Patient Satisfaction and Its Socio-Demographic Correlates in a Tertiary Hospital of Nepal

Bidhya Banstola¹

¹Department of Nursing, Pokhara Academy of Heakth Sciences.

ABSTRACT

Background: Patient satisfaction is an integral component of patient care. This concept has been already integrated in the developed nations and the topic is getting interest in developing nations. Hence attempt has been made to address the satisfaction of the patients in different settings and hospitals. The objective of this study was to assess the satisfaction and likely sociodemographic factors affecting the satisfaction among the outpatients.

Methods: A cross-sectional study was conducted among 207 outpatients visiting different departments of the hospital by systematic random sampling method. The satisfaction was assessed by the abbreviated form of Patient Satisfaction Questionnaire-18 and the mean scores of seven domains were obtained.

Results: Mean satisfaction level was 3.53(0.40) out of 5. Highest level of satisfaction was in interpersonal manner domain and the lowest in accessibility and convenience domain. None of the sociodemographic variables was significantly associated with the overall satisfaction (p>0.05). Enrollment into the national health insurance, occupation and educational status of the patients were found to significantly affect one or more domains.

Conclusions: This study showed that the overall satisfaction was fair; hence there is room for improvement for better patient satisfaction. Hospital needs to focus on easy accessibility and convenience of the healthcare facilities and resources to the patients.

Keywords: Nepal; patient satisfaction; socio-demographic tertiary hospital.

INTRODUCTION

Treatment of disease doesn't depend only on drugs given but patient satisfaction also plays a key role. Studies have shown positive patient outcomes are associated with increased patient satisfaction.^{1,2} Higher patient satisfaction is associated with less hospital visits and less hospital admissions.3 The association between socio-demographic characteristics and patient satisfaction were found inconsistent across studies4 Contrary to recommendation and routine use of patient satisfaction metrics in developed countries, the use hasn't been highlighted in developing countries. 5 As per World health report 2000, the government and hospitals should focus on improving quality, increasing access to care, and promoting efficiency.6 Few studies have been conducted on patient satisfaction, with most of them occurring in specific settings only and specific groups of patients.7 Hence, to address the lack of literature in patient satisfaction in Nepal, this study aims to assess

patient satisfaction and determine various factors associated with satisfaction in the outpatient settings in a tertiary public hospital.

METHODS

This cross-sectional study was conducted in in the outpatient department of Pokhara Academy of Health Sciences (PoAHS) for the first two weeks of June, 2023.

Study protocol was approved by the Institutional Review Committee (IRC), PoAHS (Ref No: 150/079). Patients above 18 years of age visiting the out-patient department were included. Those who were unable or refused to give consent, severely ill and unable to communicate verbally were excluded from the study.

Using 95% confidence interval, 5% margin of error, 86% of patient satisfaction- as observed in a previous study from a similar setting, 7 the sample size required was:

Correspondence: Bidhya Banstola, Pokhara Academy of Health Sciences, Pokhara, Nepal. Email: bidhya77@gmail.com.

 $n = (Z^2 \times p (1 - p)) / d^2 = (1.96 \times 1.96 \times 0.86 \times 0.14) / 0.05 \times 0.05 =$ 192. Using a 10% non-response rate, the minimum sample size needed was 204. Systematic random sampling method was employed for patient selection. Every day every 10th patient was interviewed with maximum of 20 patients per day and continued till completion of sample size. A total of 215 filled questionnaires were obtained. eight were excluded due to missing datas, and hence the final analyzed sample size was 207.

Face to face interview of the respondent by the interviewers was done. First part included sociodemographic information of the participants. Second part included PSQ-18 which is the short form of PSQ-III developed by RAND.8 The questionnaire is an internationally validated tool used in different settings and countries and in Nepal too. 9-21 PSQ-18 consists of 18 items probing seven dimensions of patient satisfaction: general satisfaction, technical quality, interpersonal manner, communication, financial aspects, time spent with the doctor, and accessibility and convenience. Each question in the PSQ-18 has a 5-point Likert Scale ranging from "Strongly Disagree," "Disagree," "Neutral," "Agree" to "Strongly Agree." The PSQ-18 yields separate scores for each of seven different subscales: General Satisfaction (Items 3 and 17); Technical Quality (Items 2, 4, 6, and 14); Interpersonal Manner (Items 10 and 11); Communication (Items 1 and 13); Financial Aspects (Items 5 and 7); Time Spent with Doctor (Items 12 and 15); Accessibility and Convenience (Items 8, 9, 16, and 18). Further, the method to calculate the score of the items along with the seven dimensions is given in the supplemental file. Overall satisfaction score was obtained as the average of the seven subscales. After translating the questionnaire into the Nepali language, pre-testing among 20 patients was done at the same hospital and these patients were not included in the final data analysis part. The Cronbach's alpha was found to be 0.74, hence internal consistency was fine.

Statistical Package for Social Sciences (SPSS) was used for the entry and analysis of the data. Sociodemographic characteristics were described in terms of frequency and percentages. Patient satisfaction scores were expressed as mean and standard deviations. The exploratory variable was assessed for normality using Kolmogorov-Smirnov Test and the Shapiro-Wilk Test tests of normality. As the data was of normal distribution, independent sample t-test was used to compare the means between categorical variables. ANOVA test was used to compare means among those with three or more categorical variables. A p-value of less than 0.05 was considered to be significant.

RESULTS

Majority (53.6%) were of 41 years aged and above. Majority (42.5%) were of Brahmin ethnicity. Of the total, 134 (64.7%) were females. The educational status was evenly distributed with maximum studying up to primary level (26.6%). Most of them were involved in agriculture (44.4%) sector. More than half (52.7%) had the nearest health facility at 30 to 60 minutes distance. On inquiry regarding enrollment in national government health insurance scheme, nearly one-third (28.5%) hadn't enrolled. (Table 1)

Table1. Socio-demographic charac respondents.	teristics of the
Socio-demographic Characteristics	Frequency (%)
Age Mean (SD)	43(14.5)
Female	134 (64.7)
Brahmin	88 (42.5)
Married	185(89.4)
Hindu	165(79.7)
Education	
Illiterate	29 (14.0)
Informal	47(22.7)
Primary	55 (26.6)
Secondary	49(23.7)
Bachelor and above	27(13.0)
Occupation	
Agriculture	92(44.4)
Homemaker	40(19.3)
Distance from health Facility	
Less than 30 minutes	42 (20.3)
30-60 minutes	109(52.7)
More than 60 minutes	56 (27.1)
Enrollment in National health insurance	148(71.5)

Patients seem to be more satisfied with the domains related to doctors' manner and communication. The mean (±SD) of patient satisfaction score was the highest in terms of interpersonal manner (4.06±0.72) and communication (3.89±0.72). Highest dissatisfaction was regarding the accessibility and convenience of the services at the hospital and had high concerns regarding the waiting duration in the emergency room. The mean (\pm SD) of the total satisfaction score was 3.53 \pm 0.40. (Table 2)

Table 2. PSQ-18 domains and overall satisfaction scores.	Mean	SD	Percentage
Overall Satisfaction	3.53	0.40	70.6
Interpersonal Manner	4.06	0.72	81.2
Doctors act too businesslike and impersonal towards me	3.94	0.72	01.2
My doctors treat me in a very friendly and courteous manner	4.18		
Communication	3.89	0.72	77.8
Doctors are good about explaining the reason for medical tests	3.83	0.72	77.0
Doctors sometimes ignore what I tell them	3.96		
		0.54	7
Technical Quality	3.83	0.51	76.6
I think my doctor's office has everything needed to provide complete medical care	3.41		
Sometimes doctors make me wonder if their diagnosis is correct	3.86		
When I go for medical care, they are careful to check everything when treating and examining me	4.07		
I have some doubts about the ability of the doctors who treat me	4.00		
Financial	3.56	0.93	71.2
I feel confident that I can get the medical care I need without being set back financially	3.74		
I have to pay for more of my medical care than I can afford	3.38		
General Satisfaction	3.34	0.79	66.8
The medical care I have been receiving is just about perfect	3.57		
I am dissatisfied with some things about the medical care I receive	3.12		
Time spent with Doctor	3.35	0.82	67.0
Accessibility and convenience	2.95	0.63	59.0
I have easy access to the medical specialists I need	3.52		
Where I get medical care, people have to wait too long for emergency treatment	2.31		
I find it hard to get an appointment for medical care right away	2.67		
I am able to get medical care whenever I need it	3.33		

Those aged above 40 years were found to have higher satisfaction level (3.56±0.41) as compared to those of aged 40 years or below (3.50±0.38) but it wasn't statistically significant(p-value=0.292). Similarly, male gender and married were found to have slightly higher level of satisfaction but was insignificant (p>0.05). People enrolled into national health insurance scheme were found to be more satisfied (3.56±0.39) than those not enrolled (3.46±0.41), however was of insignificant value(p=0.103) Table 3)

Table 3. Association between socio-demographic variables and overall satisfaction score.					
Variables	Mean±SD	p-value			
Age					
20-40	3.50±0.38	0.292*			
41 and above	3.56±0.41				
Gender					
Male	3.54±0.40	0.753*			
Female	3.52±0.40				
Marital Status					
Married	3.53±0.40	0.815*			
Unmarried	3.51±0.42				
Religion					
Hindu	3.53±0.40	0.813*			
Others	3.54±0.42				
National Health Insurance enrollment					
Yes	3.56±0.39	0.103*			
No	3.46±0.41				
Distance from Health Facility					
Less than 30 minutes	3.46±0.37	0.177#			
30-60 minutes	3.51±0.38				
More than 60 minutes	3.61±0.45				
Ethnicity					
Brahmin	3.54±0.34	0.645#			
Chhetri	3.55±0.47				
Others	3.49±0.42				

^{*}Independent sample t-test #ANOVA

Those who were enrolled in the national health insurance scheme were found to have scored significantly (p<0.05) in the domain of time spent with the doctor. Distance from the health facility was found to affect significantly the interpersonal manner domain. Post-hoc analysis showed that people living at a distance less than 30 minutes had significantly lower score as compared to other two groups, however those living at a distance within 30 to 60 minutes and those who need to travel more than 60 minutes had non-significant scores. Educational status had significant effect on time spent with doctor domain. Post-hoc analysis showed that illiterate patients scored significantly lower as compared to those having informal education (p=0.04). In financial domain, ethnicity was found to be significant factor. Pots-hoc analysis revealed that Brahmin was more satisfied as compared to Chhetri but there was no significant difference between Janajati and Chhetri or Brahmin and Chhetri. The socio-demographic variable having major effect on domains was occupation. Patients with agriculture as the main profession were more likely to be satisfied as compared to those involved in other occupation except those as homemaker. (Table 4)

Satisfaction Quality personal Manner with Doctor Convenient and Convenient National Health Insurance enrollment Yes 3.33±0.72 3.86±0.53 4.10±0.71 3.91±0.67 3.54±0.97 3.44±0.79* 2.99±0.63 No 3.36±0.93 3.76±0.45 3.95±0.76 3.83±0.84 3.61±0.83 3.13±0.86* 2.86±0.63 Distance from Health Facility Less than 30.39±0.74 3.72±0.56 3.77±0.87* 3.77±0.70 3.84±0.85 3.30±0.83 2.82±0.57 30-60 3.27±0.78 3.88±0.46 4.11±0.68* 3.93±0.70 3.42±0.97 3.29±0.78 2.93±0.67 30-60 minutes 3.43±0.83 3.81±0.56 4.17±0.63* 3.90±0.78 3.62±0.86 3.52±0.87 3.11±0.57 Educational Status Illiterate 3.37±0.91 3.66±0.60 3.89±0.69 3.87±0.84 3.56±0.87 3.03±0.75* 2.89±0.57 Informal 3.30±0.83 4.01±0.49 4.21±0.76 3.87±0.68 3.36±0.87 3.03±0.84* 3.00±0.66 <th>Variables</th> <th colspan="7">Mean±SD</th>	Variables	Mean±SD						
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30 minutes 30-60	Distance from	n Health Facili	ity					
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Educational Status Illiterate 3.37±0.91 3.66±0.60 3.89±0.69 3.87±0.84 3.56±0.87 3.03±0.75* 2.89±0.57 Informal 3.30±0.83 4.01±0.49 4.21±0.76 3.87±0.68 3.36±0.95 3.58±0.76* 3.13±0.63 Primary 3.51±0.65 3.79±0.48 4.10±0.69 3.87±0.62 3.73±0.84 3.30±0.84* 3.00±0.66 Secondary 3.25±0.81 3.83±0.48 3.96±0.75 3.87±0.75 3.60±0.94 3.55±0.80* 2.84±0.62 Bachelor 3.18±0.79 3.80±0.49 4.07±0.70 3.87±0.76 3.48±1.09 3.07±0.82* 2.82±0.62 Ethnicity Brahmin 3.32±0.78 3.82±0.46 4.10±0.65 3.90±0.69 3.72±0.88* 3.44±0.77 2.87±0.63 Chhetri 3.44±0.76 3.87±0.59 4.11±0.75 3.90±0.74 3.28±1.04* 3.37±0.82 3.06±0.64 Others 3.25±0.84 3.80±0.49 3.92±0.79 3.84±0.76 3.63±0.79* 3.20±0.89 2.97±0.62 Occupation Homemaker 3.39±0.67 3.76±0.50* 3.94±0.64* 3.74±.72 3.67±.89 3.1±.85 2.99±.56* Agriculture 3.42±0.80 3.93±0.48* 4.22±0.58* 4.01±.66 3.42±.94 3.42±.79 3.06±.64*		3.27±0.78	3.88±0.46	4.11±0.68*	3.93±0.70	3.42±0.97	3.29±0.78	2.93±0.67
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Primary 3.51±0.65 3.79±0.48 4.10±0.69 3.87±0.62 3.73±0.84 3.30±0.84* 3.00±0.66 Secondary 3.25±0.81 3.83±0.48 3.96±0.75 3.87±0.75 3.60±0.94 3.55±0.80* 2.84±0.62 Bachelor 3.18±0.79 3.80±0.49 4.07±0.70 3.87±0.76 3.48±1.09 3.07±0.82* 2.82±0.62 Ethnicity Brahmin 3.32±0.78 3.82±0.46 4.10±0.65 3.90±0.69 3.72±0.88* 3.44±0.77 2.87±0.63 Chhetri 3.44±0.76 3.87±0.59 4.11±0.75 3.90±0.74 3.28±1.04* 3.37±0.82 3.06±0.64 Others 3.25±0.84 3.80±0.49 3.92±0.79 3.84±0.76 3.63±0.79* 3.20±0.89 2.97±0.62 Occupation Homemaker 3.39±0.67 3.76±0.50* 3.94±0.64* 3.74±.72 3.67±.89 3.1±.85 2.99±.56* Agriculture 3.42±0.80 3.93±0.48* 4.22±0.58* 4.01±.66 3.42±.94 3.42±.79 3.06±.64*	Illiterate	3.37±0.91	3.66±0.60	3.89±0.69	3.87±0.84	3.56±0.87	3.03±0.75*	2.89±0.57
Secondary 3.25±0.81 3.83±0.48 3.96±0.75 3.87±0.75 3.60±0.94 3.55±0.80* 2.84±0.62 Bachelor 3.18±0.79 3.80±0.49 4.07±0.70 3.87±0.76 3.48±1.09 3.07±0.82* 2.82±0.62 Ethnicity Brahmin 3.32±0.78 3.82±0.46 4.10±0.65 3.90±0.69 3.72±0.88* 3.44±0.77 2.87±0.63 Chhetri 3.44±0.76 3.87±0.59 4.11±0.75 3.90±0.74 3.28±1.04* 3.37±0.82 3.06±0.64 Others 3.25±0.84 3.80±0.49 3.92±0.79 3.84±0.76 3.63±0.79* 3.20±0.89 2.97±0.62 Occupation Homemaker 3.39±0.67 3.76±0.50* 3.94±0.64* 3.74±.72 3.67±.89 3.1±.85 2.99±.56* Agriculture 3.42±0.80 3.93±0.48* 4.22±0.58* 4.01±.66 3.42±.94 3.42±.79 3.06±.64*	Informal	3.30±0.83	4.01±0.49	4.21±0.76	3.87±0.68	3.36±0.95	3.58±0.76*	3.13±0.63
Bachelor 3.18±0.79 3.80±0.49 4.07±0.70 3.87±0.76 3.48±1.09 3.07±0.82* 2.82±0.62 Ethnicity Brahmin 3.32±0.78 3.82±0.46 4.10±0.65 3.90±0.69 3.72±0.88* 3.44±0.77 2.87±0.63 Chhetri 3.44±0.76 3.87±0.59 4.11±0.75 3.90±0.74 3.28±1.04* 3.37±0.82 3.06±0.64 Others 3.25±0.84 3.80±0.49 3.92±0.79 3.84±0.76 3.63±0.79* 3.20±0.89 2.97±0.62 Occupation Homemaker 3.39±0.67 3.76±0.50* 3.94±0.64* 3.74±.72 3.67±.89 3.1±.85 2.99±.56* Agriculture 3.42±0.80 3.93±0.48* 4.22±0.58* 4.01±.66 3.42±.94 3.42±.79 3.06±.64*	Primary	3.51±0.65	3.79±0.48	4.10±0.69	3.87±0.62	3.73±0.84	3.30±0.84*	3.00±0.66
Ethnicity Brahmin 3.32 ± 0.78 3.82 ± 0.46 4.10 ± 0.65 3.90 ± 0.69 $3.72\pm0.88^*$ 3.44 ± 0.77 2.87 ± 0.63 Chhetri 3.44 ± 0.76 3.87 ± 0.59 4.11 ± 0.75 3.90 ± 0.74 $3.28\pm1.04^*$ 3.37 ± 0.82 3.06 ± 0.64 Others 3.25 ± 0.84 3.80 ± 0.49 3.92 ± 0.79 3.84 ± 0.76 $3.63\pm0.79^*$ 3.20 ± 0.89 2.97 ± 0.62 Occupation Homemaker 3.39 ± 0.67 $3.76\pm0.50^*$ $3.94\pm0.64^*$ $3.74\pm.72$ $3.67\pm.89$ $3.1\pm.85$ $2.99\pm.56^*$ Agriculture 3.42 ± 0.80 $3.93\pm0.48^*$ $4.22\pm0.58^*$ $4.01\pm.66$ $3.42\pm.94$ $3.42\pm.79$ $3.06\pm.64^*$	Secondary	3.25±0.81	3.83±0.48	3.96±0.75	3.87±0.75	3.60±0.94	3.55±0.80*	2.84±0.62
Brahmin 3.32 ± 0.78 3.82 ± 0.46 4.10 ± 0.65 3.90 ± 0.69 $3.72\pm0.88^*$ 3.44 ± 0.77 2.87 ± 0.63 Chhetri 3.44 ± 0.76 3.87 ± 0.59 4.11 ± 0.75 3.90 ± 0.74 $3.28\pm1.04^*$ 3.37 ± 0.82 3.06 ± 0.64 Others 3.25 ± 0.84 3.80 ± 0.49 3.92 ± 0.79 3.84 ± 0.76 $3.63\pm0.79^*$ 3.20 ± 0.89 2.97 ± 0.62 Occupation Homemaker 3.39 ± 0.67 $3.76\pm0.50^*$ $3.94\pm0.64^*$ $3.74\pm.72$ $3.67\pm.89$ $3.1\pm.85$ $2.99\pm.56^*$ Agriculture 3.42 ± 0.80 $3.93\pm0.48^*$ $4.22\pm0.58^*$ $4.01\pm.66$ $3.42\pm.94$ $3.42\pm.79$ $3.06\pm.64^*$	Bachelor	3.18±0.79	3.80±0.49	4.07±0.70	3.87±0.76	3.48±1.09	3.07±0.82*	2.82±0.62
Chhetri 3.44 ± 0.76 3.87 ± 0.59 4.11 ± 0.75 3.90 ± 0.74 $3.28\pm1.04^*$ 3.37 ± 0.82 3.06 ± 0.64 Others 3.25 ± 0.84 3.80 ± 0.49 3.92 ± 0.79 3.84 ± 0.76 $3.63\pm0.79^*$ 3.20 ± 0.89 2.97 ± 0.62 Occupation Homemaker 3.39 ± 0.67 $3.76\pm0.50^*$ $3.94\pm0.64^*$ $3.74\pm.72$ $3.67\pm.89$ $3.1\pm.85$ $2.99\pm.56^*$ Agriculture 3.42 ± 0.80 $3.93\pm0.48^*$ $4.22\pm0.58^*$ $4.01\pm.66$ $3.42\pm.94$ $3.42\pm.79$ $3.06\pm.64^*$	Ethnicity							
Others 3.25±0.84 3.80±0.49 3.92±0.79 3.84±0.76 3.63±0.79* 3.20±0.89 2.97±0.62 Occupation Homemaker 3.39±0.67 3.76±0.50* 3.94±0.64* 3.74±.72 3.67±.89 3.1±.85 2.99±.56* Agriculture 3.42±0.80 3.93±0.48* 4.22±0.58* 4.01±.66 3.42±.94 3.42±.79 3.06±.64*	Brahmin	3.32±0.78	3.82±0.46	4.10±0.65	3.90±0.69	3.72±0.88*	3.44±0.77	2.87±0.63
Occupation Homemaker 3.39 ± 0.67 $3.76\pm0.50^*$ $3.94\pm0.64^*$ $3.74\pm.72$ $3.67\pm.89$ $3.1\pm.85$ $2.99\pm.56^*$ Agriculture 3.42 ± 0.80 $3.93\pm0.48^*$ $4.22\pm0.58^*$ $4.01\pm.66$ $3.42\pm.94$ $3.42\pm.79$ $3.06\pm.64^*$	Chhetri	3.44±0.76	3.87±0.59	4.11±0.75	3.90±0.74	3.28±1.04*	3.37±0.82	3.06±0.64
Homemaker 3.39±0.67 3.76±0.50* 3.94±0.64* 3.74±.72 3.67±.89 3.1±.85 2.99±.56* Agriculture 3.42±0.80 3.93±0.48* 4.22±0.58* 4.01±.66 3.42±.94 3.42±.79 3.06±.64*	Others	3.25±0.84	3.80±0.49	3.92±0.79	3.84±0.76	3.63±0.79*	3.20±0.89	2.97±0.62
Agriculture 3.42±0.80 3.93±0.48* 4.22±0.58* 4.01±.66 3.42±.94 3.42±.79 3.06±.64*	Occupation							
	Homemaker	3.39±0.67	3.76±0.50*	3.94±0.64*	3.74±.72	3.67±.89	3.1±.85	2.99±.56*
Others 3.23±0.83 3.75±0.54* 3.93±0.88* 3.83±.79 3.68±.94 3.42±.84 2.81±.66*	Agriculture	3.42±0.80	3.93±0.48*	4.22±0.58*	4.01±.66	3.42±.94	3.42±.79	3.06±.64*
	Others	3.23±0.83	3.75±0.54*	3.93±0.88*	3.83±.79	3.68±.94	3.42±.84	2.81±.66*

DISCUSSION

Female accounted for approximately two-thirds of those visiting the out-patient department. This finding is similar to studies done in some hospitals of Nepal 22, ²³ but in contrast to the studies done in Shahid Gangalal Hospital of Kathmandu²⁴ and Biratnagar hospital.²⁵ This may be due to difference in sampling method as well as the duration period of sample collection. This is in contrast to studies done in other countries. 14, 16 The likely reasons may be higher female population in Nepal, higher number of males going abroad and health-seeking behavior of females. Mean age of the study population was 43 years and was similar to studies conducted in Nepal and outside Nepal. 9, 13, 19, 22, 26

Overall satisfaction rate was fair (70.6%). This was similar

to study done in tertiary eastern hospital of Nepal.²⁷ This was lower as compared to similar studies done in tertiary level hospitals of Kathmandu ranging from 75 to 86%. 7, 24, 26 Possible reasons may be the availability of higher level of services and availability of wellequipped devices. The score was better as compared to study done in Himalayan eye hospital (51.2%) and Manipal Teaching Hospital (33.1%).^{28, 29} The result was similar to the study done in Bangladesh, 17 Nigeria 20 and Saudi Arabia. 11 It was higher as compared to study done in Malaysia¹⁹ and lower as compared to studies done in Bengaluru of India¹⁶ and Australia.¹⁵ Possible reasons for these differences are the study settings, questionnaire used, the hospital level, timing of the study, the covid effect, the difference in the availability of human resources and standards of care provided.

Respondents were well satisfied in domains related to doctors' namely interpersonal manner (4.06±0.72), communication (3.89±0.72) and technical quality (3.83±0.51). This is good sign that the patients have trust on the doctors. These findings are in agreement with studies done in Bhaktapur Hospital of Nepal and Bir Hospital, Kathmandu, Nepal. 9, 26 Studies done in other countries also show similar rankings for the satisfaction domains, though the scoring varies. 12, 13 Possible explanation for this is that most of these studies are done in government-based hospitals and less in private settings. Variation in the scoring is understandable based on the difference in the availability of resources. diagnostic facilities and treatment facilities.

Patients were poorly satisfied with issues related to accessibility and convenience (2.95±0.63) and the time spent with doctor (3.35±0.82) as well as scored low in area of general satisfaction (3.34±0.79). These domains ranked similar in the studies done in Kathmandu, the difference was the score differences, lower in the study done in Bhaktapur hospital and higher in the study done in Bir hospital^{9, 26}. These findings suggest that the population has difficulty in access of different services provided at the hospitals. Hence improvements need to seek out to address issues for better patient satisfaction which is also an important component to the patient treatment process.

No sociodemographic variables were found to significantly affect the overall satisfaction. This was similar to studies done in hospitals of India. $^{10,\ 21}$ This was in contrary to the study done in hospital in Malaysia which found gender; income level and purpose of visit to the clinic had significant effect on the overall satisfaction level.¹⁹ A cross-sectional study done in COVID-19 era in India found that religion was found to be significantly associated. ¹⁸ Patients' satisfaction level was significantly associated with their age (p=0.002), educational level (p=0.001), marital status (p=0.001) and socio economic status (p=0.021) in a study conducted at Chitwan Medical College, Nepal.²² The likely reason is the difference in the questionnaire used and difference in sociodemographic profile between the two cities. No demographic variables were found to be significant predictor for the overall satisfaction. Majority of the population were females and married in this study. More heterogeneity of the sample, multicenter study and larger sample size would help to look on detailed analysis of these variables. There may be some overarching factors and some confounding variables like prior experience with the services which might play substantial role in overall patient satisfaction too.

Occupation had significant effect on three domains of satisfaction: on technical quality, interpersonal manner and accessibility and convenience. Those involved in agriculture were found likely to be more satisfied as compared to those involved in other occupation except homemaker. This is contrast to the study done in Bhaktapur hospital patients who reported that agriculture as their primary occupation were less likely to be satisfied than patients who responded that their main occupation was service.9 Likely reason is the difference in the proportion of patients involved in agriculture in the two studies and the locality difference.

Those enrolled in the national health insurance scheme were found to be significantly more satisfied in the domain of time spent with the doctor. This was not in agreement with study done in Kathmandu.9 The difference is that greater proportions of patients were enrolled in this study (71.5%) as compared to other (42.6%). The previous study was done in 2019 B.S hence the health insurance was in the earlier stage, hence patient didn't feel satisfied with the services though they didn't had to pay from their pockets.

People living less than 30 minutes had significantly lower score as compared to those living farther away. This finding was consistent with the study done in Bhaktapur hospital. This is usually the case in our settings because the nearer the health care service, people may not be valuing the services they are receiving.

It is a single-center study hence cannot be generalized to the whole population. Due to the cross-sectional nature of the study, casual relationship cannot be established between the domains of PSQ-18 and sociodemographic variables.

CONCLUSIONS

The overall satisfaction was fair. Patients were satisfied with the interpersonal manner and communication of the doctors and dissatisfied with the accessibility and convenience of the services at the hospital. None of the socio-demographic factors significantly affected the overall satisfaction of the patients. However, the dissatisfaction of the illiterate patients in time spent with the doctor showed it is recommended to well explain the illiterate patients while providing services. In order to enhance the patient's satisfaction attending outpatient department, it is recommended to provide easy access to get an appointment and specialist services, minimize the too long waiting for treatment.

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