



A Study on Patient Satisfaction among the Patients Admitted in the In-Patient Departments of a Tertiary Health Care Institution in North East India

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ABSTRACT

Introduction: Tertiary care hospital should be able to provide best possible health care to patients. The study was conducted to determine the patient satisfaction of IPD patients seeking treatment in Jorhat Medical College and Hospitals and to compare the level of satisfaction of the patients across selected departments.

Materials and Methods: This cross sectional study was conducted between July to August 2018 among the patients admitted in the IPD of Jorhat Medical College & Hospitals. Multistage random sampling was first done to select departments of the medical college. Then stratified sampling technique with proportionate allocation was used to select patients from these respective departments. Finally, systematic sampling technique was used to select respondents from among the inpatients of the selected departments.

Results: Satisfaction regarding physical facilities like cleanliness of the wards (79.64%), toilets (51.96%), availability of drugs (59.28%), quality of food and water etc (55.71%) were of major concern. The satisfaction level is statistically significant with bio social characteristics like background ($p=0.0002$), sex ($p=0.0356$) and socioeconomic status ($p=0.077$).

Conclusion: Assessing satisfaction of patients is simple and cost effective way for evaluation of hospital services.

Key words: patient satisfaction, IPD, quality of care, tertiary care hospital

INTRODUCTION

Quality can be defined as fulfilment or meeting of expectations of a person from a service or product¹. Quality of clinical services provided, availability of medicine, behaviour of doctors and other health staff, cost of services, hospital infrastructure, physical comfort, emotional support, and respect for patient preferences all contribute to patient satisfaction. Mismatch between patient expectation and the service received is related to decreased satisfaction. The satisfaction of patients coming to hospitals depends on the structure and function of the medical care system. The functioning of medical care system is based on the various social, technical and physical aspects. The structure of the

medical care system is guided by the policies of the government and the type of government set-up prevailing in the country, whereas the functioning mainly depends on those who manage the system.

In a welfare state like India, where the government takes up the responsibility of providing free medical care to those who are unable to afford it, free consultation, medicines and treatment facilities have to be provided. Those receiving these kinds of services may be satisfied with whatever services are being provided to them in the hospitals because they are free of cost. But, as soon as they come to realize that it is their right to receive these services and it is the responsibility of government to look after their well-being, when they cannot af-

ford, rise in their level of expectations is in controllable.¹

Assessing patient perspectives gives them a voice, which can make public health services more responsive to people's needs and expectations². To provide highest level of satisfaction that is profitable to both the patient and the provider, management must control both the perception of expectation and the quality of delivery of the healthcare services¹. Therefore this study was conducted with the objectives of measuring the patient satisfaction of Inpatient Department patients in Medicine, Obstetrics & Gynaecology, Surgery and Paediatrics Departments of Jorhat Medical College & Hospital, Assam and compare the level of satisfaction of the patients across the selected departments of the setup.

MATERIALS AND METHODS

The study population comprised of both male and female patients who came to seek health services and admitted to the respective wards in Jorhat Medical College Hospital, Jorhat

On the basis of previous studies of patient satisfaction and quality of care, and using an appropriate statistical formula for estimating minimum sample size in descriptive health studies [$n=Z^2 pq/d^2$], a sample size of 256 was calculated to detect level of satisfaction among the study participants. The prevalence used for sample size calculation was 80%⁴. An absolute error of 5% has been taken. The sample size was inflated by 10% to take care of non-response, incomplete responses and refusals. Thus a total of 281 (rounded off to 280 participants) have been selected for the study.

Patients between the ages of 18 and 80 years admitted in the respective specialties of indoor patient departments (IPD) were included in the study. Patients who were unfit to take part in the study and those who did not give informed consent were excluded from the study.

A multistage sampling technique was used to select study population. In the first stage four clinical departments [Surgery, Obstetrics & Gynecology, Medicine and Orthopedics] were selected based on the increased load of patients in these departments in the previous three consecutive years. In the second stage, a stratified sampling technique with proportionate allocation was used to select 57,103,102 and 18 patients from these respective departments. Finally, systematic sampling technique was used to select respondents from among the inpatients in the sampled clinical departments. Every 5th patient admitted in the IPD of the respective departments was taken for the study pur-

pose. A Pre designed pre tested semi structured Proforma was used to collect data by interview method.

Necessary approval for conducting the study by the Institutional Ethics Committee of Jorhat Medical College & Hospitals has been obtained. Written informed consent was taken from the participants prior to data collection.

RESULTS

A total of 280 patients admitted in the indoor departments of Medicine, Surgery, Obstetrics & Gynaecology and Orthopaedics were included in the study. Out of total, 91 patients were male and 189 patients were female. Majority of the patients were residing in the rural areas (78.93%) and most of them were literate. A total number of 107 patients were employed and rest were students, housewives, retired and unemployed. Besides it was observed that majority of the patients belonged to the lower socio economic groups. (Table 1)

The satisfaction levels of the studied patients in different aspects of hospital care areas are as described. 93.57% of the total patients were satisfied with the time taken for the registration procedure and 87.14% were satisfied with the behaviour of the registration clerk.

Table1: Socio demographic profile of the patients

Characteristics	Cases (%)
Gender	
Male	91 (32.5)
Female	189 (67.5)
Age	
< 20 years	51 (18.22)
21-40 years	101 (36.07)
41 - 60 years	95 (33.93)
> 60 years	33 (11.78)
Education	
Illiterate	5 (1.78)
Primary	37 (13.21)
High school	87 (31.07)
Secondary	91 (32.5)
Graduate	47 (16.78)
Post graduate	13 (4.64)
Occupation	
Unskilled	76 (27.14)
Skilled	31 (11.07)
Unemployed	16 (5.72)
Housewife	109 (38.93)
Student	48 (17.14)
Place of residence	
Urban	59 (21.07)
Rural	221 (78.93)
Socio economic status	
Class 1(upper)	18 (6.43)
Class2(upper middle)	27 (9.64)
Class 3(upper lower)	39 (13.93)
Class 4(lower middle)	64 (22.86)
Class 5(lower)	132 (47.14)

Table 2: Satisfaction of the people with physical facilities

Aspect of facilities	Satisfied (%)	Not Satisfied (%)
Availability of signboards	249(88.93)	31(11.07)
Wheelchairs and trolleys	255(91.07)	25(8.93)
Beds	267(95.35)	13(4.65)
Cleanliness of the ward	223(79.64)	57(20.36)
Cleanliness of Toilet	179(63.93)	101(36.07)
Lighting arrangement	247(88.21)	33(11.79)
Fans	195(69.64)	85(30.36)
Drinking Water	102(36.43)	178(63.57)
Availability of Drugs	166(59.28)	114(40.72)
Cost of Drugs	201(71.78)	79(28.22)
Availability of Radiological tests	211(75.36)	69(24.64)
Time taken to deliver radiological reports	233(83.21)	47(16.79)
Availability of Laboratory tests	225(80.36)	55(19.64)
Time taken to deliver laboratory reports	236(84.28)	44(15.72)
Cost of Diagnostic tests	198(70.71)	82(29.29)
Quality of the served food	156(55.71)	124(44.29)
Timing of Serving Food	209(74.64)	71(25.36)
Food served as per suggestion of doctor	229(81.78)	51(18.22)
Food menu	149(53.21)	131(46.79)

Table 3: Satisfaction of the people regarding the behaviour of the staff

Aspect of Care	Satisfied (%)	Not Satisfied (%)
Doctor has given enough time to narrate the illness	265(94.64)	15(5.36)
Attitude of doctor	270(96.43)	10(3.57)
Doctor has given enough attention	267(95.36)	13(4.64)
Round the clock availability of Nurses	261(93.21)	19(6.79)
Behavior of nursing staff	255(91.07)	25(8.93)
Behavior of paramedical staff	259(92.50)	21(8.50)
Behavior of clerk at the admission counter	244(87.14)	36(12.86)
Behavior of the ward boys and sweepers	232(82.86)	48(17.14)

Table 4: Satisfaction regarding cleanliness in the bathrooms among the four Departments

Department	Satisfaction with cleanliness in Bathroom
Orthopaedics	55.56%
Surgery	45.61%
Medicine	51.96%
O & G	87.38%

When asked about overall satisfaction it was found that 90.71% respondents were satisfied with the overall admission procedure. (Table 2)

88.93% respondents expressed satisfaction with the availability of sign boards and admitted that signboards were helpful while locating wards, labora-

tory, radiology room and other locations. Regarding the availability of wheel chair and trolley and beds the satisfaction level was found to be 91.07% and 95.35%. Besides it was seen that 88.21% and 69.64% of the respondents were satisfied with the lighting arrangement and fans respectively (Table 2). However while assessing the cleanliness in the toilets difference was observed between Obstetrics and Gynaecology Department and rest of the departments. It was found that patient satisfaction regarding cleanliness of toilets in O&G department was 87.38% and that for the Orthopaedics, Surgery and Medicine Department was 55.56%, 45.61% and 51.96% respectively (Table 4). The satisfaction with the cleanliness in the ward was 79.64% and it was almost equal in all the four departments. Besides it was seen that 71.78% of the respondents were satisfied with the cost of drugs but relatively low satisfaction level was noted regarding availability of drugs in the hospital, which was 59.28% (Table 2).

When asked about availability of radiological and laboratory tests, 75.36% and 80.36% satisfaction was observed and it was found that some of the tests were not available in the hospital and patients had to carry out those tests in the private setup. 83.21% of patients were satisfied with the time taken to deliver the radiological reports and 84.28% of patients were satisfied with the time taken to deliver the laboratory reports. Similarly most of the patients (70.71%) were satisfied with the cost of the diagnostic tests (Table 2).

It was found that the satisfaction levels regarding the food menu and the quality of food was comparatively low. Out of the total respondents only 55.71% of them were satisfied with the quality of food and 53.71% of them were satisfied with the food menu (Table 2)

A much better scenario was observed while assessing the patient satisfaction towards the Healthcare providers and other staff. It was seen that 96.43% patients were satisfied with the attitude of the doctor and 94.64% of the patients were satisfied with the time given by the doctor to narrate their illness. Also 95.36% of the respondents admitted that the doctor had given enough attention to them. Most of the patients were satisfied with the behaviour of the nurses (91.07%) and 93.21% patients accepted that there was round the clock availability of nurses and they could find the nurses whenever any help required. Regarding the behaviour of the other paramedical staff and ward boys & sweepers it was observed that the patient satisfaction level was 92.50% and 82.86% respectively (Table 3).

The association of the overall satisfaction with different factors was assessed. It was found that the satisfaction during treatment was significantly associated with sex (p=0.0365), background

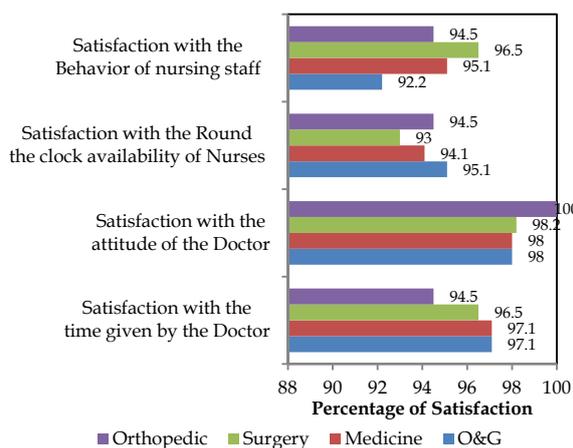


Figure 1: Figure showing department wise comparison of patient satisfaction regarding behaviour of the staff

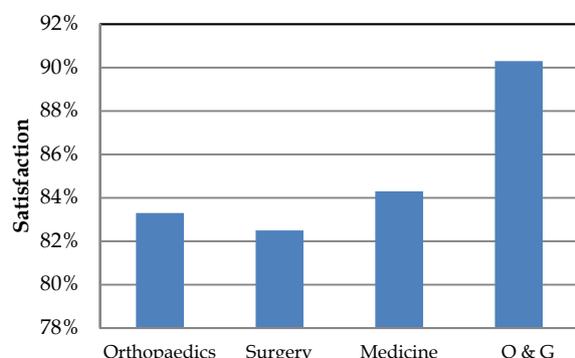


Figure 2: Figure showing department wise the overall satisfaction of the patients

Table 5: Association of satisfaction levels with bio-social characteristics

Social characteristics	Overall satisfaction		P value
	Satisfied (n=241) (86.07%)	Not Satisfied (n=39) (13.93%)	
Background			
Rural	199	22	0.0002*
Urban	42	17	
Sex			
Male	84	7	0.0365*
Female	157	32	
Socioeconomic status			
Class 1(upper)	12	6	0.0077*
Class 2 (upper middle)	20	7	
Class 3 (upper lower)	32	7	
Class 4 (lower middle)	55	9	
Class 5(lower)	122	10	

(p=0.0002) and socioeconomic status (p=0.0077). The level of satisfaction was more in females and it was higher in the respondents who were from rural background and belonged to the lower socio economic groups (Table 5).

Besides these at the end of the survey three questions were asked to the patients which were -what improvement they would like to see in the hospital, what made them to come to the hospital and will they come to the hospital next time for treatment. Most of the patients advised that the Hospital needs to improve the drinking water facility, food facilities, cleanliness and more number of drugs should be available at the hospital at an affordable cost. Regarding the factor which draw them towards the hospital it was seen that most of the patients decided to come to this hospital because it was cost effective and close to residence. Besides this, some of them were referred from other Primary and Community Health centres. When asked about whether they would come to the hospital next time for treatment it was found that out of the 280 respondents 246 (87.86%) responded affirmative.

DISCUSSION

The present study was an attempt to provide an insight on the level of patients’ satisfaction with hospital services in the inpatient departments of Jorhat Medical College & Hospital. Component wise patients had good experience for most of the services but for doctor’s services, the highest level of patient satisfaction was noted. It was found that about 96.42% patients were satisfied with the attitude of the doctors and 94.64% patients were satisfied with the time spent by the doctors with the patients which is similar to the result reported in the study by Sultana et al.³, Pakistan, 2010 where the satisfaction of patient with attitude and behaviour of the doctors and the time spent by the doctors were 95.5% and 92.20% respectively. However result in this study was much higher compared to the results obtained by Kumari et al.⁴ and Qadri et al.⁶ where they reported the patient satisfaction with the attitude and behaviour of the doctor to be 66.8% and 73% respectively. This was also notably better than the one found by JP Singh et al⁹ which reported that 71.6% patients were satisfied with the behaviour of the doctors. Similarly 95.36% patients expressed satisfaction with the attention given by the doctors which is almost similar to the result found by Kausar et al¹¹ (94%).

Besides it was seen that 91.07% and 92.50% patients were satisfied regarding the behaviour of the nurses and paramedical staff. It was less than the results recorded by Sultana et al.³, where the satisfaction level for behaviour of nurses and paramedical staff was 93.3% and 94.5%. However results in this study are high in contrast to the study by Qadri et al.⁶ (45% and 59%) and Sharma et al.⁸ where the satisfaction level with the behaviour of Nurses and paramedical staff was 64%.

However the aspects of Health Care where the level of patient satisfaction was low were drinking water, cleanliness of the toilets and food facilities. One reason for the dissatisfaction with water quality is the presence of excessive iron in the ground water which results in altering the taste and appearance of drinking water, staining of the bathrooms and toilets and requires repeated cleansing of the water purifiers. In this study a striking feature was seen that the patients were satisfied with the sanitation and cleanliness of the O&G department as a whole and also the toilets and bathrooms of this department. This can be mostly attributed to a reasonably newer infrastructure for the said department and the various ongoing programmes like LaQshya and NQAS of the Government of India, which has been rolled out for this department. These programmes deal with the quality of care aspect for the patients in public health care facilities. In the current study it was found that only 36.43% of patients were satisfied with the drinking water facility. Almost similar kind of results were reported by Sultana et al.³ (41.5%), but it was significantly lower in comparison to the satisfaction obtained by Qadri et al⁶ (67.5%), Singh et al⁹ (75.30%), Joshi et al.¹⁰ (68%) and Kausar et al¹¹ (83.6%). Regarding the cleanliness of toilets, the satisfaction level was 63.93%. Though the result was in consistent with the study by Qadri et al.⁶ (64.5%) but it was less than another study by Kausar et al¹¹ which found that 85.6% of patients were satisfied with the cleanliness in the toilets.

A high proportion of patients were dissatisfied with the availability of drugs and it was found that only 59.28% of the patients are satisfied with the availability of drugs in the hospital. It was much lower compared to the study by Kausar et al¹¹ (88.4%) and Kaushal et al.¹² (87.7%).

Our study also found that the satisfaction of patients regarding the food was less. It was seen that only 53.21% and 55.71% of patients were satisfied with the food menu and quality of food. Food served is mostly "one size fits all" type. There is no provision of specific food for the different needs of patients e.g diabetics and hypertensives. It was less than the satisfaction level recorded in other studies like Qadri et al.⁶ (81.5%) and Aleena et al.¹² (82%).

This study showed that overall satisfaction with treatment was 86.10% which is more than the satisfaction level reported by Kumari et al. in Lucknow⁴, (81.6%), Qureshi et al.⁵ in Kashmir (72%) and Syed Suja Qadri et al.⁶ in rural Haryana (79.3%) and SA Deva et al.¹³ in Kashmir (80%), but less than as reported by Bhattacharya et al¹⁴ (88%) and SK Jawhar et al¹⁵ in India (90-95%).

In the current study it has been seen that the government services are mostly utilised by the people

belonging to the rural and lower socio economic section of the society with average education up to high school level. Most of the beneficiaries were pregnant mothers and women requiring obstetrics and gynaecological services. These people were mostly satisfied with the treatment and services by the personnel across the various departments of the hospital. Regarding the supplies, consumables and food quality there was similar satisfaction across the various departments as the supply chain is monitored centrally in the hospital and as per the state protocol. However apart from the services and supplies, the consumers were seen to be much influenced by the cleanliness and upkeep of the facility and this has drawn a difference in the satisfaction level across the departments like O&G with highest satisfaction. This emphasises the importance of cleanliness and hygiene in public health facilities and emphasises the need of the programmes like NQAS, Kayakalp and LaQshya.

CONCLUSION

Assessing satisfaction of patients is simple and cost effective way for evaluation of hospital services. It is to keep in mind that the providing quality service is a continuous process and more studies should be done on this aspect, including more number of patients in near future to get a more clear understanding about satisfaction level of the patients towards the services provided by the Healthcare facilities.

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