

# **Quality of Medical Care: Patient experiences and satisfaction at tertiary care setting in Public Hospital in Pakistan**

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## **ABSTRACT**

**Background:** In a developing country like Pakistan, health remains a forgotten priority. Patient's satisfaction survey is an important indicator of standard of healthcare and can serve as a quality improvement tool for healthcare organizations. Owing to the scarcity of data in Pakistan on this subject

**Aim:** To assess patient satisfaction with the view to utilize them for improvement in medical services.

**Methods:** We carried out a cross sectional study during October 2018 to December 2018. Ethical approval was obtained from Institutional Review Board. A total of 140 patients from East Surgical department of Mayo Hospital, Lahore were approached using convenient sampling technique. A questionnaire to collect demographic data along with information about admission in hospital, and satisfaction with regards to doctors, nurses, paramedical staff and general condition of ward was filled from the indoor patients. Response was recorded on 5-point Likert scale. Analysis was done using SPSS-20 and relative frequencies and means were calculated.

**Results:** A total of 140 patients participated with equal representation of male and females and average age of 37.09 years ( $SD=14.19$ ). Thirty five percent had education level up to Matric. Length of stay ranged from 2 to more than 20 days, with most frequent duration being 2-5 days (58.57%). Comparison of the means showed that overall satisfaction was highest among females (Mean= 9.54), those with secondary education (Mean=9.62) and urban population (Mean=9.59). Patient satisfaction with regards to paramedical staff was significantly less (Mean=5.36) compared to overall satisfaction with nursing staff (Mean=8.87) and the Physicians ((Mean=9.56). Majority of the patients expressed satisfaction with the hospital in general (Mean=9.50) and were willing to recommend this hospital to others.

**Conclusion:** Majority of the patients were satisfied with most aspects of care provided at tertiary care settings in a public hospital. Satisfaction with Paramedical staff was generally less and needs improvement. Further studies are warranted to explore various aspects like outdoor management, follow ups, intra and inter hospital department's comparison and diagnostic facilities like imaging and laboratory tests etc.

**Keywords:** Quality of medical care, health care, patient's satisfaction

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## **INTRODUCTION**

In a developing country like Pakistan, health remains a forgotten priority. Pakistan's per capita health spending is below the benchmark set by WHO<sup>1</sup> and the current doctor population ratio stands at 1: 997 and hospital bed ratio at 1:1584<sup>2</sup>. This depicts the current state of affairs and the need for improvement in healthcare system.

Patients' satisfaction is an important indicator of standard of healthcare and can serve as a quality improvement tool for healthcare organizations. Patient satisfaction is a term that can be interpreted differently by different patients and is multidimensional in context. However a working definition could be, "patient's perception of care received compared with the care expected"<sup>3</sup>. Patient satisfaction surveys not only provide information about quality of the hospital services but also give a good insight to patient's perspective of care. Moreover measures of satisfaction have been found to correlate directly with outcome of care and treatment compliance<sup>4</sup>.

Surveys of patient satisfaction provide essential information to identify flaws in healthcare system and overcoming them. They are now an established component of quality assessment of medical services and are gaining recognition in health policies<sup>5</sup>.

A number of international studies have been conducted on the subject of patient satisfaction with regards to healthcare providers and associated health

services. However, satisfaction varies across countries and settings, depending upon cultural practices, availability of resources and efficacy of healthcare system.<sup>(6)</sup> Statistics on this subject are lacking in Pakistan, with very limited researches,<sup>(6)(7)</sup> that too with inconsistent findings.

Owing to the scarcity of data on this subject, there is need for patient satisfaction surveys with the view to utilize them for improvement in medical services.

## **MATERIAL AND METHODS**

The descriptive, cross sectional study was conducted from October 2018 to December 2018. Ethical approval was obtained from Institutional Review Board. A total of 140 patients from East Surgical department of Mayo Hospital, Lahore were approached using convenient sampling technique. All patients interviewed were fully alert and oriented at the time of interview. They were explained thoroughly before signing written informed consent, assuring the confidentiality. All the participants were aged above eighteen, and they had an in-patient stay of minimum 2 days. The potential participants were approached at the time of discharge and interviewer based questionnaires were filled.

A pre-designed, pre-tested questionnaire was used having 37 questions. Questionnaire was validated by distributing it to academic members and subject specialist for its content validity. Questionnaire has three parts. First portion covered the demographic variables like age,

gender, education, occupation, residence and marital status. Second portion contains variable related to admission and discharge process like duration of admission, previous hospital admissions, mode of admission and discharge medication advice. This portion also include questions regarding overall satisfaction and future recommendations for this hospital. Third part includes questions related to patient interaction with doctors, nurses, paramedical staff and general condition of ward. Response was recorded on 5 point likert scale of never, rarely, sometimes, usually and always, where 1 score was given to 'never' and 5 score was given to 'always'. Overall satisfaction with doctors, nurses, paramedical staff and general condition was scored between 0-10 where 0 was considered as 'least satisfied' and 10 was considered as 'well satisfied'.

The questionnaire was initially developed in English language. The questions were translated in Urdu language in such a manner that subjects could easily understand and answer the questions. Interview was conducted by same research team member who was trained for interviewing. This member had no involvement in delivery of care in order to reduce interviewer bias. This interview took approximately 20 minutes. The questionnaire was back-translated at the time of data entry.

Data was analyzed using SPSS 20. Frequencies and means were calculated. The association between variables were tested for statistical significance using appropriate tests with differences regarded to be significant at 5% level.

## RESULTS

A total of 140 patients participated in the study. The sample had equal representation of male and female respondents. Participants' average age was 37.09 years ( $SD = 14.19$ ). Majority of them were married (76.43%), unemployed (45%) and residents of urban areas (67.86%). Thirty five percent had education level up to Matric and almost equal persons (34.29%) were illiterate.

Additionally, 119 (85%) participants did not have prior hospitalization history while majority of the remaining 21 patients were admitted in hospital once (10%). Length of stay ranged from 2 to more than 20 days, with most frequent duration being 2-5 days (58.57%). Among the 140 patients, 76 (54.29%) were admitted in hospital through Emergency while 64 (45.71%) were admitted through OPD and majority (98.57%) of the patients were discharged through routine mode of discharge. The descriptive analysis regarding patient satisfaction is presented in Table-3.

Comparison of the means showed that overall satisfaction was highest among females (Mean= 9.54), those with secondary education (Mean= 9.62) and urban population (Mean= 9.59).

Table-1

Demographic Characteristics	Frequency	%age
<b>Age</b>		
18-29	52	37.14
30-44	43	30.71
45-59	29	20.71
60 and older	16	11.43
<b>Gender</b>		
Male	70	50.00
Female	70	50.00
<b>Marital Status</b>		
Single	28	20.00
Married	107	76.43
Divorced	1	0.71
Widow	4	2.86
<b>Education</b>		
Illiterate	48	34.29
Primary	21	15.00
Secondary	13	9.29
Matric	49	35.00
Graduation	8	5.71
Masters	1	0.71
<b>Residence</b>		
Urban	95	67.86
Rural	45	32.14
<b>Occupation Type</b>		
Government Officer	9	6.43
Private Job	25	17.86
Own Business	34	24.29
Unemployed	63	45
Student	9	6.43

Table-2

Pt Characteristics	Frequency	%age
<b>Admitted in Hospital Before</b>		
Yes	21	15.00
No	119	85.00
<b>Frequency of Admission</b>		
1 time	14	10.00
2 times	3	2.14
3 times	2	1.43
4 times	1	0.71
<b>Length of Stay</b>		
2-5days	82	58.57
5-10 days	36	25.71
10-20 days	13	9.29
> 20 days	9	6.43
<b>Mode of Discharge</b>		
Discharge	138	98.57
DOR	1	0.71
LAMA	1	0.71
<b>Mode of Admission</b>		
OPD	64	45.71
Emergency	76	54.29

Table-3

Description	Mean	SD
Was the doctor available when patient called him/her?	4.98	0.15
Do you think that doctor understands about your disease?	4.88	0.50
Were you explained about your disease?	4.39	1.14
Did the clinician use words that were easily understandable to you?	4.74	0.74
Did the clinician listen to your questions/queries?	4.91	0.40
Did the clinician spend enough time with you?	4.72	0.54
Do you have confidence in the abilities of your clinician?	4.97	0.27
Overall satisfaction with clinician.	9.56	0.98
Was the nursing staff available when patient called her?	4.97	0.27
Attitude of nursing staff with the patient was fair.	4.69	0.71
Nurses informed the patient about the drug to be given.	3.66	1.59
Did the nursing staff listen to your questions/queries?	4.87	0.52
Do you have confidence in the abilities of your nursing staff?	4.87	0.45
Overall satisfaction with nursing staff.	8.87	1.68
Was the paramedical staff available when patient called them.	4.84	0.60
Attitude of paramedical staff with the patient was fair.	3.19	1.31
Paramedical staff asked for money for patient care.	3.53	1.61
Overall satisfaction with paramedical staff.	5.36	3.77
Cleanliness of the ward was good.	4.93	0.28
Cleanliness of the washrooms was good.	3.40	1.21
Do you have clear understanding about your health management?	1.14	0.46
Do you have clear understanding about your discharge medication?	1.46	0.78
Do you have clear understanding about your follow up plan?	1.32	0.65
Are you satisfied with your treatment in this hospital?	9.50	0.92
Will you recommend this hospital to others?	3.71	0.82

## DISCUSSION

There is a growing need to improve quality of health services in Pakistan and patient satisfaction is a key determinant in this. It affects clinical outcomes and facilitates delivery of effective patient centered care<sup>6</sup>. In this study we assessed patients' perception about the standard of health care in one of the oldest and biggest hospitals of Lahore, Pakistan. The questionnaire pertained to various aspects of services and care provided by doctors, nurses and paramedical staff as well as patients' level of satisfaction with them and hospital's physical environment. All attributes have been shown to be statistically significant and positively related to overall satisfaction<sup>8</sup>.

Generally, majority of the patients were pleased with the doctors with high overall satisfaction (Mean= 9.56) and good confidence in abilities of the doctor (Mean= 4.97). These results are consistent with other studies of Pakistan, which showed that only a small minority of patients were not satisfied with their doctors<sup>7,9</sup>. According to Donabedian<sup>10</sup>, a greater proportion i.e. 40-50% of patient satisfaction depends on relationship between physician and patient while 30-40% is based on diagnostic and therapeutic expertise of the doctor. Three other international studies showed that interpersonal relationship and doctors' attitude was a more influential factor than clinical competence<sup>11,12,13</sup>. This study aimed at both these aspects. Results showed that patients were highly content with the availability of doctor when needed as well as their ability to listen to questions, as showed by highest means of both. Patients also felt that doctors had a clear understanding of their disease (Mean= 4.88) and used understandable words while answering queries (Mean= 4.74). This is important as a survey showed that clear explanation and efficient communication had the strongest influence in improving overall patient satisfaction among other attributes<sup>14</sup>. Another research however suggested

that there is room for improvement in communication behavior of doctors<sup>15</sup>. When asked whether patients were explained about their disease, this factor had the lowest mean among all (4.39), consistent with other Pakistani surveys that showed a small but significant proportion were not given any information about their disease<sup>7,16</sup>, indicating a common problem.

Studies have shown that nursing care has the strongest impact on overall patient satisfaction and is ranked highest among other factors such as physician care and physical environment<sup>17,18,19,20</sup>. Previous researches on nursing care in this region have shown contrasting results<sup>7,21,22</sup>. In our study, patients were satisfied with availability, attitude and listening ability of nursing staff (Mean= 4.97, 4.69 and 4.87 respectively). However, patients did feel that nurses seldom informed them about the drug to be administered (Mean=3.66). Although confidence in the ability of nursing staff (Mean=4.87) and overall satisfaction (8.87) were high, both were less than that observed in case of doctors.

Patient satisfaction with regards to paramedical staff was significantly less than the other two (Mean= 5.36). A major reason of this could be that patients felt that attitude of paramedical staff was not fair and that they asked extra money for services and patient care which is in fact part of their job description.

Coming to hospital conditions, cleanliness having a direct effect on health of patients is an important factor regarding satisfaction levels<sup>7</sup>. Majority of patients were satisfied with the cleanliness of wards (Mean= 4.93) while cleanliness of washrooms was highly criticized (Mean=3.40). A few other studies have shown cleanliness of hospital and washrooms to be below satisfaction levels<sup>7,23,24</sup> showing this to be a general problem in this particular region. Additionally, few patients had clear idea of their discharge medication and follow-up plan indicating need for effective and clear communication in this regard.

Previous studies have shown lower satisfaction scores in Pakistan when compared internationally, which may be due to differences in healthcare system and/or cultural differences<sup>6</sup>. In this study, however, majority of the patients expressed satisfaction with the hospital in general (Mean=9.50) and were willing to recommend this hospital to others.

When degree of satisfaction was compared across gender, residence and education status of patients, highest levels were observed among females, those with secondary education and urban population. Higher satisfaction levels among females can be explained by the fact that in our culture, women have less exposure and therefore less awareness about standards of care<sup>7</sup>. Contrary to our study, higher education level has been linked to a lower degree of satisfaction probably due to greater expectations and perception of care<sup>25,26,27</sup>.

The study was limited by factors such as small sample size, being carried at one surgical unit only, at one particular hospital, cross-sectional design and relying on retrospective experience of care at time of discharge. However, this can serve as the basis for further extensive comparative and correlational studies.

## CONCLUSION

The study showed that majority of patients was satisfied with most aspects of care provided at tertiary care settings. Patients expressed high level of satisfaction and good confidence in abilities of doctors and nurses. Satisfaction level with paramedical staff was generally less than both. These results need to be utilized systemically and extensively for developing improvement initiatives. Further studies are warranted to explore various other aspects like outdoor management, follow ups, intra and inter hospital department's comparison and diagnostic facilities like imaging and laboratory tests etc.

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