

Comparison of Patients Satisfaction Levels Toward Nursing Care in Public and Private Hospitals, Jimma, Ethiopia

Kebede Dinsa, Beshea Gelana Deressa , Waju Beyene Salgedo

Department of Health Policy and Management, Jimma University, Jimma, Oromia, Ethiopia

Correspondence: Beshea Gelana Deressa, Department of health policy and management, Jimma University, Jimma, Oromia, Ethiopia, Tel +251 921833996, Email tuniriyabesha@gmail.com

Background: The difference in nursing care quality by institution has implications for both the organization and its clients. Though disparities in patient satisfaction, which is an interpersonal patient outcome with nursing care, have been reported between public and private hospitals, there has been little research on the study area.

Objective: To compare the level of patients' satisfaction towards nursing care services among adult inpatients at Jimma Medical Center, and Oda Hulle hospital Jimma, southwest Ethiopia 2021.

Methods: A comparative cross-sectional study design was used among 431 patients of Jimma medical center and Oda Hulle hospital from May 3 to July 3, 2021, using a systematic random sampling technique. The Newcastle scale of satisfaction was used to collect data, which was then entered into Epidata 4.6 and exported to SPSS version 26 for analysis. We used descriptive and logistic regression analysis.

Results: Patient satisfaction at public and private hospitals was reported 54.2% (95% CI: 52.9–59.3) and 57.1% (95% CI: 55.2–61.7), respectively. In public hospital, the patient satisfaction was affected by being in the age group of 41–50 years ($P = 0.006$, AOR = 3), duration of stay in the ward ($P = 0.002$, AOR = 0.42), cleanliness of the ward ($P = 0.018$, AOR = 1.8), and admission history ($P = 0.049$, AOR = 0.60). In private hospital (Oda Hulle), the patient satisfaction was affected by history of admission ($P = 0.035$, OR = 0.456), ward space ($p = 0.007$, AOR = 2.8), the perceived capacity of nurses ($P = 0.002$, AOR = 5.8) to pharmacy services ($P = 0.032$, AOR = 2.3).

Conclusion: Relatively the patient satisfaction towards nursing care in public hospital was lower compared to the private hospital, though no statistical difference ($p = 0.225$) observed. Illness history, cleanliness of the ward, Nurses make adequate visits and get their support when needed, Adequacy of ward space, the perceived capacity of nurses, and Access to pharmacy services were positively associated with patient satisfaction.

Keywords: nursing care, patients' satisfaction, public–private, service quality

Introduction

The health-care sector has transformed and expanded over the years, and decent healthcare is now considered a basic need.¹ The World Health Organization established the ultimate goal of preserving the best possible level of health for all people and providing high-quality care.^{2,3} Nurses are the frontline professionals most likely to meet, spend the most time with, and rely on during their hospitalization for restoration of the patients health by giving the nursing care.^{4,5} Nursing care is defined as an activity that is planned and delivered by the nurses, such as medication administration, ambulation of the patients, changes of position, bathing patients, mouth care, vital sign recording, intake and output documentation, nutrition, and giving education for hospital discharges.⁶ The process of delivering all these care has significant impact on patient satisfaction.⁷

Patient satisfaction has been defined in a variety of ways by researchers. According to Donabedian A (1988), patient satisfaction is the fundamental measure providing information on to what extent values and expectations of a patient are

met and indicating the excellence of the care in which the major authority is the patient.⁸ It is also described as a health-care recipient's reaction to several aspects of their service experience.⁹ It is used in many health-care facilities as an important pointer of quality care and is frequently included in health-care planning and evaluation.¹⁰ And also it is people's expectations for health-care services based on health, disease, quality of life, and other requirements.¹¹

The level of patient satisfaction towards nursing care is widely varied across the world: 77.6% in Italy,¹² 54.8% in Turkey,¹³ and 91% in India.¹⁴ In Ethiopia, 42.6% in specialized hospitals of Addis Ababa,¹⁵ 48.4% in Amhara regional state,¹¹ 79.7% in Mekele town,¹⁶ and 77.0% in Jimma specialized hospital.¹⁷ All variations were due to different factors like patients' sociodemographic characteristics,^{18–20} and institutional related factors,^{19–22} and patient-provider communication.²³ Consistently, the other factors which can determine the satisfaction of the patients are the waiting time and privacy provided during the health-care services.²⁴

The overall level of patient satisfaction with inpatient nursing care was low in developing countries like sub-Saharan countries including Ethiopia.^{5,25} This can be due to an inadequate nurse to population ratio, inadequate competency, scarcity of resources, and an ineffective healthcare system.^{26,27} This is in public hospitals, but in private health facilities, great emphasis on patients' satisfaction is more than government health facilities, because the private health facility was business-oriented, and they have to satisfy their patients by providing good services.²⁸

Patients' satisfaction with nursing care is a key determinant of how satisfied they are with their overall hospital experience. As part of health-care research, studies on nursing care quality are becoming more and more significant. In determining the quality of services, assessments of the patient's perspectives or opinions have to be considered. As a result, measuring the benefits of nursing care to patients and society as a whole is necessary to assess its quality. On the other hand, it is clinically relevant to determine how satisfied patients are with health services because they are more likely to adhere to treatment plans, participate actively in their own care, and continue using health-care services.^{29–31}

Ethiopian Federal Ministry of Health (FMOH) has been engaged to improve the quality of nursing care, also to improve patient satisfaction across the country in the last few years by launching the initiatives like Compassionate and respectful care (CRC), and national nursing quality service were started.³² However, little studies found indicating patient satisfaction toward nursing care after these interventions. On the other hand, there is rapid change and competition in the healthcare industry to meet the demands of its clients. This time, there is competition between public and recently spreading private hospitals in the sub regional cities of Ethiopia to meet the patients' demand. Thus, there might be a difference in patient satisfaction between the two. Again, there are only a few studies in the country studying the level of patient satisfaction toward nursing care comparing the two (public and private hospitals).³¹

Moreover, to conduct this study we take the consonance theory of patient satisfaction as a foundation which states patient satisfaction is the outcome of the consonance between patient expectation of care and the actual received care from the nurses. This theory recognizes that the interaction between patients and nurses and their active engagement in the share goal is critically important for the patient outcome.³³ Therefore, this study aimed to determine and compare the level of patients' satisfaction towards nursing care services among adult inpatients at Jimma Medical Center, and Oda Hulle hospital in Jimma town. This will aid in determining whether patients' needs and expectations are being met, allowing nurses to plan appropriate nursing interventions for patients and health-care administrators to examine differences and factors influencing patient satisfaction with nursing care in both private and public hospitals in order to design appropriate interventions for improvement.;

Materials and Methods

Study Area and Period

This research was carried out in public and private hospitals in Jimma town, Oromia region. The government owns public hospitals in order to provide health-care services at relatively lower costs, and a high patient flow is expected. Private hospitals are run as businesses and are owned by individuals. Jimma Town currently has four hospitals (two public and two private). The Jima Medical Center (public) and Oda Hulle Hospital (private) were chosen because they provide and have relatively similar services and capacities and are thought to represent both sides (public and private) of nursing care in town. The study was conducted from May 03 to July 03, 2021.

Study Design and Population

An institutional-based comparative cross-sectional study design was employed among patients admitted in Jimma Medical center (Public Hospital) and Oda hulle Private hospital.

Source Population

All Adult patients, who were admitted to the inpatient wards of Jimma Medical Center, and Oda Hulle hospital

Study Population

Selected adult patients those admitted to the Medical, Surgical, and Gynecology wards of Jimma Medical Center, and Oda Hulle hospital, during the study period.

Eligibility Criteria

Adult patients' ≥ 18 years of age, and are admitted to the wards, at least for 24 hours were included in the study whereas patients who were severely ill, unconscious, unable to communicate during the study period were excluded.

Sample Size and Sampling

Sample size was determined using double proportion formula using the previous report on the patient satisfaction in public hospital ($P1 = 0.64$) and private hospital ($P2 = 0.54$).²¹ Accordingly, the initial sample size became 392. To determine the final sample size, we consider the total admission during the study period of both hospitals. It was 623 (413 at Jimma Medical center and 210 at Oda Hulle hospital). These numbers were taken from HMIS quarterly report. Since the calculated sample size was manageable, and for the sake of increasing the precision of our data, the investigators decided to take all the samples by including a 10% non-response rate. Then the final sample size taken was 431.

Systematic random sampling technique was employed after proportional allocation of the sample to each hospital and wards. Patient register (logbook) in the ward was used as the sampling frame, the first patient was selected by lottery method from their order of registration and then every other patient who will receive care was selected.

Measures

The Newcastle Satisfaction with Nursing Scales (NSNS) tool developed by Thomas et al³⁴ was adapted from a previous study done in Ethiopia.³⁵ This NSNS has 19 item questions in which response of respondent's satisfaction status was collected by a Likert scale of 1–5: value 1 for “highly-dissatisfied”, response and value 5 for “highly-satisfied”. The maximum potential score was 95, and the minimum score was 19. The total satisfaction sum score for each patient and the mean score were calculated. A mean split approach was used to dichotomize the patient satisfaction into “satisfied” (ie, satisfaction score ≥ 60.15 in JMC, and ≥ 63.05 in Oda Hulle) and “not satisfied” (ie, satisfaction score < 60.15 in JMC, and < 63.05 in Oda Hulle).²⁷ NSNS tool had excellent reliability (Cronbach's $\alpha=0.96$).³⁶ In this study, the Cronbach alpha was calculated to check the reliability of the tool, and it was excellent (Cronbach's $\alpha=0.90$). Face validity was also done to assure the validity of the tool.

A semi-structured interview administered questionnaire was utilized to collect the data. To avoid the social desirability bias, six data collectors were selected from Firomsis hospital, and Shenen Gibe hospital which were out of the selected study setting. To reduce the risk of COVID-19 for patients and data collectors COVID-19 protocol was maintained.

The pre-test was conducted on 5% of the sample size of patients in another hospital's medical, surgical, and gynecology ward one week before data collection to make sure clarity of the questions, after which correction of concepts and statements was made. The quality of data was ensured through giving orientation for data collectors and supervisors; regular supervision; immediate feedback; spot-checking; and reviewing each of the completed questionnaires daily. The questionnaire was prepared in English and translated into the local languages, Afan Oromo and Amharic, and then back to English to keep its consistency.

Data Analysis

Data entry, edition, cleaning, and coding were conducted using Epi data version 4.6 and then exported to SPSS version 26 for analysis because SPSS it is useful for analyzing various data sets and performing various statistical analyses, such

as regression analysis and determining the relationship between dependent and independent variables. For all categorical variables frequencies and percentages were calculated. Finally, the data were summarized using descriptive statistics of the standard deviation, and percentage. To determine the patient satisfaction towards nursing care in both hospitals, a satisfaction sum score of NSNS (Newcastle scale of satisfaction with nursing scale) for each patient was calculated, and the mean for the satisfaction sum score was calculated. Multivariate logistic regression analysis was used to identify associated factors of patient satisfaction using an odds ratio and level of significance at 5%.

Result

Socio-Demographic Characteristics

A total of 431 (286 from public and 145 from Private hospital) patients were participated in this study, yielding a response rate of 100%. In both hospitals, the majority of the patients/respondents were female, 166 (58.0%) in Jimma Medical Center, and 85 (58.6%) in Oda Hulle hospital. The mean age of the respondents was 41.18 (SD = 13.15), and 40.39 (SD = 13.8) in Jimma Medical Center and Oda Hulle hospital, respectively. Concerning the educational status, the majority of respondents were found in the primary school category in both hospitals. The majority of the patients were married 223 (78.0%) and 105 (72.4%) in Jimma Medical Center and Oda Hulle hospital, respectively. More than half of the patients were from Urban both in Jimma Medical Center 158 (55.2%), and Oda Hulle hospital 94 (64.8%) (See Table 1).

Clinical Characteristics of Study Participants

Nearly half of the patients were admitted to medical ward in both public and private. More than half of the patients, 164 (57.3%) in public hospital and 84 (57.9%) in private hospital, have no history of previous admission. The cause of the

Table 1 Socio-Demographic Characteristics of the Patients in Jimma Medical Center, and Oda Hulle Hospital in Jimma, Ethiopia, 2021

Variables	Category	Name of Hospital		Total (n=431)
		JMC (n=286)	Oda Hulle (n=145)	
		Frequency (%)	Frequency (%)	
Sex	Male	120 (42.0)	60.0 (41.4)	180 (41.8)
	Female	166 (58.0)	85.0 (58.6)	251 (58.2)
Age	18–30	62.0 (21.7)	36.0 (24.8)	98.0 (22.7)
	31–40	90.0 (31.5)	48.0 (33.1)	138 (32.0)
	41–50	65.0 (22.7)	30.0 (20.7)	95.0 (22.1)
	51–60	46.0 (16.1)	19.0 (13.1)	65.0 (15.0)
	Above 61	23.0 (8.0)	12.0 (8.3)	35.0 (8.0)
Educational level	Unable to read and write	65 (22.7)	22 (15.2)	87 (20.20)
	Primary school (1–8)	103 (36.0)	48 (33.1)	151 (35.0)
	Highschool & preparatory (9–12)	73 (25.2)	41 (28.3)	114 (26.5)
	Tertiary (above 12)	45 (15.7)	34 (23.4)	79 (18.30)
Marital status	Single/Unmarried	50 (17.5)	36 (24.8)	86 (19.50)
	Married	223 (78.0)	105 (72.4)	328 (76.10)
	Divorced	13 (4.5)	4 (2.8)	17 (3.90)

(Continued)

Table 1 (Continued).

Variables	Category	Name of Hospital		Total (n=431)
		JMC (n=286)	Oda Hulle (n=145)	
		Frequency (%)	Frequency (%)	
Occupation	Unemployed	13 (4.5)	11 (7.6)	24 (5.70)
	Government worker	94 (32.9)	28 (19.3)	122 (28.30)
	Merchant	55 (19.2)	57 (39.3)	112 (25.90)
	Daily laborer	18 (6.3)	3 (2.1)	21 (4.90)
	House wife	48 (16.8)	29 (20.0)	77 (17.80)
	Student	13 (4.5)	5 (3.4)	18 (4.20)
	Farmer	24 (8.4)	5 (3.4)	29 (6.70)
	Others	21 (7.3)	7 (4.8)	28 (6.50)
Residence	Urban	158 (55.2)	94 (64.8)	252 (58.5)
	Rural	128 (44.8)	51 (35.2)	179 (41.5)

illness was reported as chronic in Jimma medical center 177 (61.9%), as compared to Oda Hulle hospital in which the majority of the patients' cause of the illness was reported as acute 104 (71.7%) (Table 2).

Institutional Related Factors

Regarding the hospital structure-related factors (adequacy and maintenance of ward equipment and infrastructure including the availability of wheelchairs, wardroom light and ventilation, and cleanliness of the ward), more than half of the patients admitted in both hospitals, 63.4% in Jimma medical center, and 56% of patients admitted in Oda Hulle were satisfied. Related to the appropriateness of the services given, the majority of the patients admitted to Jimma

Table 2 Clinical Characteristics of the Patients in Jimma Medical Center, and Oda Hulle Hospital, Jimma Ethiopia, 2021

Variables	Category	Name of Hospital		
		JMC (n=286)	Oda Hulle (n=145)	Total (N=431)
Admission wards	Medical wards	130 (45.5)	60 (41.4)	190 (44.1)
	Surgical wards	85 (29.7)	48 (33.1)	133 (30.9)
	Gyne wards	71 (24.8)	37 (25.5)	108 (25.0)
History of admission frequency	First time	164 (57.3)	84 (57.9)	248 (57.5)
	Second time	100 (35.0)	51 (35.2)	151 (35.1)
	>2 times	22 (7.7)	10 (6.9)	32 (7.40)
Length of stay in the ward	1–7 days	174 (60.8)	133 (91.7)	307 (71.2)
	8–15 days	90 (31.5)	12 (8.3)	99 (23.0)
	16–30 days	22 (7.7)	0 (0.0)	20 (4.60)
Illness history/cause	Acute	109 (38.7)	104 (71.7)	213 (49.40)
	Chronic	177 (61.9%)	41 (28.3%)	218 (50.60)

Medical Center (54.5%) and 69% of patients admitted to Oda Hulle hospital report as they were satisfied with the diagnostic services given. See [Figure 1](#).

Health Care Providers' Related Factors

More than half of patients admitted to Jimma Medical Center (62%), and Oda Hulle hospital (73.1%) reported as they satisfied with patient-centeredness related factors like: Nurses make adequate visits and get their support when needed, Physician communication – well explanation/consultation, Nurses treat with respect and good behavior, and Nurse explaining well and listening carefully.

Concerning timeliness of the service, patients admitted to both hospitals dissatisfied (43% in JUMC, and 38.6% in Oda Hulle) with efficient services (regarding the length of stay). On the other hand, more than half of the patients, 57% in Jimma Medical Center, and (61%) in Oda Hulle were reported as satisfied in there is a good layout from wards to other services like laboratory-ray and pharmacy. Regarding the staff competence, the admitted patients were satisfied with the perceived capacity of nurses (68.8%) in Jimma Medical Center and (80%) in Oda Hulle hospital (see [Figure 2](#)).

Level of Patient Satisfaction Towards Nursing Care in Jimma Medical Center and Oda Hulle Hospital

From Newcastle scale of satisfaction with nursing care items, the way nurses are talking to me was the item in which the patients admitted to Jimma medical center scored the highest mean score, 65.93 (3.47 ± 0.939), whereas how nurses helped me with bed making was the lowest mean score 55.1 (2.90 ± 1.042). In other way, in Oda Hulle hospital, how nurses helped put your relatives' or friends' minds at rest is the lowest score, and the way nurses are talking to me is the highest score in NSNS ([Table 3](#)).

Of the total patients admitted in Oda Hulle hospital (which is private hospital), 57.10% of them were satisfied with nursing care given, while only 54.5% of the patients admitted in Jimma medical center (which is public hospital) were satisfied with nursing care they got.

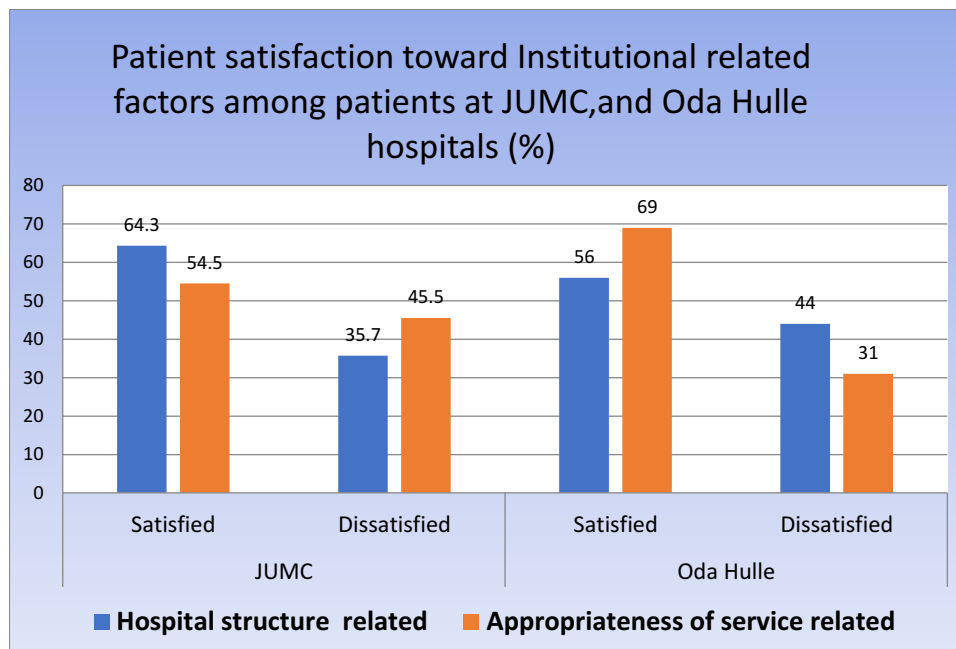


Figure 1 Satisfaction on institutional-related factors among patients in Jimma Medical Center and Oda Hulle hospital, Jimma, Ethiopia, 2021.

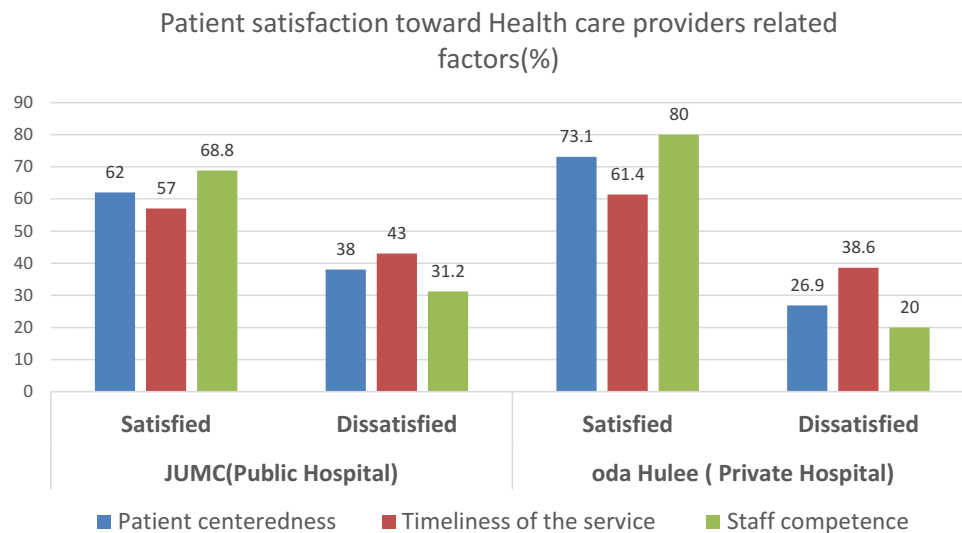


Figure 2 Satisfaction on health care providers' behaviors among patients in Jimma university medical center, and Oda Hulle hospital, Jimma, Ethiopia, 2021.

Factors Affecting the Patient Satisfaction Towards Nursing Care in Jimma Medical Center (JMC)

In JMC, age is significantly associated with patient satisfaction in multivariate logistic regression among the socio-demographic characteristics of patients. Based on this, the patients whose age is found between 41 and 50 years were

Table 3 The Satisfaction Score of the Patients Towards the Nursing Care with NSNS in JMC, and da Hulle Hospital, Jimma, Ethiopia, 2021

Items Of Newcastle Scale Of Satisfaction Toward Nursing Care	The Sum Score of NSNS			
	Jimma Medical Center		Oda Hulle	
	NSNS score	Mean (SD)	NSNS Score	Mean (SD)
The way nurses are talking to me	65.93	3.47 ± 0.939	67.26	3.54 ± 0.936
How nurses listened to my worries and concerns	61.37	3.23 ± 0.978	64.98	3.42 ± 0.925
How nurses treated me as an individual	60.23	3.17 ± 0.998	60.61	3.19 ± 1.047
How nurses are willing to respond to my requests	59.85	3.15 ± 1.006	65.17	3.43 ± 0.985
How nurses helped me with my pain	58.9	3.10 ± 1.073	61.56	3.24 ± 1.082
How nurses helped me with bed making	55.1	2.90 ± 1.042	59.09	3.11 ± 1.131
My anxiety and stress were alleviated by nursing care	59.66	3.14 ± 1.024	62.7	3.30 ± 1.023
The amounts of time nurses spent with you	60.23	3.17 ± 1.050	64.03	3.37 ± 0.992
How quickly nurses come when you need them	58.9	3.10 ± 1.033	65.17	3.43 ± 0.985
The way the nurses made you feel at home	55.48	2.92 ± 1.033	60.23	3.17 ± 1.082
The amount of information nurses gives you about your condition and treatment	58.52	3.08 ± 1.113	60.42	3.18 ± 1.052
How often nurses check to see if you are okay	60.8	3.20 ± 1.002	62.32	3.28 ± 1.024
The amount of privacy nurses gives me	61.18	3.22 ± 1.06	65.74	3.46 ± 0.958

(Continued)

Table 3 (Continued).

Items Of Newcastle Scale Of Satisfaction Toward Nursing Care	The Sum Score of NSNS			
	Jimma Medical Center		Oda Hulle	
	NSNS score	Mean (SD)	NSNS Score	Mean (SD)
Nurses awareness of your needs	58.9	3.10 ± 1.07	62.32	3.28 ± 1.010
The confidentiality the nurses gives me	60.8	3.20 ± 1.002	64.03	3.37 ± 1.013
How nurses helped put your relatives' or friends' minds at rest	57.19	3.01 ± 1.095	55.67	2.93 ± 1.153
The amount of freedom you were given on the ward	62.51	3.29 ± 1.015	63.27	3.33 ± 1.007
Nurses' manner in going about their work	62.51	3.29 ± 0.979	66.12	3.48 ± 0.980
The way nurses explained things to me	64.41	3.39 ± 0.944	67.26	3.54 ± 0.85
Overall mean	60.15	3.16	63.05	3.31
Cronbach's alpha	0.862		0.881	

three times (3x) more satisfied with the nursing care they received as compared with patients whose age was 18–30 years old ($P = 0.006$, AOR = 3.95% CI: 1.381–6.55). Again, from the clinical characteristics of the patients, duration of stay and history/frequency of admission were significantly associated with patient satisfaction. From this, the patients who stayed 8–15 days in the ward were about 58% less satisfied compared with those who stayed 1–7 days ($P = 0.002$, AOR = 0.42, 95% CI: 0.24–0.73). Again, the patients who had a history of admission for the second time or repeated were 40% less satisfied compared with those who were admitted for the first time ($P = 0.049$, AOR = 0.60, 95% CI: 0.34–0.52). Concerning the cause of illness or history of illness, the patients with chronic disease were 1.3 times more satisfied as compared with those of acute illness patients ($P = 0.009$, AOR = 1.3, 95% CI: 1.8–2) (Table 4).

Factors Associated with Patient Satisfaction Towards Nursing Care in Oda Hulle Hospital

Patients who have admitted to the hospital for the second time were 54% less satisfied with nursing care as compared to those admitted for the first time ($P = 0.035$, AOR = 0.456, 95% CI: 0.22–0.94). If we come to the type of admission ward, the patients admitted to the medical ward were 60% less satisfied with nursing care given as compared with the patients admitted

Table 4 Multivariable Analysis Results of Selected Variables Associated with Patient Satisfaction Towards Nursing Care in Jimma Medical Center, Jimma, Ethiopia, 2021

Variables	Category	Patients 'Satisfaction Status		COR (95% CI)	AOR (95% CI)	PV
		Dissatisfied NSNS Score < 60.15	Satisfied NSNS SCORE ≥ 60.15			
Age	18–30	33 (53.2)	29 (46.8)	1	1	
	31–40	48 (53.3)	42 (46.7)	0.97 (0.52, 1.9)	1 (0.528, 2.052)	0.91
	41–50	19 (29.2)	46 (70.8)	2.8 (1.33, 5.72)	3 (1.4, 6.6)	0.006**
	51–60	19 (41.3)	27 (58.7)	1.62 (0.75, 3.5)	1.814 (0.82, 4)	0.140
	>61	11 (47.8)	12 (52.2)	1.24 (0.5, 3.24)	1.301 (0.5, 3.5)	0.61

(Continued)

Table 4 (Continued).

Variables	Category	Patients' Satisfaction Status		COR (95% CI)	AOR (95% CI)	PV
		Dissatisfied NSNS Score<60.15	Satisfied NSNS SCORE≥60.15			
Duration of stay	1–7 days	67 (38.5)	107 (61.5)	1	1	
	8–15 days	51 (58.6)	36 (41.4)	0.44 (0.3, 0.75)	0.42 (0.244, 0.74)	0.002**
	16–30 days	10 (50.0)	10 (50.0)	0.63 (0.25, 1.6)	0.5 (0.170, 1.22)	0.120
	31–60 days	2 (40.0)	3 (60.0)	0.94 (0.2, 5.8)	0.462 (0.67, 3.2)	0.40
Admission history/frequency	First time	69 (42.1)	95 (57.9)	1	1	0.095
	Second time	53 (53.0)	47 (47.0)	0.60 (1.4, 1.62)	0.6 (0.343, 0.52)	0.049**
	> two times	8 (36.4)	14 (63.6)	1.3 (0.51, 3.2)	1.4 (0.5, 3.68)	0.55
Illness history/cause	Acute	73 (42.4)	99 (57.6)	1	1	
	Chronic	57 (50.0)	57 (50.0)	1.4 (1.8, 2.2)	1.3 (1.8, 2.9)	0.009**
Cleanliness of the ward	Dissatisfied	71 (53.8)	61 (46.2)	1	1	
	Satisfied	59 (38.3)	95 (61.7)	1.9 (1.7, 3.0)	1.8 (1.1, 3.0)	0.018**
Nurses make adequate visits and get their support when needed	Dissatisfied	71 (60.7)	46 (39.3)	1	1	
	Satisfied	59 (34.9)	110 (65.1)	1.7 (1.3, 2.12)	1.9 (1.0, 3.3)	0.025**

Note: **Significant at $P < 0.01$.

to the surgical ward of Oda Hulle hospital ($P = 0.018$, AOR = 0.4, 95% CI: 0.2–0.85). Regarding the patient's cause of illness or history of illness, the patients whose cause of the illness was chronic were two times higher satisfied as compared with those with their cause of the illness was acute ($P = 0.033$, AOR = 2.08, 95% CI: 1.9–4.9) (Table 5).

Table 5 Multivariable Analysis Results of Selected Variables Associated with Patient Satisfaction Towards Nursing Care in Oda Hulle Hospital, Jimma, Ethiopia, 2021

Variables	Category	Patients' Satisfaction Status, (n (%))		COR (95% CI)	AOR (95% CI)	PV
		Dissatisfied NSNS Score≤63.05	Satisfied NSNS Score>63.05			
History of admission	First time	33 (39.3)	51 (60.7)	1	1	
	Second times	29 (56.9)	22 (43.1)	0.5 (0.24, 0.99)	0.46 (0.22, 0.95)	0.035**
	> two times	6 (60.0)	4 (40.0)	0.43 (0.11, 1.62)	0.3 (0.07, 1.2)	0.087
Admission ward	Surgical ward	17 (35.4)	31 (64.6)	1	1	
	Medical ward	33 (55.0)	27 (45.0)	2.23 (1.02, 4.9)	0.4 (0.2, 0.85)	0.018**
	Gyne ward	18 (48.6)	19 (51.4)	1.3 (0.6, 2.9)	0.52 (0.21, 1.3)	0.167

(Continued)

Table 5 (Continued).

Variables	Category	Patients' Satisfaction Status, (n (%))		COR (95% CI)	AOR (95% CI)	PV
		Dissatisfied NSNS Score ≤ 63.05	Satisfied NSNS Score > 63.05			
Illness history/cause	Acute	37 (47.4)	41 (52.6)	1	1	
	Chronic	31 (46.3)	36 (53.7)	1.05 (0.55, 0.96)	2.08 (1.9, 4.9)	0.033**
Adequacy of ward space	Dissatisfied	33 (63.5)	19 (36.5)	1		
	Satisfied	35 (37.6)	58 (62.4)	2.9 (1.4, 5.8)	2.8 (1.32, 5.9)	0.007**
Access to pharmacy services or get medicine in a hospital	Dissatisfied	32 (62.7)	19 (37.3)	1		
	Satisfied	36 (38.3)	58 (61.7)	2.7 (1.3, 5.4)	2.3 (1.08, 4.9)	0.032**
The perceived capacity of nurses	Dissatisfied	19 (79.2)	5 (20.8)	1		
	Satisfied	49 (40.5)	72 (59.5)	5.5 (1.9, 15.9)	5.8 (1.9, 10.03)	0.002**

Note: **Significant at $P < 0.01$.

Discussion

This facility-based comparative cross-sectional study has attempted to assess the satisfaction of patients in a public and private hospital in Jimma, Ethiopia. The overall patient satisfaction towards the nursing care was 55.6% (95% CI: 53.5–58.6). The study revealed that more than half, 54.5% (95% CI: 52.9–59.3), and 57.1% (95% CI: 55.2–61.37) of the admitted patients were satisfied with the nursing care they received in Jimma medical center which is a public hospital, and Oda Hulle which is a private hospital, respectively.

The patients in private (Oda Hulle) hospitals were more satisfied (57.1%) when compared to the public (Jimma Medical Center) in which the satisfaction level was 54.5%. The reason may be the services given in private hospital was rapid and fast since they are business-oriented,²⁸ and the staff nurses found in the private hospital may be the higher paid and motivated to serve the patients in good conditions. This study finding is lower than the study conducted in India, where 77% of patients were satisfied in private hospitals and 66% of patients were satisfied in a public hospital with nursing care, they both provide,³⁷ but higher than study the study conducted in Ghana where more satisfied patients were in the private health sector was reported than in the public sector which was 33%.³⁸

On the other hand, this study result is not consistent with the study conducted in Addis Ababa²¹ and Nepal³⁹ in which patient satisfaction in a public hospital is higher than patient satisfaction in a private hospital. This might be due to the sample size and methods of the study.

This study revealed that the majority of female and married participants in both public and private hospital reported higher satisfaction compared to their male and single counterparts. This finding was similar with study findings in Turkey where the study participants were females and married and less educated were more satisfied with their counterparts,¹⁰ and again similar with the study conducted in Amhara regional state, Bahirdar town, in which male respondents were 0.71 times less likely to be satisfied.¹¹ This might be due to the reason that the females can get the social support, and care they get from their spouses/husbands, and again the children might reduce their care needs and expectation levels.¹⁰ This finding was not consistent with the finding from in Ghana, reported males were more satisfied than females.³⁸

Regarding the residence, and educational level of the patients, the patients who come from the rural and those who have a less educational level (unable to read and write) were more satisfied with compared to their counterparts in Jimma Medical center (public hospital). However, patients who came from the rural area were dissatisfied with the nursing care in private hospital (oda hulle) (47.1%).

Concerning the admission process of the patients, the patients in a private hospital (Oda Hulle) were more satisfied (73.1%) than a public hospital, Jimma Medical Center (55.6%). This finding was similar to the study conducted in Bahirdar town between private and public health facility shows that the admission process in a private health facility was clearly explained 90.83% than public health facility 64.72%.²⁸ This is again because the private one is more business-oriented, and the patient will receive the services which will be equivalent to their payments.

Regarding factors associated with the satisfaction of patients, history of admission, cause of illness, and cleanliness of the ward were significant in both hospitals. Related to patient's cause of illness or history of illness, the patients who were the cause of their illness was chronic were two times higher satisfied as compared with those their cause of the illness was acute ($P = 0.033$, $AOR = 2.08$, $95\% \text{ CI: } 1.9\text{--}4.9$). The probable reason may be because of the developed awareness about the diseases either from experiences or from the nurse's health education given. This study was not consistent with a study conducted in Addis Ababa.²¹ This may be due to the study participants' characteristic level of education.

The patients who have a history of admission for the second time were 54% less satisfied with nursing care as compared with those who have admission frequency one (new) to the hospital with ($P = 0.035$, $OR = 0.456$, $95\% \text{ CI: } 0.22\text{--}0.94$). This finding was similar to a study conducted in Eastern Ethiopia.⁴⁰ And the finding is not consistent with the study conducted in Bahirdar town, which states that patients who have admission history were found to be 2.05 times more likely to be satisfied compared with those study participants who have no admission which states that patients who have admission history were found to be 2.05 times more likely to be satisfied compared with those study participants who have no admission history.²⁸ This might be due to socio-demographic characteristics of participants and upgrading different nurses to the next level.³⁵

Implication

These study results imply that health-care providers (Nurses) and hospital administrators should consider ways to improve the negatively associated factors with patient satisfaction, to increase the satisfaction of patients during their stay in the hospital. To bring improvement on nursing care in the hospital; administrators should take the responsibility and take up the challenges, which will advance, standard of care. Furthermore, the study's findings indicate that regular evaluation of nursing care quality is required to improve patient care. It should be clearly communicated to nurses through in-service training programs intended to refresh and update knowledge and skills in various aspects of patient care. Evidence-based nursing practices can help to improve the quality of nursing care provided to patients admitted to various hospital units.

Limitation

Since the data were collected in the wards of the hospital, social desirability bias may have an impact on the patients' responses, leading them to report more positive experiences in order to preserve their relationships with nurses. Additionally, given that the data was gathered during the COVID-19 pandemic, there may not have been much interaction between the patient and the nurse in order to prevent the spread of the disease by physical contact.

Conclusion

The study revealed the patient satisfaction towards nursing care was low when compared to the previous studies even if it was more than half both in Jimma Medical Center and Oda Hulle hospital. The level of patient satisfaction in private hospital is relatively higher than that of public hospitals, though it was not significant statistically. More than half of the patients in Jimma Medical Center were dissatisfied with getting medicine in the hospital, access to water, latrine, and handwashing facility. Whereas patients in Oda Hulle hospital were dissatisfied with Payments for an examination, drug, and I laboratory is not fair.

On the other hand, being the age category of 41–50 years, an adequate visit by nurse and get support when needed, adequacy of the ward space, cleanliness of the ward, and access to get the pharmacy in the hospital were positively associated with patient satisfaction.

Ethical Considerations

To conduct the study, ethical clearance was obtained from Institutional review board of Jimma University after submitting the proposal. The letter of support was obtained from both participating facilities. Written informed consent was taken from the participants and all the data obtained in due course was kept confidentially. This study was conducted in accordance with the Declaration of Helsinki.

Acknowledgment

We thank Jimma University for funding this research project. We are also grateful to all study participants and data collectors.

Disclosure

The authors report no conflicts of interest in this work.

References

1. Samina M, Gij Q, Tabish S, Samiya M, Riyaz R. Patient's perception of nursing care at a large teaching hospital in India. *Int J Health Sci.* 2008;2(2):92–100.
2. Chalkidou K, Glassman A, Marten R, et al. Priority-setting for achieving universal health coverage. *Bull World Health Organ.* 2016;94(6):462–467. doi:10.2471/BLT.15.155721
3. World Health Organization (OECD) and the World Bank under the overall guidance of Marie-Paule Kieny. *Delivering Quality Health Services.* OECD Publishing; 2018:1–100.
4. Cole BJ, Cotter EJ, Wang KC, Davey A. Patient understanding, expectations, outcomes, and satisfaction regarding anterior cruciate ligament injuries and surgical management. *J Arthrosc Relat Surg.* 2017;33(5):1092–1096. doi:10.1016/j.arthro.2017.01.049
5. St A, Hospital M, Gerense H, et al. Quality of nursing care among in-patient of medical-surgical ward in Axum St. Marry Hospital, Tigray, Ethiopia 2015. *Enzyme Eng.* 2015;4(2):1–5.
6. Kalisch BJ. Missed nursing care. *Nurs Care Qual.* 2006;21:2–3.
7. Wagner D, Bear M. Patient satisfaction with nursing care: a concept analysis with in a nursing framework. *J Adv Nurs.* 2009;65(3):692–701. doi:10.1111/j.1365-2648.2008.04866.x
8. Donabedian. The quality of care. *JAMA.* 1988;260:1–6.
9. Özlü ZK. Evaluation of satisfaction with nursing care of patients hospitalized in surgical clinics of different hospitals. *Int J Caring Sci.* 2015;8(1):19–24.
10. Karaca A, Durna Z. Patient satisfaction with the quality of nursing care. *Nurs Open.* 2019;6(2):535–545. doi:10.1002/nop.2.237
11. Kasa AS, Gedamu H. Predictors of adult patient satisfaction with nursing care in public hospitals of Amhara region, Northwest Ethiopia. *BMC Health Serv Res.* 2019;19(1):1–9. doi:10.1186/s12913-019-3898-3
12. Palese A, Gonella S, Fontanive A, et al. The degree of satisfaction of in-hospital medical patients with nursing care and predictors of dissatisfaction: findings from a secondary analysis. *Scand J Caring Sci.* 2017;31(4):768–778. doi:10.1111/scs.12396
13. Kol E, Arıkan F, İlaslan E, Akıncı MA, Koçak MC. A quality indicator for the evaluation of nursing care: determination of patient satisfaction and related factors at a university hospital in the Mediterranean Region in Turkey. *Collegian.* 2018;25(1):51–56. doi:10.1016/j.colegn.2017.03.006
14. Vinodkumar S, Varghese BG, Setia MS. Factors associated with patient satisfaction in a private health care setting in India: a cross-sectional analysis. *J Hosp Adm.* 2018;7(4):44.
15. Asamrew N, Endris AA, Tadesse M. Level of patient satisfaction with inpatient services and its determinants: a study of a specialized hospital in Ethiopia. *J Environ Public Health.* 2020;2020:1.
16. Marama T, Bayu H, Merga M, Binu W. Patient satisfaction and associated factors among clients admitted to obstetrics and gynecology wards of public hospitals in Mekelle Town, Ethiopia: an institution-based cross-sectional study. *Obstet Gynecol Int.* 2018;2018:1–9. doi:10.1155/2018/2475059
17. Assefa F, Mosse A, Michael Y. Assessment of clients' satisfaction with health service deliveries at Jimma university specialized hospital. *Ethiop J Health Sci.* 2011;21(2):101–109. doi:10.4314/ejhs.v21i2.69050
18. Akbas M. Patient satisfaction on nursing care: the case of gynecology and obstetrics clinics. *Acta bioethica.* 2019;25(1):127–136. doi:10.4067/S1726-569X2019000100127
19. Haile Eyasu K, Adane AA, Amdie FZ, Getahun TB, Biwota MA. Adult patients' satisfaction with inpatient nursing care and associated factors in an Ethiopian referral hospital, Northeast, Ethiopia. *Adv Nurs.* 2016;2016:1–7. doi:10.1155/2016/6308617
20. Feleke AA. Patient satisfaction and associated factors on in-patient nursing service at public hospitals of Dawro zone, Southern Ethiopia. *Int J Caring Sci.* 2020;13(2):1411–1420.
21. Mekonnen A. College of health sciences school of allied health sciences department of nursing and midwifery; 2017.
22. Teshome Kassa R. Clients' satisfaction level toward health care service in selected Addis Ababa Hospitals, Ethiopia, 2016. *Primary Health Care.* 2019;9(1):1–4.
23. Batbaatar E, Dorjdagva J, Luvsannyam A, Savino MM, Amenta P. Determinants of patient satisfaction: a systematic review. *Perspect Public Health.* 2017;137(2):89–101. doi:10.1177/1757913916634136
24. Hussain A, Sial MS, Usman SM, Hwang J, Jiang Y, Shafiq A. What factors affect patient satisfaction in public sector hospitals: evidence from an emerging economy. *Int J Environ Res Public Health.* 2019;16(6):994. doi:10.3390/ijerph16060994

25. Woldeyohanes TR, Woldehaimanot TE, Kerie MW, Mengistie MA, Yesuf EA. Perceived patient satisfaction with in-patient services at Jimma University Specialized Hospital, Southwest Ethiopia public health. *BMC Res Notes*. 2015;8(1):1–8. doi:10.1186/s13104-015-1179-8
26. Ogaji DS, Giles S, Daker-White G, Bower P. Systematic review of patients' views on the quality of primary health care in sub-Saharan Africa. *SAGE Open Med*. 2015;3:205031211560833. doi:10.1177/2050312115608338
27. Sharew NT, Bizuneh HT, Assefa HK, Habtewold TD. Investigating admitted patients' satisfaction with nursing care at Debre Berhan Referral Hospital in Ethiopia: a cross-sectional study. *BMJ Open*. 2018;8(5):e021107. doi:10.1136/bmjopen-2017-021107
28. Eleni TT. Inpatient Care Satisfaction among public and private health sectors in Bahir Dar town, Amhara regional state, North West Ethiopia. *Int J Caring Sci*. 2018;11(3):1609–1622.
29. Folami F. Assessment of patient satisfaction with nursing care in selected wards of the Lagos University Teaching Hospital (LUTH). *Biomed J Sci Tech Res*. 2019;17(1):12489–12497.
30. Mobolaji-Olajide OM, Adereti SC, Odutayo PO, Adejumo PO. In-patient satisfaction with nursing care: outcome measurement in a tertiary health facility in Lagos, Nigeria. *Int J Africa Nurs Sci*. 2020;13:100264. doi:10.1016/j.ijans.2020.100264
31. Mulugeta H, Wagnaw F, Dessie G, Biresaw H, Habtewold TD. Patient satisfaction with nursing care in Ethiopia: a systematic review and meta-analysis. *BMC Nurs*. 2019;18(1):1–12. doi:10.1186/s12912-019-0348-9
32. Hospitals E, Initiative M. Ethiopian hospital services guideline; 2016:83–84.
33. Arde BOA. Consonance theory: a proposed theory of patient satisfaction. *Philipp J Nurs*. 2017;87(2):74–79.
34. Thomas LH, McColl E, Priest J, Bond S, Boys RJ. Newcastle satisfaction with nursing scales: an instrument for quality assessments of nursing care. *Qual Saf Heal Care*. 1996;5(2):67–72. doi:10.1136/qshc.5.2.67
35. Shewasinad S, Sayih A. Assessment of adult patient satisfaction and associated factors with nursing care among admitted patient in medical, surgical, obstetrics and gynecology ward in Mizan-Aman General Hospital, Bonga and Tepi Hospitals, Southwest Ethiopia. *JOJ Nurse Heal Care*. 2018;8(5):1–9.
36. Akin S, Erdogan S. The Turkish version of the Newcastle satisfaction with nursing care scale used on medical and surgical patients. *J Clin Nurs*. 2007;16(4):646–653. doi:10.1111/j.1365-2702.2006.01583.x
37. Chakraborty R, Majumdar A. Measuring consumer satisfaction in health care sector: the applicability of SERVQUAL. *J Arts Sci Commer*. 2011;2(4):149–160.
38. Dzomeku VM, Perekuu T, Mantey RE. In-patient satisfaction with nursing care: a case study At Kwame Nkrumah University of Science and Technology Hospital. *Int J Res Med Heal Sci*. 2013;2(1):19–24.
39. Sigdel A. Patients' satisfaction in public and private hospital of Morang District Nepal: a comparative cross sectional. *S Am J Acad Res*. 2015;2:1–7.
40. Ahmed T, Assefa N, Demisie A. Levels of adult patients' satisfaction with nursing care in selected public hospitals in Ethiopia. *Int J Health Sci*. 2014;8(4):375–383.

Nursing: Research and Reviews

Dovepress

Publish your work in this journal

Nursing: Research and Reviews is an international, peer-reviewed, open access journal publishing original research, reports, reviews and commentaries on all aspects of nursing and patient care. These include patient education and counseling, ethics, management and organizational issues, diagnostics and prescribing, health outcomes, economics and resource management, improving patient safety in all settings. The manuscript management system is completely online and includes a very quick and fair peer-review system. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <http://www.dovepress.com/nursing-research-and-reviews-journal>