# Patient Satisfaction with Inpatient Hospital Services: A Cross Sectional Survey of Admitted Patients of Combined Military Hospital, Malir Cantt, Karachi

Samira Faiz Bari, Hamid Jamal Siddiqui\*, Farhan Muhammad Qureshi, Sehrish Zehra, Muhammad Tahir\*, Saba Rizwan

Karachi Institute of Medical Sciences, Karachi/National University of Medical Sciences (NUMS) Pakistan, \*Combined Military Hospital Malir/National University of Medical Sciences (NUMS) Pakistan

### ABSTRACT

*Objective:* To assess the level of satisfaction regarding the admission process, treatment process, nursing care and general support services amid patients admitted in various hospital departments.

*Study Design:* Hospital-based cross-sectional survey.

Place and Duration of Study: Combined Military Hospital, Malir Cantt, from Oct 2018 to Sep 2019.

*Methodology:* Data was collected from 522 participants. An inpatient feedback form was used to assess satisfaction among admitted patients.

*Result:* Out of 522, 256 (49%) participants ranked health care facilities as excellent and 199 (38%) participants ranked health care facilities as good. Out of 53 (10%) participants were satisfied, while only 16 (3%) were discontented with current hospital facilities.

*Conclusion:* This survey has provided deep insight into the contemporary health care services of the hospital. Being a cost-effective organization, CMH Malir Cantt has delivered excellent quality care to patients through continuous efforts towards betterment in every discipline deemed to the medical facility.

Keywords: Hospital services, Indoor patients, Inpatients, level of satisfaction, Patients satisfaction.

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## **INTRODUCTION**

In the contemporary era, where the population growth has pushed the world towards the commotion of demand-supply equilibrium, companies and organizations have realized that the sustainable provision and the growth of the business depend upon the ability to satisfy their customers largely.<sup>1-3</sup> However, when it comes to the health sector, customer satisfaction becomes mandatory as customers are people who are in pain and agony needing immediate assistance and relief.<sup>4-6</sup> Private and public hospitals contribute a lot to the health sector in any state, ensuring that they provide optimum care to fulfil the demands of their clients.<sup>7,8</sup> Despitedelivering and maintaining health, medical centres also assess and certify the health status of individuals, segregate the diseased from healthy to limit the spread and prognosticate.9,10

This survey was conducted at Combined Military Hospital (CMH), Malir Cantt. The study was aimed to gather feedback from patients admitted to different departments to evaluate the level of satisfaction concerning hospital facilities since clients'opinions, suggestions, perceptions, and appreciation lead the organization toward amelioration, augmenting community health and wellness.

## METHODOLOGY

A hospital-based cross-sectional survey was conducted at CMH, Malir Cantt, from Oct2018 to September 2019. CMH provides health care services to the population of 139,052 people residing in the Malir cantonment and the densely populated area surrounding it. The data collection process was started after receiving the Ethical Review Committee approval (File No.1440/2018/Trg/Adm) from CMH, Malir.

**Inclusion Criteria:** All the patients admitted inCMH, Malir Cantt were included in the study.

**Exclusion Criteria:** Non-consenting patients were excluded.

Data was collected from 522 participants through consecutive sampling.Using the openEpi online sample size calculator, keeping the anticipated outcome frequency at 90%,<sup>11,12</sup> and absolute precision of  $\pm$  3%, the sample size came out to be 384 at a 95% confidence level. However, to strengthen the study, the sample size was increased as much as possible concerning time, capacity and resources.One staff member from each department was specially assigned and trained by

**Correspondence: Dr Muhammad Tahir,** Department of ENT, Combined Military Hospital Malir Pakistan *Received: 22 Apr 2020; revision received: 22 Jun 2020; accepted: 26 Jun 2020* 

the researchers for the data collection of this study. With a minimum time of 24 hours hospital stay, indoor patients from eight departments of hospital (i.e. Medical, Surgery, Gynaecology, ENT, Pediatrics, Eye, Medical ICU and Surgical ICU) were asked to fill the questionnaire on their day of discharge. Verbal consent was obtained from every participant. Individuals who could not read or understand the languages of the questionnaire (English and Urdu) were helped by the same staff members. The attendants/parents of children filled the feedback forms from the Paediatric ward.

An "inpatient feedback form" was used to assess the level of satisfaction among patients that were standardized through a small-scale pilot study on 30 patients. This questionnaire comprised 18 items measuring four core dimensions of the available health care facilities. These includeadmission facilities(the admission process, patient guidance and bed allocation), treatment process(questions about treatment facilities, medicine information, doctor's round and timely provision of initial treatment), nursing facilities (patient comfort, collection of samples, nursing care, timely provision of medicine and response to patient's complaints) and general support services (facilities for attendants, hospital environment, the behaviour of staff, clean-liness in hospital, bed linens and hospital clothing and meal services). Each questionnaire was structured on four points Likert Scale ranging from higher to lower satisfaction levels, respectively. Respondent's A rating of the scale indicated respondent's level of satisfaction as excellent, good, satisfactory and unsatisfactory. Three questions, namely, allocation of bed, collection of samples and initial treatment, were ranked excellent, good, satisfactory and unsatisfactory by the time taken in the provision of these facilities, i.e. within 15 minutes, within half an hour, within one hour and more than one hour, respectively. The participants were also asked if they had any suggestions to make the services more beneficial and patientfriendly.

In order to save the time of the participants, a small section of basic identification information was added at the beginning of the feedback form rather than a detailed one. Information mainly related to age, gender, marital status, religion and employment status (serving, retired or jobless) was gathered. In the case of females, jobless and housewife were taken as equivalent. Duration of hospital stay was also recorded. Anonymity was maintained during the entire research process, with all information kept confidential. Statistical Package for Social Sciences (SPSS) version 21.0 was used for the data analysis. Quantitative variables were summarized as Mean  $\pm$  SD and qualitative variables were summarized as frequency and percentages.

## RESULTS

There were 522 participants in the study. The majority of the participants were between 20 to 60 years of age. Out of all participating patients, 256 (49%) were females admitted to the Obstetrics and Gynaecology ward. 340 (65%) were married individuals, while 271 (52%) were employed in public or private sector organizations. The significant bulk of the population was Muslim. 334 (64%) of the patients were discharged between 24 hours to 2 days after resuming health (Table-I).

Table-I: Socio-demographic characteristics of patients (n 522).

Socio-Demographic Characteristics		n	⁰∕₀
Age (In Years)	>20	110	21
	20-40	188	36
	40-60	162	31
	<60	62	12
Gender	Male	266	51
	Female	256	49
Marital Status	Single	135	26
	Married	340	65
	Widowed/divorced	47	9
Religion	Muslims	491	94
	Christians	26	5
	Hindus	5	1
Employment Status	Employed	271	52
	Unemployed	94	18
	Retired	167	30
Duration of	24 hrs – 2 days	334	64
Stay	>2 days	188	36

Table-II displays the four core dimensions of the health care services provided by the hospital. 390 (74.7%) of the participants selected the excellent category for bed allocation. Similarly, patients were very satisfied with the whole treatment procedure. Only around 26 (5%) were not satisfied with the timely provision of initial treatment. More than half of the study participants ranked excellent concerning nursing care, while similar finding was reported for collection of samples and timely provision of medicine, 254 (48.66%) and 252 (48.28%), respectively.

More than 418 (80%) have been ranked positively. Nevertheless, 230 (44%) of attendants were not entirely in favour of the present facilities. However, the behaviour of the staff was found to be the top appreciated category with 256 (49%) rated as excellent. 49% and

Predictors of Patient Satisfaction	Excellent n (%)	Good n (%)	Satisfactory n (%)	Unsatisfactory n (%)
Admission Facilities				
Admission Process	240 (45.98)	214 (41.0)	62 (11.82)	6 (1.15)
Patient's guidance	211 (40.42)	251 (48.0)	47 (9)	13 (2.49)
Bed Allocation	390 (74.71)	92 (17.62)	12 (2.3)	28 (5.36)
Treatment Process				
Treatment Facilities	247 (47.32)	203 (38.89)	60 (11.49)	12 (2.3)
Information Regarding Medicine	181 (34.67)	223 (42.72)	99 (18.97)	19 (3.64)
Doctor's Rounds	297 (56.90)	175 (33.52)	43 (8.24)	7 (1.34)
Initial Treatment	351 (67.24)	122 (23.37)	22 (4.21)	26 (5.17)
Nursing Facilities				
Timely provision of medicine	252 (48.28)	184 (35.25)	76 (14.56)	10 (1.92)
Patient's comfort	249 (47.70)	225 (43.10)	41 (7.85)	7 (1.34)
Nursing care	227 (53.07)	185 (35.44)	52 (9.96)	8 (1.53)
Samples Collection Process	254 (48.66)	163 (31.23)	62 (11.88)	43 (8.24)
Patient Complaints Response	238 (45.59)	227 (43.49)	38 (7.28)	19 (3.64)
<b>General Support Services (Non-Medical</b>	l Services)			
Cleanliness in Hospital	247 (47.32)	196 (37.55)	68 (13.03)	11 (2.11)
Facilities for attendants	198 (37.93)	234 (44.83)	71 (13.60)	19 (3.64)
Hospital Environment	233 (44.64)	229 (43.87)	49 (9.39)	11 (2.1)
Behavior of hospital staff	256 (49.04)	220 (42.15)	35 (6.70)	11 (2.11)
Meal services	240 (45.98)	198 (37.93)	71 (13.6)	13 (2.49)
Bed linen & hospital clothing	238 (45.59)	218 (41.76)	50 (9.58)	16 (3.06)

Table-II: Predictors of Satisfaction among the patients admitted at CMH, Malir Cantt (n=522).

38% of the participants marked the health care facilities as excellent and good, respectively. 10% participants were satisfied while only 3% were discontented with current hospital facilities (Figure).



Figure: Overall patients' level of satisfaction.

## DISCUSSION

Thissurvey indicated a high level of satisfaction among inpatients, as 49% and 38% of the services has been graded as excellent and good, respectively. People, irrespective of age group, occupations, caste, creed, and religion, were included. The main aim was to evaluate the hospital's current health care delivery system yet to get deep insight into the deficiencies in the current medical services. It has been noticed that people from low socio-economic groups do not expect much from hospitals concerning staff behaviour and basic amenities throughout their hospital stay.<sup>13,14,15</sup>

However, CMH, Malir Cantt, a cost-effective health care provider, mainly caters to patients from the middle and lower classes and is keen to deliver optimal and equivalent services to all its consumers. Consequently, people not only expressed their confidence and gratification in the contemporary services but were also satisfied with the impartiality and probity of the system. Our findings were consistent with a study conducted in Sudan in 2018.<sup>16</sup> Patients with low socioeconomic backgrounds were more satisfied with the medical care. Their satisfaction was that the services provided were beyond their expectations.<sup>17,18</sup>

People admitted were delighted with the ongoing admission facilities and guidance at admission. Although approximately 75% of patients rated bed allocation as excellent, 5% among 522 seemed to be dissatisfied. The delay in bed allocation might be the reason for an extension of waiting time that caused the aversion. However, the level of satisfaction remained unchanged when the waiting time was reduced according to a study conducted in Turkey.<sup>17</sup> Never-theless. Our findings second the issue raised by Lotilikar *et al*, that delay in bed allotment leads to impediment in the admission process and communication between patient and the physician, ultimately causing patient discontentment.<sup>18</sup> Therefore, the hospital management shall make the bed allocation process quick and feasible.<sup>19,20</sup>

A vast majority of the study participants showed complacency with all the treatment facilities they received during their hospital stay. The Tanzania-based study participants ranked the reliability domain second, including the physicians' ability to properly and timely diagnosis and treatment.<sup>19</sup> Some other studies revealed different results deemed to the treatment facilities where the patients were unappeased with medical care.<sup>20,21</sup>

Patientcontentment was extensively influenced by the professional skills, competency and empathy of the health professionals, whether doctors, paramedics or administrators. Patients expressed their satisfaction with the nursing care, timely provision of medicine, laboratory facilities and the response to their complaints. These results were analogous to the findings of Bensing et al, that highlighted the importance of commitment, honesty, personal attention, verbal and nonverbal communication skills for patient satisfaction as well.<sup>22</sup> A study done in 2006 on physicians' attitude showed that the level of their respectful attitude differs with every patient.23The compassion and respectful attitude of health care providers strengthen this bond that enhances patients' trust to provide more information regarding their ailment and convey more positive affect.<sup>24,25</sup>

The physical environment has the highest impact on patients' satisfaction with the health care services they would achieve in a particular hospital. The first impression is developed with the generalized cleanliness and the neatness of the wards, beds and washrooms. More than 97% of our study respondents were delighted with the neat and clean hospital environment and the hygienic meals. There are a few studies in which patients were not pleased with the poor physical environment of the hospital.<sup>16,19</sup>

The survey results were gathered within one year, which was the strength of our study; otherwise, there would have been a hawthorn effect as physicians and staffwere aware of the ongoing audit. Additionally, a more detailed socio-demographic questionnaire would have strengthened the study to a greater extent.

Being a cost-effective organization, CMH, Malir Cantt has delivered excellent quality care to patients through continuous efforts towards betterment in every discipline deemed to the medical facility. The policies, developmental programs, standard operating procedures (SOPs), audits, and appraisal may be an example for other health care organizations to upgrade the quality and become a practical part of the system.

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#### CONCLUSION

This survey has provided deep insight into the contemporary health care services of the hospital. Being a cost-effective organization, CMH MalirCantt has delivered excellent quality care to patients through continuous efforts to-wards betterment in every discipline deemed to the medical faci-lity.

#### Conflict of Interest: None

#### Authors' Contribution

SFB: Manuscript drafting, literature survey and bibliography, data interpretation, HJS: Conceived the main research idea& developed the study design, developed the study tool i.e. questionnaire, data analysis and Interpretation for results, FMQ: Data collection and Analysis, interpretation of results and Tabulation, final proof read for any grammatical or language errors, SZ: Helped in data collection, data entry and analysis, MT: Research supervisor, critical checking and analysis of the results, final approval of the manuscript, SR: Helped in data collection, data entry and analysis.

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