

Original Research Article

An evaluation of the in-patient feedback services in a tertiary care hospital of Northern India

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Received: 28 January 2019

Revised: 12 February 2019

Accepted: 13 February 2019

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ABSTRACT

Background: Patient satisfaction is an important indicator of the quality of services provided by any healthcare organization and directly or indirectly affects patient retention, legal issues, revenues, reputation and success of a healthcare organization. Patient's feedback about the clinical as well as non-clinical services can be recorded for gap analysis and improvement of services.

Methods: The cross-sectional study was carried out in a large tertiary care hospital in North India from May 2012 to December 2012. A pre-tested internally developed questionnaire was used to collect the data.

Results: It was observed that the average satisfaction score was relatively high for the criteria like doctor's counselling, attitude of nurse and availability and behaviour of attendant. The average scores for medical and nursing care (clinical services) provided in wards were high (70-74% satisfaction). However, approximately 45% and 50% patients were dissatisfied with the housekeeping and dietary services respectively. This resulted in a dip in the overall impression of the hospital services to 68%.

Conclusions: The percentage of patients satisfied with the overall services (clinical and non-clinical) of the hospital is only 68% which goes on to prove that the patients' perception of quality is changing with the times and non-clinical areas like housekeeping, dietary, billing, security services are becoming as important as clinical care services that are provided by hospitals.

Keywords: Patient satisfaction, In-patient, Tertiary, Feedback form, Patient feedback

INTRODUCTION

Patient satisfaction is an important yardstick to measure quality of the healthcare services.¹ It helps in identifying the gaps and resolving the problems from the patient's point of view.^{2,3} Patient satisfaction is affected by various factors like hospital personnel (doctors, nurses), and environment.^{4,5}

Patient satisfaction is the extent to which a patient is satisfied with the services offered by a health care

provider. It is about meeting the patient's expectations. It is highly subjective and depends on individual expectations and perceptions. Two people receiving the same care can have different levels of satisfaction due to the difference in their expectations from the service. Satisfaction is not overtly observable. It encompasses all aspects of health services including distribution, access and utilization.⁶

Patient satisfaction depends not only on the clinical aspects but on non-clinical aspects as well. Evaluation of

patient satisfaction can be done qualitatively or quantitatively, with quantitative approach being more accurate. Healthcare organizations therefore use patient satisfaction surveys to interpret subjective feedback of patients into quantifiable and meaningful information. Patient satisfaction surveys may be developed in-house or by third party providers.

Standardized questionnaires are a common assessment tool employed for patient satisfaction studies.^{7,8} They can be administered through e-mail, interviews (face to face or telephonic) or physical feedback forms filled in the hospital. Analysis of the feedback obtained helps to identify gaps and develop initiatives for quality improvement.

In hospitals, patient feedback can be obtained for the in-patient department (IPD) services or for the outpatient department (OPD) services or individually for various other departments. In-patients are a valuable source of information regarding the quality of services provided by the hospital, as they use most of the services during their stay at the hospital.

A survey of 32 large tertiary hospitals in the USA in 2011 showed that physician care, nursing care, and physical environment significantly affected patient satisfaction and nursing care was found to be the most critical among these. Respect and courtesy by hospital staff also greatly impacted satisfaction of patients followed by effective communication and explanation.⁹ In contrast another survey conducted in Ireland hospitals scored proper communication and explanation as the most important attribute in patient satisfaction compared to other attributes of patient care.¹⁰

In a study conducted at a military teaching hospital in Turkey, findings indicated that physician care, nursing, hospital environment, food services, type of clinic were the main determinants of overall patient satisfaction.¹¹

Outcomes of four studies conducted in tertiary hospitals of different countries revealed that certain aspects of nursing care like courtesy, listening, respect; access of care greatly impacted patient satisfaction compared to physician care, hospital environment, admission processes or cleanliness.^{12,13-15}

While a few other studies found interpersonal skills of physician, their attitude and involving patients in decision making affected patient satisfaction more than clinical competence or other hospital tangibles.¹⁶⁻¹⁸ However, in another study conducted in a public hospital of France, hospital amenities and living arrangements were found to significantly affect satisfaction than other factors.

The aim of the study was to assess the level of satisfaction of the admitted patients, regarding the services of the hospital with the following objectives; (1) to find out the patient's opinion about the clinical as well

as non-clinical services (2) to record the suggestions and remarks of the patients regarding infrastructure/process/behavior aspects for future gap analysis.

METHODS

This cross-sectional study (mixed method) was carried out in a large tertiary care hospital in Uttarakhand, for a period of 8 months from May 2012 to December 2012. Participation of the study population was voluntary. A pre-tested questionnaire (instrument) was used to collect the data. The questionnaire consisted of 11 areas /categories/aspects for which data was collected. Each category had a set of attributes/criteria, totaling to 36 attributes/criteria studied for these 11 areas (Table 1). The responses to these attributes were numerically rated on a scale from 1 to 4 by the patient, 4 being excellent and 1 being poor.

Provision to capture additional feedback (qualitative information) through open ended questions was also provided in the IPD Feedback form for gathering general feedback/comments/suggestions of patients (Table 2). Turn-around time for various areas like admission, treatment, procedure, report collection, billing and discharge could also be recorded on the feedback form.

The study population consisted of patients admitted in the different wards of the hospital who volunteered to provide feedback. The feedback forms were provided to the patient/patient's attendant on the day of their discharge, and were to be submitted to the respective ward clerks upon completion. The forms were filled as per the patient's own understanding and interpretation of the questions (self-reported). Frequency analysis was done using Microsoft Excel 2010.

Analysis and interpretation of the data:

The average for each attribute was calculated by adding all the ratings given by different patients to that attribute and dividing this sum by the number of ratings. Averages for all the 36 attributes was calculated in the same manner each month for each ward.

Monthly average for each attribute of a ward (AvM)=sum of ratings given to the attribute/total number of ratings obtained.

To calculate the average rating for each attribute during a particular month for all the wards, all the averages obtained earlier for each ward were summed up and divided by the number of wards.

Monthly average for each attribute for all wards=sum of monthly averages for the attribute of each ward (AvM1+AvM2+AvM3+....AvM18)/total number of participating wards (18).

For the quantitative information, any score below 3.5 was noted as an area for improvement.

heads like structural, processes, behavioural, and services improvements.

Qualitative information (like statement/ complaint/ suggestion) was noted and categorized under different

The areas with higher than average turn-around times were put for further root cause analysis.

Table 1: Criteria for quantitative analysis.

Area	Criteria for quantitative analysis
OPD/emergency	Doctor counselling
	Attitude of nurse
	Admission formalities explanation
	Availability and behaviour of attendant
	Availability of wheelchair/trolley
Admission procedure	Cash counter accessibility
	Charges explained
Medical care	Doctor visits- timely and regularly
	Doctor counselling
	Treatment cost explained by doctor
	Instructions during discharge
Nursing care	Services provided by hospital explained
	Nurse attended on time
	Timely sample collection
	Coordination of discharge
	Courtesy and behaviour
	Explanation at the time of discharge
Ward attendant	Timely availability
	Behaviour
Housekeeping	Cleanliness of room/ward
	Cleanliness of toilets
	Availability of housekeeping staff
	Overall hospital cleanliness
Diet	Quality of food
	Timely delivery of food
	Food as per doctor advise/patient wish
	Quantity of food
Radiology	Comfort during procedure
	Explanation of the procedure
	Behaviour of staff
	Report collection time
Discharge procedure	Timely information about discharge
	Courtesy and behaviour of cash counter staff
Security	Courtesy and behaviour
	Guidance by security staff
Overall impression	Overall impression of the hospital

RESULTS

It was observed (Figure 1) that average satisfaction score was relatively high for criteria like doctor's counseling, attitude of nurse, availability and behavior of attendant. The overall satisfaction score varies between 3.3-3.6 regarding explanation of charges and admission formalities. For the criteria related to medical care and Nursing care (Figure 2) provided in the wards, average scores were higher than 3.5, highest average being 3.8 for certain nursing criteria. Explanation of treatment cost by

the doctor had lower average scores compared to other medical and nursing averages. Housekeeping, dietary/canteen services criteria (Figure 3) averages did not show much variation and were mostly low (less than 3.5 for most criteria) with average 3 being the lowest for quality of food. Criteria for ward attendants had average scores between 3.5 and 3.7.

Comfort during radiology/imaging procedure, behavior of radiology staff and courtesy of security staff (Figure 4) scored an average of 3.5 or less whereas, timely

information about discharge and overall impression of the hospital scored averages 3.5 or over for most criteria.

The satisfaction level trend lines for most of the variables show a slight decline or are flat between May and June 2012, except for the average for the criteria of ward attendants (Figure 4).

Ultimately all the areas show a positive rise of satisfaction score towards the end period of the study from November to December 2012. During the study period, the lowest averages of 3.17 were given to the dietary/canteen services and the highest averages of 3.75 were scored by nursing care services. Average scores of all other services fell in between these two ranges.

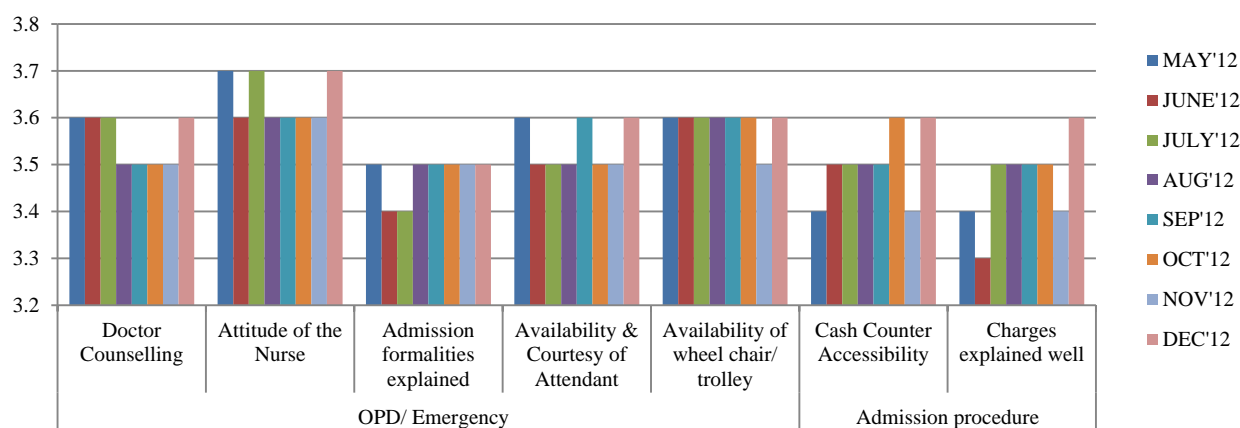


Figure 1: Pre admission ratings for OPD/emergency and admission procedure.

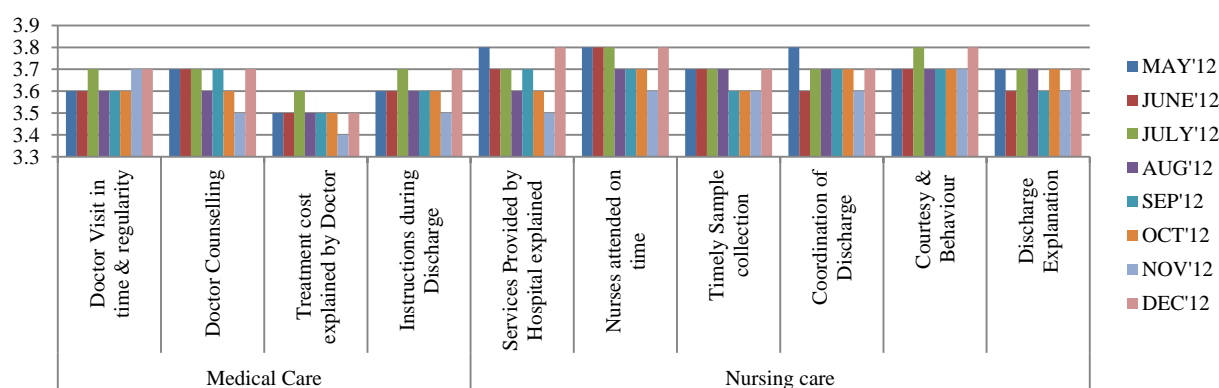


Figure 2: Ratings at the ward level for medical care and nursing care.

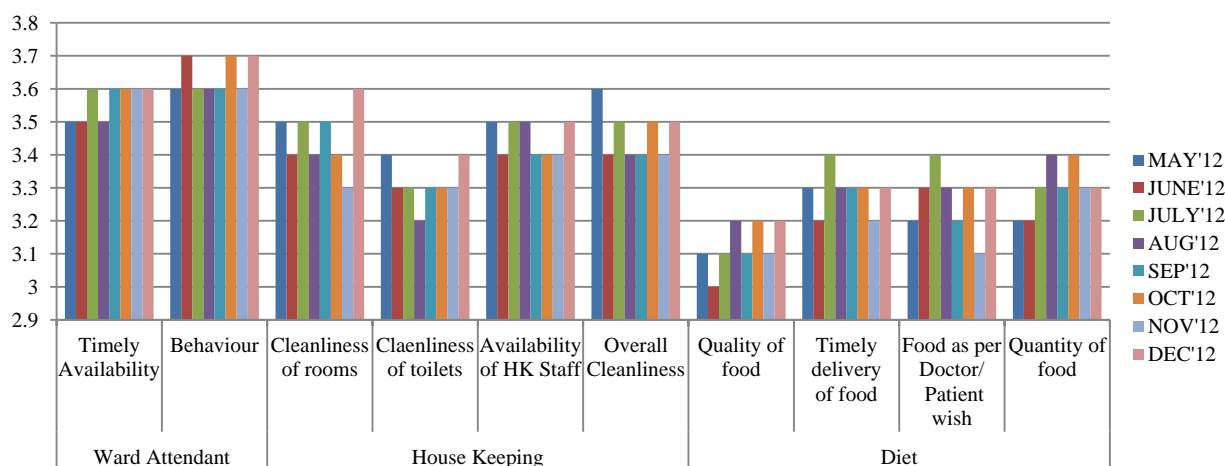


Figure 3: Ratings at the ward level for ward attendants, housekeeping and dietary services.

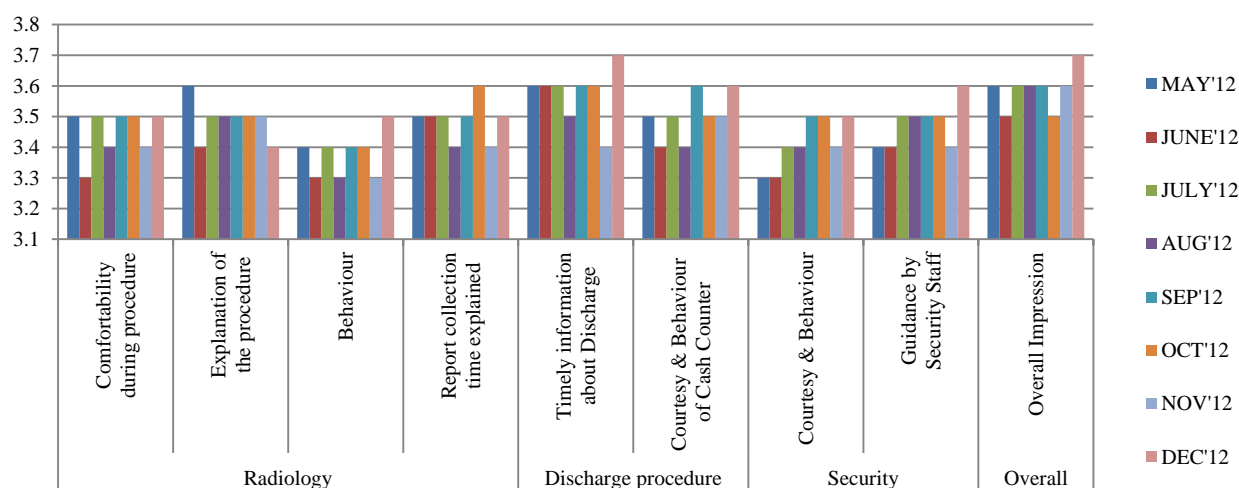


Figure 4: Ratings for radiology services, discharge procedure, security services and overall impression of hospital.

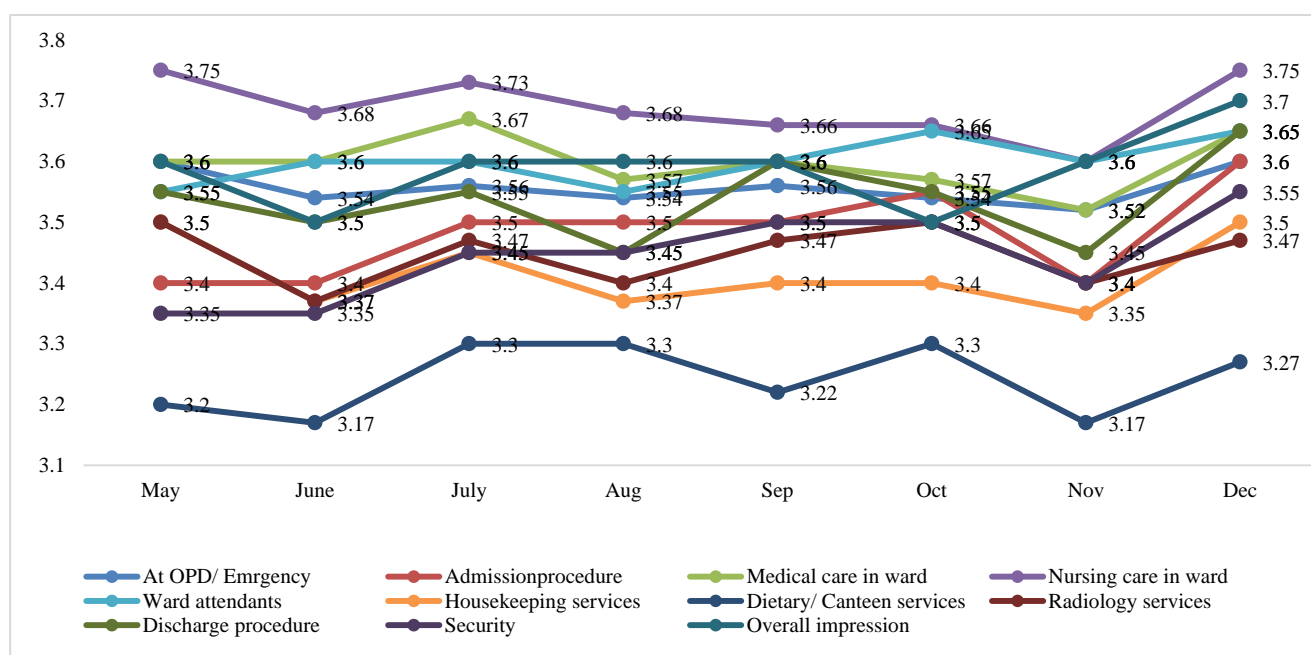


Figure 5: Monthly trend for services/areas.

The response given by patients in the form of complaints/suggestions/feedback to the open-ended questions in the patient feedback form was recorded

separately and the 238 statements were categorized under various areas of improvement viz. structure, process, behavior, services.

Table 2: Summary of patients' comments and suggestions (qualitative analysis).

Patient's comments/suggestions	Frequency (total= 238 statements)
Structure improvement (provision of utilities-toilets, couch for patient attendants, warming/storing home brought food, treatment charges)	83
Process improvement (discharge process, visiting hours, doctors' rounds, billing)	51
Behaviour improvement (area specific comments on behaviour of employees)	26
Services improvement (housekeeping, dietary/ canteen, security, ambulance)	78

Table 3: Number and percentage of satisfied/ dissatisfied patients.

Area	Criteria for quantitative analysis	Total responses	Dissatisfied N (%)	Satisfied N (%)
At OPD/ emergency	Doctor counselling	2172	755 (34.76)	1417 (65.24)
	Attitude of nurse	2175	657 (31.02)	1518 (68.98)
	Admission formalities explanation	2118	828 (39.09)	1290 (60.91)
	Availability and behaviour of attendant	2160	716 (33.15)	1444 (66.85)
	Availability of wheelchair/trolley	2090	604 (28.9)	1486 (71.1)
Admission Procedure	Cash counter accessibility	1905	733 (38.48)	1172 (61.52)
	Charges explained	1920	737 (38.39)	1183 (61.61)
Medical care in ward (after admission)	Doctor visits- timely and regularly	2181	624 (28.6)	1557 (71.4)
	Doctor counselling	2137	630 (29.5)	1507 (70.5)
	Treatment cost explained by doctor	2111	640 (30)	1471 (70)
	Instructions during discharge	2106	585 (27.8)	1521 (72.2)
Nursing care in ward (after admission)	Services provided by hospital explained	1979	504 (25.5)	1475 (74.5)
	Nurse attended on time	2170	452 (20.8)	1718 (79.2)
	Timely sample collection	2152	558 (25.9)	1594 (74.1)
	Coordination of discharge	2160	481 (22.3)	1679 (77.7)
	Courtesy and behaviour	2181	465 (21.3)	1716 (78.7)
	Explanation at the time of discharge	2140	519 (24.3)	1621 (75.7)
Ward attendants	Timely availability	2133	721 (33.8)	1412 (66.2)
	Behaviour	2151	594 (27.6)	1557 (72.4)
Housekeeping services	Cleanliness of room/ward	2118	902 (42.6)	1216 (57.4)
	Cleanliness of toilets	2114	990 (46.8)	1124 (53.2)
	Availability of housekeeping staff	2059	856 (41.6)	1203 (58.4)
	Overall hospital cleanliness	2043	882 (43.2)	1161 (56.8)
Dietary/canteen services	Quality of food	2020	1105 (54.7)	915 (45.3)
	Timely delivery of food	2012	934 (46.4)	1078 (53.6)
	Food as per doctor advise/patient wish	1996	922 (46.2)	1074 (53.8)
	Quantity of food	1989	862 (43.3)	1127 (56.7)
Radiology services	Comfort during procedure	1815	749 (41.3)	1066 (58.7)
	Explanation of the procedure	1835	719 (31.2)	1116 (68.8)
	Behaviour of staff	1819	816 (44.9)	1003 (55.1)
	Report collection time	1903	696 (36.6)	1207 (63.4)
Discharge procedure	Timely information about discharge	1929	614 (31.8)	1315 (68.2)
	Courtesy and behaviour of cash counter staff	2011	803 (39.9)	1208 (60.1)
Security	Courtesy and behaviour of security staff	2024	885 (43.7)	1139 (56.3)
	Guidance given by the security staff	2023	788 (39)	1235 (61)
Overall impression		1878	606 (32.3)	1272 (67.7)

DISCUSSION

For each criterion, an average scoring of 3.5 or below was considered as low which required further analysis for improvement initiatives.

At the OPD/emergency which is the first contact points of the patients to the hospital, average scores were relatively high for criteria like doctor's counseling, attitude of nurse and availability and behavior of attendant, availability of trolley/wheelchair, greater than 3.5, reaching 3.7 for nurse's attitude. The satisfaction score varies between 3.3-3.6 regarding explanation of charges and admission formalities. 65.24% patients were

highly satisfied with the counseling provided by the doctors, 68.98% found the response and attitude of the nurses to be excellent. Availability of OPD attendant, wheelchair/trolley was scored positive by 67% (Table 3). For patients requiring hospital admission, 39.09% felt that formalities were not explained/explained but not clearly (average score of 3.4). This could be because of less time available at the OPD/emergency due to patient load in these areas. During admission process, a few cases (38.4%) reported difficulty in locating the cash counter and the admission charges not explained clearly (average score of 3.4). The directional signage directing the patients to the cash counter could have been at inconspicuous places, or confusing to patients.

In the ward, for criteria related to medical care and nursing care, average scores were higher than 3.5, highest average being 3.8 for certain nursing criteria. Timely visits and counseling provided by the doctors were rated good (average score from 3.5 to 3.7) by 70.5% patients although for a few cases (30%) further treatment cost was not explained by the doctor (average score of 3.4). 72.2% patients felt that doctors gave proper instructions during discharge (average score from 3.5 to 3.7). As regards nursing care, 74.4% of the patients scored all six criteria between good to excellent (average scoring 3.5 and above) (Table 3). This is in contrast to a study conducted by Baruah M et al in which only 40% of the patients were satisfied with the nursing care.¹⁹ 66.2% and 72.4% admitted patients respectively found availability and behavior of ward attendants to be satisfactory.

41.3% patients felt they were not made comfortable during the Radiology/Imaging procedure. 44.9% rated the behavior of the radiology staff at an average score of 3.37. Also 36.6% patients reported a delay in getting reports (also corroborated from the turn-around time for report collection noted by patient on the feedback form). Further analysis of the turn-around time needs to be carried out to identify possible bottlenecks causing delays.

Since many patients visiting the hospital belong to middle to low income groups, diagnostic and treatment cost are important criteria in their expectation of affordable/cheap services and ultimately affects satisfaction levels.

Housekeeping, dietary/canteen services criteria averages did not show much variation and were mostly low (less than 3.5 for most criteria) with average 3 being the lowest for quality of food. Criteria for ward attendants had average scores between 3.5 and 3.7.

41.6% to 46.8% patients rated cleanliness of rooms and toilets, timely availability of housekeeping staff and overall hospital cleanliness poorly (average scores being less than 3.5 for most criteria for housekeeping services) which is higher than the 35.5% of the respondents dissatisfied by the toilet facilities in a study by Qadri SS et al, but significantly lower than that of another study by Aleena et al with 80% level of dissatisfaction.^{20,21}

Between 43% to 55% patients were unhappy with the dietary services and low scores (less than average 3.5) were given to all four criteria under diet (quality of food, quantity of food, timely delivery of food, diet as per doctor's advice wherever applicable). This is in line with a study conducted at a tertiary care hospital in Nagpur, India where 51.93% admitted patients were unsatisfied with quality of food, but is in contrast to other studies by Qadri et al and Aleena et al, with low dissatisfaction rates of 18.25 and 18% respectively.²⁰⁻²²

68.2% patients said they were mostly informed timely by the treating doctor/nurse about their discharge, but the

discharge process was long and tedious (turn-around time for discharge process noted by patient on the feedback form). Courtesy and behavior of cash counter staff were mostly found satisfactory (average score 3.5) by 60% of patients.

Courtesy and behavior of security staff towards patients/patient's attendants was scored poorly (average score 3.41) by 43.7% patients while 61% were satisfied with the way finding guidance provided by the security staff. Due to the large number of people (relatives/friends) coming along with the patients, there is a huge load on the security to prevent overcrowding in the wards. This often times results in friction between patients/their attendants and hospital security staff.

The overall impression of the hospital was rated as satisfactory (average score of 3.58) by 68% of the patients which is in consonance to the 64% and 63% reported in studies by Baruah et al and by Mahapatra et al respectively.^{19,23} But is significantly lower than those reported by Deva et al in Kashmir at 80%, Kumari et al from Lucknow at 81.6%.^{6,24} Though the average scores for medical and nursing care were high (70-74% satisfaction), but the overall percentage of patients satisfied is only 68% which goes on to prove that the patients' perception of quality is changing with the times. They now see quality of hospital services not just in terms of clinical outcomes but other non-clinical factors as well like housekeeping, security, diet, facilities provided, courtesy and behavior of staff, ease of admission/discharge process, which greatly affects their satisfaction levels.

CONCLUSION

Similar findings may be observed in other similar sized large private hospitals receiving a mix of demographic characteristics. The overall analysis of the quantitative and qualitative data from the patient feedback shows that more than 70% of in-patients are satisfied with the medical care and greater than 74% with the nursing care provided at the hospital. The radiology and Imaging services show a scope for further improvement. Certain non-clinical services like housekeeping, security, dietary services and the discharge procedure scored poorly and need to be analyzed for identifying the causes and taking corrective action.

Recommendations

- Soft skills training of all non-clinical professionals-front office employees (reception, registration, billing and cash counters), security, ward attendants and housekeeping staff.
- A study of the turn-around time for radiology and Imaging services needs to be undertaken to identify the cause of delays in the procedures or receiving the reports.

- The discharge process needs to be studied to find the causes for delays.
- Infrastructure related issues to be identified and resolved as per priority.
- Ensuring adherence to cleaning protocols, following checklists for wards/rooms/toilets and continuous monitoring by housekeeping supervisors and managers.
- Root cause analysis for issues related to dietary services to be undertaken.

ACKNOWLEDGEMENTS

We would like to thank Sumedha Attri for helping in this study.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Samant S, Saini RS. An evaluation of the in-patient feedback services in a tertiary care hospital of Northern India. Int J Community Med Public Health 2019;6:1039-46.