ORIGINAL ARTICLE

Satisfaction Level and its Predictors among Out Patients at Public Sector Hospital in Karachi

Naveed Ali Khan[1*], Syeda Kanwal Aslam[2*], Ata Ur Rehman[1], Muhammad Sameer Qureshi[3], Sumera Inam[2], Khursheed A Samo[1] and Amyna Shallwani[1]

ABSTRACT

Background: Patient satisfaction is an important parameter of evaluating health care services from a patient's perspective. In terms of "people centered healthcare", it has gained importance over last few decades; but the concept is generally neglected in quality assessment of healthcare setups by developing countries like Pakistan. We aimed to assess the level of satisfaction among outpatients receiving healthcare services at the surgical outpatient department, Civil Hospital Karachi, Pakistan; and identify the aspects of healthcare service delivery's quality associated with patient's dissatisfaction.

Methods: A cross sectional study was conducted at the surgical outpatient department , Civil Hospital Karachi (CHK). Information relating to patient's evaluation of health care service delivery, and level of satisfaction were collected through post consultation survey of 454 patients attending the OPD from 28th February, 2014 to 30th April, 2014.

Results: We found that almost three quarters (75.1%, n=341) of the patients attending surgical outpatient department were not satisfied. They were less likely to be satisfied if they evaluated the interpersonal communication as poor; namely: staff behavior (OR=0.15, 95% CI[0.03-0.82]), service by the attending doctors in terms of explanation regarding their ailment and its treatment(OR=0.13, 95% CI[0.02-0.63]), and over crowd handling by staff members(OR=0.37, 95% CI[0.20-0.66]). They were also less likely to be satisfied if they evaluated the following facilities as poor: over all cleanliness (OR=0.20, 95% CI[0.07-0.56]), and toilet facilities(OR=0.34, 95% CI[0.18-0.63]).

Conclusion: This study identifies high dissatisfaction level among outpatients. Furthermore, the influential, alterable variables related to administrative issues and interpersonal communication between patients and hospital staff at outpatient department may provide implications for public sector hospitals aiming at improving the quality of healthcare in developing countries.

Key words: Patient satisfaction, developing country, healthcare quality.

INTRODUCTION

Patient satisfaction is an important parameter of evaluating health care services from a patient's perspective. It may be defined as the subjective opinion of the patient evaluating various aspects of their service experience to indicate the quality of care[1-3]. Patient satisfaction in terms of "people centered healthcare", has gained importance over last decades, and has been emphasized by the international health agencies[4]. Patient satisfaction evaluations are helpful to evaluate the quality of care, as an outcome variable for healthcare services, as an indicator of some deficiency in service, and for formulation of healthcare policy[5]. There is increasing pressure on healthcare providers to ensure that the planning and evaluation of healthcare services incorporate the views of consumers-the patients[6].

Realizing the importance of patient satisfaction, it has now been mandated as an element of quality management reports in most healthcare systems of developed countries[2]. However, the concept is still generally neglected in developing countries like Pakistan, and more so in the public sector hospitals[7]; which provide access to healthcare for majority of the underprivileged masses. The satisfaction of consumers is not given priority in our financially strained healthcare

*   The first two authors equally contributed to this menuscript.

Department of Surgery, Civil Hospital Karachi[1], School of Public Health[2], Department of Biochemistry, Dow International Medical College[3], Dow University of Health Sciences, Karachi, Pakistan.

Correspondence: Dr. Syeda Kanwal Aslam, School of Public Health, Dow University of Health Sciences, Karachi, Pakistan.

Email: syeda.kanwal@duhs.edu.pk

setup. Furthermore, our healthcare structure has long been criticized for underutilization of primary health care setups in the country. Despite having a huge infrastructure of primary care units, 77% of per capita health expenditure is spent in private sector[5]. The quality of healthcare on public sector hospitals may give directions for improving consumers' utilization of these primary care setups as well. We thus aim to assess the level of satisfaction among outpatients receiving healthcare services at Surgical OPD, CHK, Pakistan; and identify factors associated with dissatisfaction.

METHODS

This cross sectional study was conducted at the Surgical OPD, CHK. CHK is a public sector, tertiary care teaching hospital, which caters to the health care needs of approximately two million out-patients annually not only from Karachi, but also from rural areas of the Sindh and Baluchistan province[8]. Some 400 patients visit the Surgical OPD on daily basis[9]. All patients who were 12 years or older in age, attended the surgical OPD of CHK from 28th February, 2014 to 30st April, 2014 were included in the study after obtaining verbal informed consent. Patients with serious physical or mental pathologies were excluded from the study. Consecutive patients were surveyed at the end of their consultation with the attending doctor.

Sample Size Estimation:

Our sample size calculations incorporated results from previous studies, with 40% satisfaction level among patients at 95% confidence level and 5% error; 368 was the estimated sample size[10].

Instrument and variables

A structured questionnaire was designed to assess the satisfaction level. It comprised of questions related to demography, perceptions of patients evaluating: service delivery by doctors and paramedical staff, treatment given, and the facilities available at the hospital. Demographics included information about the patient's age, gender, marital status, education, occupation, and average income.

Patients were asked to rate the services at the OPD on a likert scale of 1 to 4, the ranking was done as 1. Excellent, 2. Good, 3.Fair, 4. Poor. Questions related to the facilities at the hospital included evaluation of parking facilities, seating arrangements, toilet facilities, drinking water, cleanliness, telephone facility, and waiting space outside the OPD. In the section of perception of patients regarding service delivery by the doctor, questions evaluating the behavior of doctor,

adequacy of time taken by the doctor to attend the patient, explanation about the nature of disease and illness, and the level of satisfaction for the treatment provided; were included. The perception of patients regarding service delivery by the paramedical staff included questions evaluating the behavior of lab technician, behavior of staff (nurses, housekeeper and all), handling the problem of overcrowding, promptness of services. The section on facilities during the treatment, evaluated opening timings of the OPD, procedure to get registration cards, registration procedure in the ward, facilities available in the OPD, waiting time in the queue, and level of confidentiality inside the ward, reception and waiting room. Other questions obtained information regarding reason for selecting this hospital, level of overall satisfaction regarding healthcare services at the OPD, choice of particular healthcare aspect which needs further improvement, perception regarding the benefits of prescribed treatment in curing their ailments, and chances of recommending the hospital to family and friends. Evaluations of the facilities ranging from fair to excellent responses were classified as good, whereas those with the response poor were classified as poor.

Scoring was done to assess the level of satisfaction for all the questions. Patient's ratings for each component aspect in quality of healthcare service delivery was scored from 0 to 100, with 25 as poor, 50 as fair, 75 as good, 100 as excellent. 75% cut off was used for the level of satisfaction. Respondents scoring above 75% were categorized to be satisfied, whereas scores less than the 75 % were categorized as dissatisfied.

Statistical Analysis

Statistical Package for Social Sciences (SPSS) version 16.0 was used to analyze the data. Descriptive statistics such as frequencies and percentages were calculated for each item in the questionnaire. Level of education was categorized as uneducated, primary, matriculation, intermediate and graduation; income as = PRs.10000 per month and > PRs. 10000 per month; occupation was classified as professional, non-manual, manual, and unemployed; the marital status was classified as of being single or married.

Pearson Chi-Square was performed to examine the association of patients' ratings for each of the aspect in quality of healthcare service delivery namely: parking facilities, toilet facilities, availability of drinking water, cleanliness, telephone facilities, waiting space, doctor's explanation of illness and treatment, treatment satisfaction, behavior of laboratory technician, behavior of staff members, over crowd handling, process of getting registration card, over all registration procedure,

facilities in the OPD, waiting time in queue, level of confidentiality; with the patients' overall level of satisfaction regarding the service delivery at the OPD.

Crude odds ratios and adjusted odds ratio were used to measure the strength of the association between patient's satisfaction (dependent variable), and each independent variable. The p values of 0.05 or less were considered statistically significant.

RESULTS

A total of 454 patients completed the questionnaire. Among 454 participants, 54.4 %(n=247) were males and 45.6% (n=207) were females. The mean age of participants was 36±13 years. About 36.6% (n=166) were found to be uneducated, 81.3% (n=369) were married, 55.5% (n=252) had average income less than 10000 Pakistani rupees. Out of all the patients, 43% (n=197) respondents were referred to the hospital, 33.9% (n=154) chose the hospital due to its reputation, 12.9% (n=59) due to the better facilities in the surgical department, and only 9.6% (n=44) chose the hospital because of shorter distance.

Table 1: Baseline characteristics of patients (n= 454) visiting the surgical OPD at Civil Hospital Karachi

Characteristics	n	%
Gender		
Male	247	54.4
Female	207	45.6
Marital Status		
Single	85	18.7
Married	369	81.3
Education		
Uneducated	166	36.6
Primary	110	24.2
Matric	124	27.3
Intermediate	44	9.7
Graduation	10	2.2
Occupation		
Professional	11	2.4
Non Manual	30	6.6
Manual	311	68.5
Unemployed	102	22.5
Income		
=10000	252	55.5
=10001	202	44.5
Reason for choosing Hospital		
Hospital Reputation	154	33.9
Well facilities in the surgery	59	12.9
Being Referred here	197	43.3
Near the House	44	9.6

(Table 1) Patient's satisfaction ratings for individual aspect of healthcare quality show that patients rated the following as poor: parking facilities (57%), toilet (72.5%), and telephone facilities (70.7%). (Table 2)

Table 2: Patient's perceptions about their healthcare experience at the Hospital. (n=454)

Variables	Ratings			
	Excellent	Good	Fair	Poor
	n (%)	n (%)	n (%)	n (%)
Facilities at the Hospital				
Parking	4 (0.9)	35 (7.7)	156 (34.4)	259 (57.0)
Seating	13 (2.9)	199 (43.8)	190 (41.9)	52 (11.5)
Toilet	4 (0.9)	18 (4.0)	103 (22.7)	329 (72.5)
Drinking Water	4 (0.9)	54 (11.9)	130 (28.6)	266 (58.6)
Cleanliness	5 (1.1)	174 (38.3)	185 (40.7)	90 (19.8)
Telephone	3 (0.7)	23 (5.1)	107 (23.6)	321 (70.7)
Waiting Space	11 (2.4)	198 (43.6)	178 (39.2)	67 (14.8)
Perception of Patients towards Doctors				
Doctor's Behavior	108 (23.8)	283 (62.3)	52 (11.5)	11 (2.4)
Treatment Satisfaction	86 (18.9)	290 (63.9)	66 (14.5)	12 (2.6)
Perception of Patients towards Paramedical Staff				
Behavior of Laboratory Technician	13 (2.9)	241 (53.1)	166 (36.6)	34 (7.5)
Behavior of Staff members	12 (2.6)	224 (49.3)	153 (33.7)	65 (14.3)
Over Crowd handling	10 (2.2)	62 (13.7)	161 (35.5)	221 (48.7)
Promptness of Services	7 (1.5)	219 (48.2)	174 (38.3)	54 (11.9)
Facilities during the Treatment				
Timings of OPD	21 (4.6)	297 (65.4)	123 (27.1)	13 (2.9)
Procedure of registration cards	9 (2.0)	249 (54.8)	142 (31.3)	54 (11.9)
Overall registration Procedure	17 (3.7)	247 (54.4)	143 (31.5)	47 (10.4)
Overall environment at the OPD	28 (6.2)	282 (62.1)	122 (26.9)	22 (4.8)
Waiting time in Queue	28 (6.2)	129 (28.4)	213 (46.9)	84 (18.5)
Level of Confidentiality	53 (11.7)	275 (60.6)	95 (20.9)	31 (6.8)

Out of 454, 75.1% (n=341) of the respondents were dissatisfied whereas 24.9 %(n=113) were satisfied with the facilities provided at the hospital. Ratings for parking facilities (p-value 0.012), toilet facilities (p-value <0.001), drinking water (p-value <0.001), telephone facilities (p-value <0.001), cleanliness (p-value <0.001), waiting space(p-value 0.019), time given by the doctor (p-value <0.001), timings of OPD (p-value 0.035), behavior of laboratory technician (p-value 0.008), behavior of staff members (p-value <0.001), over crowd handling (p-value <0.001), promptness of services (p-value <0.001), explained by the doctor (p-value <0.001),registration card procedure (p-value <0.001), over all registration procedure (p-value <0.001), level of confidentiality (p-value 0.014), waiting time in the queue (p-value <0.001); were significantly associated with the level of satisfaction. (Table 3).

Univariate logistic regression analysis indicates that patients were less likely to be satisfied if they evaluated the following as poor: toilet facilities (OR=0.30, 95% CI[0.19-0.47] p-value <0.001), drinking water facilities

Table 3: Patient's perceptions about their healthcare experience at the Hospital. (n=454)

Variables	Dissatisfied		Satisfied		
	n	%	n	%	P-value
Parking Facilities					
Good	135	39.6	60	53.1	0.012*
Poor	206	60.4	53	46.9	
Seating Facilities					
Good	297	87.1	105	92.9	0.092
Poor	44	12.9	8	7.1	
Toilet Facilities					
Good	72	21.1	53	46.9	<0.001*
Poor	269	78.9	60	53.1	
Drinking Water					
Good	121	35.5	67	59.3	<0.001*
Poor	220	64.5	46	40.7	
Cleanliness					
Good	256	75.1	108	95.6	<0.001*
Poor	85	24.9	5	4.4	
Telephone Facilities					
Good	86	25.2	47	41.6	0.001*
Poor	255	74.8	66	58.4	
Waiting Space					
Good	283	83.0	104	92.0	0.019*
Poor	58	17.0	9	8.0	
Doctor's Behavior					
Good	330	96.8	113	100	0.053
Poor	11	3.2	0	0	
Time given					
Good	293	85.9	113	100	<0.001*
Poor	48	14.1	0	0	
Explained by the Doctor					
Good	281	82.4	111	98.2	<0.001*
Poor	60	17.6	2	1.8	
Treatment Satisfaction					
Good	330	96.8	112	99.1	0.179
Poor	11	3.2	1	0.9	
Behavior of Laboratory Technician					
Good	309	90.6	111	98.2	0.008*
Poor	32	9.4	2	1.8	
Behavior of Staff members					
Good	278	81.5	111	98.2	<0.001*
Poor	63	18.5	2	1.8	
Over Crowd handling					
Good	152	44.6	81	71.7	<0.001*
Poor	189	55.4	32	28.3	
Promptness of Services					
Good	287	84.2	113	100	<0.001*
Poor	54	15.8	0	0	
Timings of OPD					
Good	328	96.2	113	100	0.035*
Poor	13	3.8	0	0	
Registration Card					
Good	289	84.8	111	98.2	<0.001*
Poor	52	15.2	2	1.8	
Overall registration Procedure					
Good	295	86.5	112	99.1	<0.001*
Poor	46	13.5	1	0.9	
Overall environment at the OPD					
Good	321	94.1	111	98.2	0.079
Poor	20	5.9	2	1.8	
Waiting time in Queue					
Good	265	77.7	105	92.9	<0.001*
Poor	76	22.3	8	7.1	
Level of Confidentiality					
Good	312	91.5	111	98.2	0.014*
Poor	29	8.5	2	1.8	

*Significant at 0.05 level of significance

Table 4: Univariate analysis of patient's perceptions about their healthcare experience at the hospital and their satisfaction level. (n=454)

Variables	OR(95% CI)	p-value
Parking Facilities		
Good	1	
Poor	0.57(0.37-0.88)	0.012*
Seating Facilities		
Good	1	
Poor	0.51(0.23-1.12)	0.097
Toilet Facilities		
Good	1	
Poor	0.30(0.19-0.47)	<0.001*
Drinking Water		
Good	1	
Poor	0.37(0.24-0.58)	<0.001*
Cleanliness		
Good	1	
Poor	0.13(0.05-0.35)	<0.001*
Telephone Facilities		
Good	1	
Poor	0.47(0.30-0.74)	0.001*
Waiting Space		
Good	1	
Poor	0.42(0.20-0.88)	0.022*
Doctor's Behavior		
Good	1	
Poor	N.S	0.999
Time given by Doctor		
Good	1	
Poor	N.S	0.997
Explanation of illness/treatment by the Doctor		
Good	1	
Poor	0.08(0.02-0.35)	0.001*
Treatment Satisfaction		
Good	1	
Poor	0.26(0.03-2.09)	0.210
Behavior of Laboratory Technician		
Good	1	
Poor	0.17(0.04-0.73)	0.018*
Behavior of Staff members		
Good	1	
Poor	0.08(0.01-0.33)	<0.001*
Over Crowd handling		
Good	1	
Poor	0.31(0.20-0.50)	<0.001*
Promptness of Services		
Good	1	
Poor	N.S	0.997
Timings of OPD		
Good	1	
Poor	N.S	0.999
Registration Card		
Good	1	
Poor	0.10(0.02-0.41)	0.002*
Overall registration procedure		
Good	1	
Poor	0.50(0.08-0.42)	0.005*
Overall environment at the OPD		
Good	1	
Poor	0.28(0.06-1.25)	0.098
Waiting time in the Queue		
Good	1	
Poor	0.26(0.12-0.57)	0.001*
Level of Confidentiality		
Good	1	
Poor	0.19(0.04-0.82)	0.026*

*Significant at 0.05 level of significance
NS: Not significant

Table 5: Multivariate analysis of patient's perceptions about their healthcare experience at the hospital and their satisfaction level. (n=454)

Variables	OR(95% CI)	p-value
Parking Facilities		
Good	1	
Poor	0.94(0.54-1.65)	0.847
Toilet Facilities		
Good	1	
Poor	0.34(0.18-0.63)	0.001*
Drinking Water		
Good	1	
Poor	0.91(0.48-1.72)	0.782
Cleanliness		
Good	1	
Poor	0.20(0.07-0.56)	0.002*
Telephone Facilities		
Good	1	
Poor	1.03(0.55-1.91)	0.917
Waiting Space		
Good	1	
Poor	0.77(0.30-1.93)	0.581
Explained by the Doctor		
Good	1	
Poor	0.13(0.02-0.63)	0.011*
Behavior of Lab. Technician		
Good	1	
Poor	0.89(0.11-7.31)	0.919
Behavior of Staff members		
Good	1	
Poor	0.15(0.03-0.82)	0.029*
Over Crowd handling		
Good	1	
Poor	0.37(0.20-0.66)	0.001*
Admission Card		
Good	1	
Poor	0.28(0.05-1.50)	0.137
Admission Procedure		
Good	1	
Poor	0.13(0.01-1.36)	0.089
Length of time in the Queue		
Good	1	
Poor	0.43(0.18-1.05)	0.064
Level of Confidentiality		
Good	1	
Poor	1.56(0.25-9.59)	0.631

*Significant at 0.05 level of significance
OR = Odds ratios adjusted for their perceptions about parking facilities, toilet facilities, drinking water, cleanliness, telephone facilities, waiting space, explanation by the doctor, behavior of lab technician, behavior of staff members, over crowd handling, registration card, registration procedure, waiting time in queue, level of confidentiality.
CI = 95% Confidence Intervals.

(OR=0.37, 95% CI[0.24-0.58] p-value <0.001), cleanliness (OR=0.13, 95% CI[0.05-0.35] p-value <0.001), telephone facilities (OR=0.47, 95% CI[0.30-0.74] p-value 0.001), explanation by the doctor (OR=0.08, 95% CI[0.02-0.35] p-value 0.001), behavior of laboratory technician (OR=0.17, 95% CI[0.04-0.73] p-value 0.018), behavior of staff members(OR=0.08, 95% CI[0.01-0.33] p-value <0.001), over crowd handling (OR=0.31, 95% CI[0.20-0.50] p-value <0.001), over all registration procedure, (OR=0.50, 95% CI[0.08-0.42] p-value 0.005), waiting time in queue (OR=0.26, 95% CI[0.12-0.57] p-value <0.001), and the level of confidentiality (OR=0.19, 95% CI[0.04-0.82] p-value 0.026). The patient's level of satisfaction was not significantly associated with seating facilities, doctor's behavior, consultation time, treatment satisfaction, promptness of service, timings of OPD, and overall environment at the OPD. (Table 3)

Multivariate analysis was conducted after adjusting all independent variables which were found significant on univariate analysis: their evaluations about parking facilities, toilet facilities, drinking water, cleanliness, telephone facilities, waiting space, explanation by the doctor, behavior of lab technician, behavior of staff members, over crowd handling, registration card, registration procedure, waiting time in queue, and level of confidentiality. Multivariate logistic regression analysis indicates that patients were less likely to be satisfied if they evaluated the following hospital facilities as poor: toilet facilities (OR=0.34, 95% CI [0.18-0.63] p-value <0.001), and cleanliness (OR=0.20, 95% CI [0.07-0.56] p-value 0.002). They were also less likely to be satisfied if they were not content with inter personal communication at the OPD, namely: explanation by the doctor (OR=0.13, 95% CI [0.02-0.63] p-value 0.011), behavior of the staff members (OR=0.15, 95% CI[0.03-0.82] p-value 0.029), and over crowd handling (OR=0.37, 95% CI[0.20-0.66] p-value <0.001). After multivariate analysis, association of patient's satisfaction level with following variables also became non-significant: parking facilities, drinking water facilities, telephone facilities, waiting space, behavior of laboratory technician, process of getting registration card, over all registration procedure, waiting time in queue, and the level of confidentiality. (Table 4).

DISCUSSION

This study found that almost three quarters of the patients attending surgical OPD were less satisfied, and their views about behavior of the nurses, service by the attending doctors in terms of explanation regarding their ailment and its treatment, over crowd handling by staff members, over all cleanliness, and toilet facilities, were most influential in determining their overall satisfaction rating of the healthcare experience at the Surgical OPD, CHK.

Our finding of having three quarters of dissatisfied patients at the hospital should serve to call for improving the quality of services provided by public sector hospitals to meet the expectations of the patients as highlighted by various international health organizations[4]. It highlights the very fact that public sector hospitals of Pakistan are striving to address the needs, and meet the expectations of the population at large; and may be used to explain the reason of public sector healthcare facilities' underutilization in our country[5]. The results are poorer as compared to other study recently conducted in CHK[11]. Possible explanation for the higher dissatisfaction may be the difference in inclusion criteria, as they selected inpatients from several departments of the hospital; or it might predict the decline in quality of care at the hospital overtime.

The patients who evaluated the behavior of the staff members as poor were least likely to be satisfied with the healthcare services delivered. The patients were discontent with the behavior of the paramedical staff namely the nurses. This finding echoes the importance of nursing in patients' perceptions regarding their care and is consistent with the findings of other studies[2,12]. It is important to note here that hospitals having better work environments and higher job satisfaction levels for nurses, and a higher number of baccalaureate nurses; receive higher satisfaction rates from their patients[12]. The very same factors may be playing a role in patients' satisfaction of these participants as well. Nevertheless, World Health Organization identifies "competence, communication, respect, empathy, and sensitivity" as some of the important aspects of professional skills needed by health care professionals including nurses, for improved quality of health care[4]. Thus improvement in working environments for nurses and improving their professional skills may hold promise for improving patients' satisfaction.

Moving further, patients who were not content with the communication with attending doctors regarding their illness and treatment were less likely to be satisfied with the overall experience at the hospital. This discontent was observed if the doctors were not able to appropriately explain the ailment and its treatment to their patients. Information giving is considered as an important aspect of patients' expectations for personalized care[13,14]. Although doctors spend considerable time with their patients (most patients were content with the duration of consultation by the attending doctor in this study); they may not be able to effectively deliver the information needed by their patients. In our context, it may be due to language barrier as well, as CHK caters to the patients belonging to different ethnic backgrounds of the country. Evidence shows that these language barriers may cause problems of comprehension, and may lower patient satisfaction[15].

Various strategies of overcoming such issues in healthcare, like training of healthcare staff to manage language barrier may be explored in order to improve patient satisfaction[15]. Overall cleanliness and availability of toilet facilities were also important factors in influencing the judgment of the patients. Patients who rated the cleanliness level at the hospital as poor were less likely to be satisfied with the hospital services. Cleanliness is regarded as the most basic measure for the maintenance of hygiene in a hospital environment, and role of housekeeping is important in maintaining high level of hygiene at the hospital[16]. Iqbal A. and Ali S. also highlighted the poor hygienic conditions at the public sector hospital, and its association with patients' satisfaction level[11]. Moreover, patients were also less likely to be satisfied if they rated the toilet facilities at the hospital as poor. Considering healthcare delivery as a service and the patients as consumers, provision of basic facilities like toilets, and maintenance of cleanliness are imperative to meet the expectations of the consumer.

The next factor is related to the over crowd handling at the OPD. Patients who rated over crowd handling by the hospital staff as poor were also less likely to be satisfied. Various studies have highlighted the fact that prolonged waiting time at the hospitals due to overcrowding is associated with patients' level of satisfaction, and must be managed appropriately by the administration to ensure improved satisfaction of the patients[17-19]. Currently, appointment system is not used in the OPD at CHK, and the hospital caters to approximately 400 patients daily at the surgical OPD[9]. These issues might result in poor interpersonal communication between OPD staff and patients, and may decline satisfaction ratings amongst patients. These factors need to be taken into account when exploring dissatisfaction among patients due to prolonged wait times.

This study adds to the limited information available on patient satisfaction in public sector hospitals of Pakistan. We need further evidence to confirm these findings and determine whether they can be generalized to other public sector hospitals in the country. There were various limitations. Firstly, the survey was conducted by the in house residents at Surgical OPD, and patients might have been hesitant in portraying the true picture of the problems they faced. The study was conducted at only one of the several OPDs functioning at the hospital, and thus might not be representative of the overall quality of care at the hospital. Further evidence, based on qualitative studies conducted at a broader level, encompassing inpatients and outpatients of all departments at public sector hospitals would be needed to reveal patients' views about their healthcare experience.

CONCLUSION

This study identifies that almost three fourths of all outpatients were dissatisfied with their service experience at the public sector hospital's OPD. Patients' poor ratings for interpersonal communication at OPD like nurses' behavior, patient doctor communication, over crowd handling; and administrative issues like over all cleanliness, and toilet facilities; were most influential determinants of overall satisfaction. These alterable variables may provide implications for public sector hospitals aiming at improving the quality of healthcare in developing countries.

Competing interest

The authors declare that they have no competing interests.

How this fits in with quality in primary care

We know that patient satisfaction as an element of quality of healthcare is generally neglected in developing countries, and more so in public sector hospitals. This paper aimed to identify level of patient satisfaction, and its determinants from a public sector setup in Pakistan, which may provide implications for improving quality of health care in developing world.

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