (NSNS); which is adopted from similar study conducted in Addis Ababa by Bekele Chaka, and modified for use accordingly [18].

The instrument comprises two sections; the first section requested participants to provide information regarding socio-demographic and patient related variables. The second section of the instrument contains 19 items which requested the participants to rate their view of nursing care received as not at all satisfied, barely satisfied, quite satisfied, very satisfied, and completely satisfied. There was also four items in this section which requested participants to rate out their general evaluation of the nursing care they received during their stay at the study ward and if there were any means in which the nursing care could have been improved.

2.10. Data Collection and Data Collection Procedure

Patients who stayed in the study wards for at least 2 nights were involved in this study. Data collection was done to cover Monday to Sunday by using a pre-tested structured questionnaire which was prepared in English and translated in to Amharic for data collection; and again translated into English for its consistency. Five 4th year nursing students participated in the data collection process and out of these five students one served as supervisor and facilitator for the whole process.

The study participants were asked whether or not they were able to differentiate nursing staffs from other health care professionals. For those respondents that are unable to differentiate the nursing staffs, the data collectors explained the activities of nursing staffs to help them to differentiate the nursing staffs before the interview was conducted. The participants were also provided instructions about what the items meant and how they could respond to them.

2.11. Data Quality Control

From the very beginning, a thorough training of data collectors and supervisors was undertaken. The principal investigators and supervisors made a day to day visit for on-site supervision during the whole period of data collection.

At the end of each day, the questionnaires were reviewed, checked for completeness, accuracy and consistency by the supervisor and investigator and corrective discussion was undertaken with all the research team members. The incomplete tools were addressed according to their codes and filled again on the next day. Remarks were given during morning times on how to eliminate or minimize errors and take corrective actions timely.

2.12. Data Processing and Analysis

After all the necessary data was collected, data was coded, checked for completeness and consistency. Data entry and cleaning was done using EPI -info version 6 statistical package and exported to SPSS version 20.0 for analysis.

Tables and figures were used to describe variables; and descriptive statistics were used to summarize data, tables and figures for display results. The strength of association was measured by calculating odds ratio; and P-value of 0.05 was used as a cut of point.

2.13. Operational Definition

Nursing Staff – refers to clinical nurses (diploma holder in nursing) and BSc degree holder nurses who provide nursing care services in the study hospital.

Satisfied (for individual items of the nursing care service) –refers to patients who responded as quite/very/completely satisfied

Not satisfied (for individual items of the nursing care service) – refers to patients who responded as barely or not at all satisfied.

Generally satisfied patients – refers to patients who score mean and above mean for summated Likert scale of the whole, nineteen items of the nursing care service.

2.14. Ethical Consideration

Ethical clearance was obtained from DBU, institute of medicine and health science. A letter was written and submitted to DBRH and permission was obtained from the latter. Additionally, an informed verbal consent was received from each study respondent and anyone who was not willing to take part in the study was given full right to do so. To ensure confidentiality of respondents, their names were not indicated on the questionnaire. All interviews were conducted individually to keep privacy.

2.15. Dissemination of the Study

The final report of the study was submitted to DBU institute of medicine and health science. Results of the study will also be disseminated to zonal and town administrative health offices as well as other relevant governmental and nongovernmental organizations working on the area of patient satisfaction. The final paper of the study will also be published in journals.

3. Results

3.1. Socio-Demographic Characteristics of Respondents

All the respondents gave responses to the survey items fully with response rate of 100%. According to the findings of this study 93 (36.9%) of the respondent are in the age group of 31-40 years with the mean age of 37.9 years. The same number of participants 93 (36.9%)

had no formal education, 155 (61.5 %) of the respondents were married, and 105 (41.7%) of the participants were farmers (see table 01).

Table 1: Socio-demographic characteristic of respondents in DBRH, North Showa, Amhara National Regional State, Ethiopia, 2015

Characteristics		Frequency Percentage (%)		
Sex	Male	127	50.4	
	Female	125	49.6	
	Total	252	100	
Age	17-30	79	31.3	
	31-40	93	36.9	
	41-50	42	16.7	
	51-60	21	8.3	
	60 and above	17	6.7	
	Total	252	100	
	Orthodox	208	82.5	
Religion	Muslim	36	14.3	
	Protestant	8	3.2	
	Total	252	100	
Income(ETB)	<=600	34	13.5	
, ,	601-1200	108	42.9	
	1201-2500	89	35.3	
	>=2501	21	8.3	
	Total	252	100	
Marital status	Single	71	28.2	
	Married	155	61.5	
	Divorced	13	5.2	
	Widowed	13	5.2	
	Total	252	100	
Educational status	No formal	93	36.9	
,	education			
	Primary school	84	33.3	
	Secondary school and preparatory	36	14.3	
	Certificate and	39	15.5	
	above	252	100	
0 1 1	Total	252	100	
Occupational status	Farmer	105	41.7	
	Civil servant	31	1.3	
	Merchant	25	9.9	
	Student	41	16.9	
	House wife	45	17.9	
	Others	5	2	
	Total	252	100	

3.2. Admission Characteristics of Respondents

As illustrated in Table 02, majority 175 (69.4%) of the respondents had no history of previous admission in this hospital, and considerable number 184 (73.0%) of respondents stayed in the study wards for 2-7 days.

Table 2: Admission characteristics of respondents in DBRH, Amhara National Regional State, North Showa Ethiopia, 2015

Characteristics		Frequency	Percentage (%)
Admission ward	Medical	89	35.3
	Surgical	79	31.3
	Pediatrics	84	33.3
	Total	252	100
History of admission	Yes	77	30.6
•	No	175	69.4
	Total	252	100
Number of	2-7	184	73
days(nights) spent in	8-15	55	21.8
the hospital	16-30	13	5.2
	Total	252	100

Regarding whether or not the participants knew there was a nurse in charge of their care and facilitated the nursing care for them; 199(79%) of the participants were responded "yes".

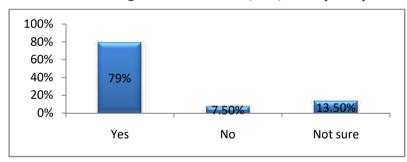


Fig 2: Presence of one particular nurse in charge of patients' care in DBRH North Showa, Amhara National Regional State, Ethiopia 2015

3.3. Scores of Patients' Satisfaction with Nursing Care

The result of this study revealed that 86.5% admitted patient satisfaction with the nursing care given in DBRH (See chart 3).

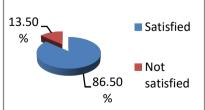


Fig. 3 Overall patient satisfactions with the nursing care given in DBRH, North Showa, Amhara National Regional State, Ethiopia 2015

From different aspects of the nursing care, capability of nurse at their job (93.7%), presence of nurses around the patient when patients are in need of them (92.9%), and nurses treatment of patients as an individual (92.5%) are aspects of the nursing care which "satisfied" with the highest proportion of the study participants. On the contrary, the amount of information nurses gave to the patient about their condition and treatment (78.2%), the amount of privacy nurses gave to the patient (78.2%), nurses' awareness of patients' needs (78.2%), and the type of information nurses gave to the patient about the latter's' conditions and treatment (82.5%), are aspects of the nursing care which relatively found to be the least satisfaction proportions of the study participants (see table 03).

Table 3: Frequency of Satisfied/Not Satisfied respondents with different aspects of the nursing care given in DBRH, North Showa, Amhara National Regional State, Ethiopia 2015

(Satisfied refers to quit/very/completely satisfied, and not satisfied refers to barely or not at all satisfied)

s.no	Items	S	NS	Total
		No (%)	No (%)	No (%)
1	The amount of time nurses spent	233(92.5)	19(7.5)	252(100)
2	How capable nurses were at their job	236(93.7)	16(6.3)	252(100)
3	There always being a nurse around when needed	234(92.9)	18(7.1)	252(100)
4	The amount nurses knew about your care	224(88.9)	28(11.1)	252(100)
5	How quickly nurses came when you called for them	234(92.9)	18(7.1)	252(100)
6	The way the nurses made you feel at home	221(87.7)	31(12.3)	252(100)
7	The amount of information nurses gave to you about your condition and treatment	197(78.2)	55(21.8)	252(100)
8	How often nurses checked to see if you were well	232(92.1)	20(7.9)	252(100)
9	Nurses' helpfulness	232(92.1)	20(7.3)	252(100)
10	The way nurses explained things to you	233(88.5)	29(11.5)	252(100)
11	How nurses helped put your relatives' or friends' minds at	222(88.1)	30(11.9)	252(100)
11	rest	222(00.1)	30(11.9)	232(100)
12	Nurses' manner in going about their work	219(86.9)	33(13.1)	252(100)
13	The type of information nurses gave to you about your condition and treatment	208(82.5)	44(17.5)	252(100)
14	Nurses' treatment of you as an individual	233(92.5)	19(7.5)	252(100)
15	How nurses listened to your worries and concerns	226(89.7)	26(10.3)	252(100)
16	The amount of freedom you were given on the ward	225(89.3)	27(10.7)	252(100)
17	How willing nurses were to respond to your requests	224(88.9)	28(11.1)	252(100)
18	The amount of privacy nurses gave you	197(78.2)	55(21.8)	252(100)
19	Nurses' awareness of your needs	197(78.2)	55(21.8)	252(100)
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S=Satisfied , NS=Not Satisfied

From a total of 252 respondents 100 (39.7%) rated the overall nursing care they received in their ward as "good" (see Fig 05)

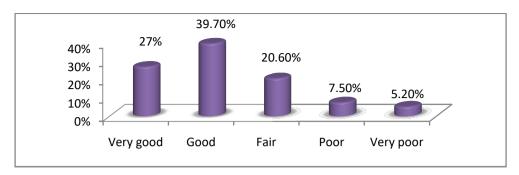


Fig 4: respondents overall rating of the nursing care given in their ward in DBRH, North Showa, Amhara National Regional State, Ethiopia 2015

Regarding overall rating of patients' recent stay in the ward; 54 (21.4%) of the study participants rated their stay as "very good", 109 (43.3%) rated as "good", 57(22.6%) rated as "fair" 26 (10.3%,) as "poor", and 6 (2.4%) of respondents rated their stay as "very poor".

3.4. Regression Analysis of Patients' Satisfaction with the Nursing Care and Selected Variables

In this study, binary logistic and multiple logistic regressions were used for those factors that are assumed to be important in determining patient satisfaction with the nursing care.

Income, educational status and history of previous admission in this hospital were identified as statistically significant predictors of patient satisfaction with the nursing care in the multivariate analysis. Patients whose income were 1201-2500 ETB were seven times more likely to be satisfied (P value=0.03, AOR=7.475, 95%CI=1.938-28.832) than those whose monthly incomes were <=600ETB. Those Patients' whose educational status were primary school were seven times more likely to be satisfied (P value =0.01, AOR=7.443, 95%CI=2.388-23.192) as compared to those whose educational status were certificate and above. Finally those patients' who had history of previous admission in this hospital were five times more likely to satisfy with the nursing care given in DBRH(P value=0.04, AOR=5.388,95%CI=1.687-17.205) than those patients who had no history of previous admission in the hospital.

Table 4: Regression analysis of socio-demographic and respondent related variables, and patient satisfaction with the nursing care given in DBRH, North Showa, Amhara National Regional State, Ethiopia 2015.

Variable	Patient satisfaction		P value *BLR	COR (95% CI)	P value *MLR	AOR (95% CI)	
	S %(No)	NS %(No)	BLK	CI)	WILK		
Age(years)	Age(years)						
17-30	87.3(69)	12.7(10)	1	1	1	1	
31-40	86(80)	14(13)	.800	2.093(.386-	.854	.909(.329-	
				2.161)		2.513)	
41-50	83.3(35)	16.7(7)	.547	1.875(.254-	.031	.242(.067875)	
				2.067)			
51-60	85.7(18)	14.3(3)	.844	3.643(.216-	.388	.511(.111-	
				3.493)		2.348)	
>=60	94.1(16)	5.9(1)	.438	6.750(.277-	.413	4.870(.110-	
				19.442)		215.21)	
Educational status							
No formal	92.5(86)	7.5(7)	<.001	6.143*(2.219-	<.001	27.128**(6.392-	
education				17.004)		115.12)	

Primary school	91.7(77)	8.3(7)	.001	5.500*(1.982- 15.264)	.001	7.443**(2.388- 23.192)	
Secondary/ preparatory school	80.6(29)	19.4(7)	.178	2.071(.717- 5.981)	.049	3.294(1.008- 10.769)	
Certificate and above	66.7(26)	33.3(13)	1	1	1	1	
Income/month(ETB)						
<=600	67.6(23)	32.4(11)	1	1	1	1	
601-1200	90.7(98)	9.3(10)	.002	4.687*(1778- 12.356)	.015	4.287(1.329- 13.821)	
1201-2500	93.3(83)	6.7(6)	.001	6.616*(2.210- 19.810)	.003	7.475**(1.938- 28.832)	
>=2501	66.7(14)	33.3(7)	.940	.937(.301- 3.043)	.909	.913(.912- 4.339)	
History of previous admission in this hospital							
Yes	93.5(72)	6.5(5)	.038	2.860(1.063- 7.699)	.004	5.388**(1.687- 17.205)	
No	83.4(146)	16.6(29)	1	1	1	1	

1= constant variable

BLR=Binary Logistic Regression MLR=Multiple Logistic Regression

4. Discussion

Patient satisfaction has become an important indicator to measure the quality of care rendered to the patients in health care institutions. Healthcare institutes have often used patients' 'outcome as measures to evaluate the health care services provided to patients'. Patient satisfaction surveys can help identify ways of improving nursing and health care services. However in Ethiopia still limited studies have been conducted on this area. This institution-based cross-sectional study is conducted to assess the level of patient satisfaction and some contributing factors for patient satisfaction with the nursing care given for patients in DBRH, North Shewa, Amhara National Regional State, Ethiopia.

The findings of this study revealed that 86.5% patient satisfaction level of patients with the nursing care given in DBRH. This was almost similar to a study conducted on client satisfaction of primary health care services delivered by a nurse practitioner in the Employee Health Services Department of a not for profit hospital, in the Southern United States. That study revealed that overall high levels of patient satisfaction with nurse practitioner delivered health care services were demonstrated, with the mean general satisfaction score of 86.86%. Also, the findings of a study conducted on patients hospitalized with cancer in Tehran Teaching Hospitals, Iran, revealed that a vast majority of these respondents (82.8%) were satisfied with the nursing care provided to them. Another recent study conducted on surgical patients' satisfaction of the nursing care at the orthopedic wards in Hospital University Sains Malaysia reported 82.7% of patient satisfaction level with the nursing care.

The finding of this study was found to be higher as compared to some studies conducted on this area. For instance, one study revealed that the overall satisfaction level of patients with the nursing care services rendered at Felege Hiwot Referral and Finote Selam District Hospitals, North West Ethiopia, was 67.1 %.(2). Another similar study which is conducted on adult patients from medical, surgical and gynecological wards in three government hospitals in Addis Ababa, Ethiopia, reported that the overall rating of satisfaction was 67%. (18). The result of overall satisfaction of this study was also found to be higher than a study conducted on patients' admitted in the medical wards of the UP-PGH (Philippino General Hospital), Philippines, which reported that 57.8% of patients were satisfied with the nursing care given to them.

In the current study comparatively higher satisfaction level of patients with the nursing care services rendered might be attributed to improvement in the quality of nursing care services, improvement in the competence of nurse practitioners, and improvement in the awareness of people about the nursing care services. In addition to this the study hospital was awarded nationally in the last two consecutive years for its quality nursing care services given to patients.

Examining individual items in the satisfaction scale, the current study revealed that capability of nurses at their job (93.7%), presence of nurse around the patient when patients' are in need of them (92.9%), and nurses treatment of patients as an individual (92.5%) were aspects of the nursing care services which were satisfied with the highest proportion of the study participants.

From those items that are discussed above some of the items were found to be consistent with other studies. For instance studies conducted on patient satisfaction with the nursing care in Addis Ababa ,in North West Ethiopia, and in Jordan all revealed that capability of nurses at their job were among items that patients scored the highest for their satisfaction with the nursing care (2,18,35) Similarly, the above study which is conducted on adult patient satisfaction with the nursing care in Addis Ababa in 2005 by Bekele Chaka reported that treatment of patients as an individual was also among the items scored highest for patient satisfaction with the nursing care.

Certain items like the amount (78.2%) and type (82.5%) of information nurses gave to patients about their condition and treatment, and the feeling of privacy (78.2%) were found to be relatively the least satisfaction indicators. Similar results in some items have been found in those studies that are discussed above in which the amount and type of information nurses gave to patients about their conditions where treatments were found to be least satisfaction proportion.

Contrary to the results of the current study, the feeling of privacy were among items about which patients were highly satisfied according to the results of the studies conducted on patient satisfaction with the nursing care in North West Ethiopia and in Jordan (2, 35). This might be attributed to overcrowded conditions of wards in the study hospital and gap on utilization of available privacy screens. In addition to this it might also be attributed to reluctance of the nurse practitioner in keeping the privacy of patients.

Concerning the socio-demographic and patient-related characteristics determining patients overall satisfaction, educational status was among the predictors of patient satisfaction with nursing care. Patients whose educational status was primary school were more likely to be satisfied as compared to those with certificate and above. Similar studies done by Bekele

Chaka and Jafar A. Alasad and M. Ahmed on patient satisfaction with the nursing care revealed educational status was one of significant predictors of patients' overall satisfaction with the nursing care services in which less educated patients were more likely to be satisfied than patients with high educational status. This might be attributed to less educated people having lower expectation of the care so that they are easily satisfied.

Income was also among the determinant factors of satisfaction of patients with nursing care (P value=0.03). This result is also supported by study done by Setter J. F. and Thomas V. (36). The current study founded that people who have monthly income of 1201-2500 ETB were more likely to be satisfied than patients who have monthly income of less than 600 ETB. This might be because low income people have low health, get lower health care, have less continuous relations with health care providers and have difficulties getting appointments.

The result of this study also identified having history of previous admission in the study hospital as one of the predictors of patient satisfaction. Having history of previous admission increases the likelihood of getting high satisfaction. This might be attributed to those people who have had history of previous admission are not knew for the hospital environment, the care given and the nursing staffs. In addition to this they might also doesn't suffer from expectation crises of the care given.

5. Strengths and Limitations of the Study

5.1. Strengths of the Study

- Data were collected by interview technique using structured questionaaires;
- The study utilized valid and standardized instruments to assess patient satisfaction with nursing care (NSNS)
- The results of this study are important in indicating gaps on the nursing care services in the study hospital.

5.2. Limitations of the Study

- Because of time constraints a small number of sample size was used in this study.
- Generalizability of the study findings is potentially limited in view of the use of convenience sampling.
- Because of time and logistic constraints, the interview was held with admitted patients, but exit interview is preferred, to reduce information biases (social desirability bias). Eventhough patients were reassured on the confidentiality issue they may have fear of their response to negatively affect the care provided to them.

6. Conclusion

This institution-based cross-sectional study was conducted to assess the level in-patient satisfaction and related factors with the nursing care service given in DBRH, Amhara National Regional State, North Showa, Ethiopia. According to the findings of this study a high satisfaction level (86.5%) of patients with the nursing care services was revealed.

Capability of nurses at their job, presence of nurses around the patient when patients are in need of them, and nurses treatment of patients as an individual without partiality were aspects of the nursing care services with the strongest quality of the nursing care services

that should be sustained and improved further. On the contrary the information provision and communication skills of the nursing staff, and keeping patients privacy were relatively found to be weaker in the study hospital.

A number of socio-demographic and patient related variables such as educational status, monthly income of the respondents, and having history of previous admission were found to be statistically associated with the respondents' satisfaction with the nursing care services.

7. Recommendation

Based on the findings of this study, the following recommendations are forwarded:

- It is important for nurses in DBRH improve the way of conveying information to and from patients.
- It's important that nursing staff leaders of the study hospital design and launch intervention programs to improve the information provision and communication skills of the nursing staff.
- It is also important that the DBRH use the finding of this study to understand gaps on the nursing care and to make valuable adjustment.
- It is strongly recommended that nursing schools give emphasis on communication and information provision skills of students alongside with their clinical knowledge and skills.
- It is also further suggested that future research be carried out with exit interview after patients are discharged.

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