Experience and Satisfaction of Indoor Patients with Healthcare Delivery Services in a Tertiary Care Hospital of New Delhi

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Introduction: Globally, the health care quality is an important issue for every health delivery institute. Time to time assessment of patients’ satisfaction may help to improve the quality of services.

Objectives: To assess the satisfaction of patients admitted in a tertiary care hospital regarding services provided by the health staff and other facilities provided in the hospital and to assess the areas and causes of low satisfaction among the patients if any.

Methods: It was a hospital-based, cross-sectional study conducted in a tertiary care centre in 2018. A multistage sampling technique was used for sample collection. A semi-structured and pre-tested questionnaire was used to assess several aspects of hospital care. The level of satisfaction was assessed on five points Likert scale where 1 and 5 indicating the lowest and highest agreement of satisfaction of the study variables, respectively. The data was imported to Microsoft Office Excel sheet, and the statistical analysis was performed with SPSS statistical software version 23. The study was approved by the Institutional Ethics Committee and written informed consent was taken from all the participants.

Results: A total of 450 patients had participated in the study. Among them, 53.1% were males and 76.9% were in the age group of 21-60 years. Maximum participants were residents of Delhi. A total of 405 (90%) patients were satisfied the behavior of doctors, 392 (87.1%) with other supporting staffs, 380 (84.4%) with nurses while 372 (82.7%) were satisfied with registration staff. 42 (9.3%) of the patients felt that toilets were inadequate in number for their use while 140 (31.1%) felt that drinking water availability was adequate. More than one-third 124 (27.6%) of patients revealed that waiting room/seating availability was inadequate in number and 187 (41.6%) patients found beds for the attendants to be inadequate in number. Only a few patients 5 (1%) had poor overall experience in the hospital.

Conclusion: Majority of patients were satisfied with the services except for drinking water and seating arrangement. Regular assessment of patient’s satisfaction regarding health care services should be conducted at regular intervals so that quality of services can be improved.

Keywords: Hospital experience, Indoor department, Patient satisfaction, Tertiary care hospital

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it is a need of time to improve quality health services to their patients.

Patient satisfaction is defined as the degree of congruence between a patient’s expectations of ideal care and his perception of the real care he receives. Over the last decade, patient satisfaction has gained importance over professional practice standards as an important indicator for measuring the quality of health care delivery systems. It is a multidimensional aspect, represents a vital key marker for the quality of health care delivery and this is an internationally accepted factor which needs to be studied repeatedly for the smooth functioning of the health care systems.

Indoor patient department (IPD) is one of the important places, where patients used to stay for a considerable period to receive medical care. It includes interaction with various health care personnel, availability of basic amenities in the hospital and thus, overall experience in the hospital. Therefore, it is the best place to assess their satisfaction level regarding different components of health care delivery services. Better appreciation of the factors pertaining to client satisfaction would result in implementation of custom-made programs according to the requirements of the patients, as perceived by patients and service providers.

Recent rise in the violence against healthcare staff is a serious issue in healthcare institutions. Various initiatives have been started at a higher level to reduce the incidence of violence. Most of the time it is believed that violence is an expected outcome of dissatisfaction among patients and their attendants. Regular and timely assessment of patient satisfaction allows for rectification of the weakness of the system by concerned authorities. Thus, thus this process serves as a quality improvement tool. Assessing patient perspectives gives them a voice which can make public health services more responsive to patients’ needs and expectations. Patient is the best judge since he/she accurately assesses and provides inputs which can help in the overall improvement of the quality of health care delivery.

Patient feedback is necessary to identify problems that need to be resolved in improving the health services. It is through this feedback mechanism that if any loophole found in system, that can be improved at its earliest point. The population that visits any single hospital in an area has different perceptions, views about the services being provided. Hence, each hospital data trends to vary and speaks of patient’s experience and satisfaction. However, such data is not readily available in India. Thus, it is important to conduct a study to assess the perceptions of patients admitted to the hospital regarding the behavior of human resource and quality of other healthcare services.

Methods

The study was carried out in the year 2018 for the duration of about one month in the month of January in Vardhman Mahavir Medical College & Safdarjung Hospital, a tertiary care hospital of Delhi which is one of the largest hospitals of India. Until the inception of All India Institute of Medical Sciences in 1956, Safdarjung Hospital was the only tertiary care hospital in South Delhi. It is a 1600-bed multi-speciality hospital offering high-quality healthcare facilities for patients free of cost. Basic facilities including diagnostic and therapeutic in all the specialities are available. People living in Delhi along with those from neighbouring states such as Haryana, Uttar Pradesh, Bihar and Rajasthan are availing services from that hospital. It functions under the aegis of Ministry of Health & Family Welfare (MoHFW), Govt of India. To improve the quality of services, various steps are taken by the institute on a regular basis such as training of all categories of health workers on infection control, biomedical waste management, and communication skills.

Patients of all age groups admitted in the wards of various departments in Safdarjung Hospital for a minimum period of 24 hours were included in the sampling frame. For younger population guardian or parents were the informants. Patients admitted in the Intensive care unit or with mental illness were excluded. A total of 450 patients were selected from indoor wards.

A cross-sectional study design was used to collect the data with the help of a semi-structured pre-tested questionnaire to examine several aspects of hospital care. Questions in the instrument were devised on the basis of a literature review and in-depth interviews of the patients attending the hospital. The questionnaire was pre-tested in a pilot test on 50 patients. It is comprised of 40 items which measures seven core dimension of patient satisfaction—accessibility of health care facility, perception of waiting time, availability of basic amenities, satisfaction with cost of services, relationship between patient and health providers, availability of laboratory, radiological and pharmacy facilities, information and communication. It also contained questions on socio-demographic characteristics of the respondents.

Each item in the questionnaire have responses on five points Likert scale, with 1 and 5 indicating the lowest and highest levels of agreement on satisfaction, respectively, i.e. 1=strongly disagree, 2=disagree, 3=Not to comment, 4=agree, 5=strongly disagree. For better presentation in the tabular form the variable was restructured in two terms, i.e. satisfied (which incorporates scores 4,5) and dissatisfied (which incorporates scores 1,2,3).

There are 42 departments in the hospital. For the collection of data, a multistage sampling technique was used. In the first stage, seven clinical departments with high patient load, i.e. Medicine, Surgery, Obstetrics, Gynecology, Pediatrics, Ophthalmology and Otorhinolaryngology were purposively selected. In the second stage, a stratified sampling technique with proportionate allocation was used.
to select 111, 43,164,28,72,12 and 20 patients from these respective departments. Finally, a convenient sampling technique was used to select inpatients in the sampled clinical departments till the sample size achieved.

The data was entered in Microsoft Office Excel sheet, and the statistical analysis was performed with SPSS statistical software version 21.

**Ethical Consideration:** Permission was obtained from the administrative authorities and study was approved by the Institutional Ethics Committee. Written informed consent was taken from all the participants after explaining the purpose of the study.

**Results**

A total of 450 patients participated in the present study. Table 1 shows that 53.1% of patients were males and less than half (46.9%) of them were females. Most (76.9%) of the patients were in the age group of 21-60 years. Maximum patients were resident of Delhi.

**Table 1. Sociodemographic profile of study population (N=450)**

| Variable          | No. (%) |
|-------------------|---------|
| **Gender**        |         |
| Male              | 239 (53.1%) |
| Female            | 211 (46.9%) |
| **Age**           |         |
| Less than 1 yrs.  | 7 (1.6%) |
| 1-20 yrs.         | 85 (18.9%) |
| 21-40 yrs.        | 261 (58%) |
| 41-60 yrs.        | 61 (13.6%) |
| More than 60 yrs. | 36 (8%)  |
| **Residence**     |         |
| Delhi             | 370 (82.2%) |
| Outside Delhi     | 80 (17.8%) |

*As per NPR, resident can be called if a person is living in that area for a minimum of 6 months.

In the present study, it was found that less than one-third (27.8%) patients were dissatisfied with the cleanliness of wards and nearly half (46.7%) of the patients were not satisfied with the cleanliness of the toilets. Only 14.2% patients were dissatisfied with the quality of food provided.

**Table 3. Availability of basic healthcare amenities inside the wards (N=450)**

| Availability of services | Adequate No.(%) | Inadequate No.(%) |
|--------------------------|-----------------|-------------------|
| Toilets                  | 408 (90.7%)     | 42 (9.3%)         |
| Drinking water           | 140 (31.1%)     | 310 (68.9%)       |
| Food provided in the ward| 424 (94.2%)     | 26 (5.8%)         |
| Lighting arrangements    | 418 (92.9%)     | 32 (7.1%)         |
| Waiting room/seating availability | 326 (72.4%) | 124 (27.6%) |
| Fans                     | 405 (90%)       | 45 (10%)          |
| Availability of beds for the attendants | 263 (58.4%) | 187 (41.6%) |

Above table reflects that 9.3% of patients found toilets inadequate in number for their use. Drinking water was adequate for only 31.1% of patients. Less than one-third of patients (27.6%) revealed that waiting room/seating availability was inadequate in number. It was also reflected that 41.6% patients found beds for the attendants to be inadequate in number.

**Table 4. Satisfaction with hygiene related issues in the wards (N=450)**

| Hygiene related issues          | Satisfied number (%) | Dissatisfied number (%) |
|---------------------------------|----------------------|-------------------------|
| Cleanliness of the ward         | 325 (72.2%)          | 125 (27.8%)             |
| Cleanliness of the toilets      | 240 (53.3%)          | 210 (46.7%)             |
| Quality of food provided        | 386 (85.8%)          | 64 (14.2%)              |

In the present study, it was found that less than one-third (27.8%) patients were dissatisfied with the cleanliness of wards and nearly half (46.7%) of the patients were not satisfied with the cleanliness of the toilets. Only 14.2% patients were dissatisfied with the quality of food provided.

**Table 5** shows that for cordial doctor-patient relationship 36.4% of patients were strongly agreed, 54.4% patients were agreed, 5.3% of patients made no comment, i.e. 90.8%. It was found that 2.2% of patients were disagreed and 1.3% of patients were strongly disagreed. For cordial staff-patient relationship 20.4% and 11.1% of patients were strongly agreed and agreed. For sufficient availability of basic amenities inside the wards 22% patients were strongly disagreed. Only 1.1% patients were strongly disagreed for overall satisfactory experience in the hospital.

It was found that patients were mostly satisfied with the behavior of doctors (90%) followed by other supporting staffs (87.1%), nurses (84.4%) and registration staffs (82.7%).

**Table 2. Patient satisfaction with the attitude and behavior of the healthcare providers (N=450)**

| Dimension of care                          | Satisfied No. (%) | Dissatisfied No.(%) |
|--------------------------------------------|-------------------|---------------------|
| Behavior of the registration clerk         | 372(82.7%)        | 78(17.3%)           |
| Behavior of nurses                         | 380(84.4%)        | 70(15.6%)           |
| Behavior of other supporting staffs (Class III, IV employee) | 392 (87.1%) | 58 (12.9%) |
| Behavior of doctors                        | 405(90%)          | 45(10%)             |
Table 5. Patient’s satisfaction to health care services (N=450)

| Dimension of health care                                      | Strongly agree | Agree | Not to comment | Disagree | Strongly disagree |
|---------------------------------------------------------------|----------------|-------|----------------|----------|------------------|
| Cordial Doctor-patient relationship                           | 164(36.4%)     | 245(54.4%) | 24(5.3%)       | 10(2.2%) | 6(1.3%)          |
| Cordial Staffs-patient relationship                           | 92(20.4%)      | 164(36.4%) | 120(26.6%)     | 24(5.3%) | 50(11.1%)        |
| Sufficient availability of basic amenities inside the wards   | 84(18.6%)      | 194(43.1%) | 54(12%)        | 18(4%)   | 100(22.2%)       |
| Overall satisfactory experience in the hospital               | 100(22.2%)     | 265(58.9%) | 45(10%)        | 35(7.8%) | 5(1.1%)          |

Discussion

The present study aims to assess indoor patient's experience and satisfaction in a tertiary care hospital. It is very essential to take their feedback regarding hospital care services provided. The patients are coming at that hospital not only from Delhi but also from different states of the country. They are either referred or complicated cases. These patients have various expectations for health care delivery services. Therefore, it is challenging for such health facility to fulfill their expectations. Assessment of patient's satisfaction gives the administration about ways to improve the health care services. The fact that patients expressed dissatisfaction with the services indicates that hospital administration needs to do more in the drive towards improving services.

In the present study, more (53.1%) than half of the study population were males. Most (76.9%) of the patients were in the age group of 21-60 years. Maximum patients were resident of Delhi. It was found that patients were mostly satisfied with the behavior of doctors (90%) followed by other supporting staffs (87.1%), nurses (84.4%) and registration staffs (82.7%). From the observation, it is concluded that in spite of the high burden of patients at this tertiary health care center, most of the doctors and staffs had tried to deliver quality health care. Some patients were dissatisfied with the behavior of health care personnel. These patients were the key population to be focused by the administration to make them satisfied. At a tertiary care hospital, politeness and good communication of all health personnel is crucial for delivering quality health care services.

On the contrary, lower level of satisfaction was noted by a similar study done at Ambala in which it was seen that 66.8%, 50%, 59%, 60% and 45% were satisfied regarding behavior of the doctor, registration clerk, supporting staff, pharmacist and nurses and the results were less than in a study by Sultana A et al. (95.5%, 94.5% and 93.3%). On the other hand, a study conducted by Ariba AJ et al. in a Nigerian teaching hospital found that most of the respondents (38.8%) were displeased with the overall quality and attitude of the healthcare.

In the present study, maximum patients (91.1%) were having good experience at the hospital. They were satisfied with the overall health care services at this hospital. Similar findings were also reported in other studies. These results may vary due to regional differences, individual perceptions, socioeconomic differences and other factors. In addition, variation in the methodology and timing of the study could explain some of the differences.

Major area of dissatisfaction found among patients was inadequate facility of waiting rooms/seating arrangements, beds for attendants. Less than one-third of patients revealed that waiting room/seating availability was inadequate in number. It was also reflected that 41.6% patients found beds for their attendants were inadequate in number. It was also found that more than one-third (27.6%) patients were dissatisfied with the cleanliness of wards and nearly half (46.7%) of the patients were not satisfied with the cleanliness of the toilets. Drinking water was adequate for only 31.1% of patients. These basic facilities are very important for patients care in a health care institute. Other similar study at Ambala also found that 35.5% of the respondents were dissatisfied by the toilet facilities in the hospital building. Other studies in different parts of India also revealed similar findings. In another study by Tasneem A et al. reported a higher level of dissatisfaction (80%). This indicates that region wise differences could exist. Dissatisfaction can be due to increasing expectation regarding healthcare services considering tertiary care institute. Literacy level and awareness of basic health care services could also be another reason responsible for dissatisfaction.

Limitations

Indoor patients may not be open to criticism, therefore, higher satisfaction may be reported in the present study. Responses from the discharged patients may be more suitable to assess their satisfaction. Due to paucity of time, discharged patients couldn’t be included in the study. Observer bias could be another limitation, but all the surveyors were trained to get the responses and a structured questionnaire was strength to remove observer bias.

As the present study was based on the patients’ perception of their satisfaction status about the health care delivery.
services particularly tertiary care hospital, the responses could be different for different level of healthcare delivery such as primary, secondary and tertiary health centers. However, in another study conducted in OPD setting of the same hospital, a higher level of satisfaction had been observed in patients.  

This indicates higher consistency in findings.

**Conclusion**

The present study found a high level of overall satisfaction among patients regarding health care services. But some crucial areas of dissatisfaction also persist among patients. Availability of drinking water, toilets, waiting facilities, beds for attendants should be made adequate for the patients. These facilities are also critical for quality of care which is usually not considered as important for delivering health care services.  

**Recommendations**

Availability of adequate number of toilets, drinking water facilities and cleanliness of wards, toilets should be regularly maintained patients as well as health care providers for improving the overall patient satisfaction. Regular assessment of patients’ satisfaction should be conducted followed by concrete action plan so that quality health care services can be further improved.

**Conflict of Interest:** None

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