

## ORIGINAL ARTICLE

ASSESSMENT OF PATIENTS SATISFACTION ATTENDING  
OUTPATIENT DEPARTMENTS OF TEACHING HOSPITALS OF  
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**Background:** The doctor-patient relationship is a central feature of the healthcare system. The recent developments in the delivery of health care have tended to focus on patient satisfaction. Therefore, this study was planned to find out the satisfaction of patients attending the outpatient department of teaching hospitals in Peshawar. **Methods:** A cross-sectional study on Patients Satisfaction was conducted in outpatient departments of five different private and public teaching hospitals in Peshawar, Pakistan from March 2019 to March 2020. The questionnaire was translated into Pashto. All the patients consenting to participate were asked questions from Patient Satisfaction Questionnaire-18 (PSQ-18) by the principal investigator. The data was analyzed using SPSS Version 25. **Results:** The mean age of the sample (n=1025) was 37.58±15.60 years. There were 725 (70.1%) females and the majority were attending public sector hospitals (n=596, 58.1%). More than half of the sample (n=589, 57.5%) reported higher than mean scores on the Patient Satisfaction Questionnaire (PSQ). The insignificant gender difference was observed in terms of PSQ, whereas patients of public sector hospitals were more satisfied than patients of private sector hospitals ( $p=0.000$ ). The inter-scale correlation using Pearson Coefficient between patient satisfaction and its subtypes showed a significant moderate positive correlation with a  $p$ -value of  $p=0.000$ . **Conclusion:** More than half of the patients showed satisfaction with the healthcare services. Patients attending public sector hospitals were more satisfied than the patients attending private sector hospitals.

**Keywords:** Patients satisfaction; Teaching hospitals; Outpatient department

**Citation:** Khan L, Hidayat H, Hussain I, Khan J, Ali H, Sethi MR, *et al.* Assessment of patients satisfaction attending outpatient departments of Teaching Hospitals of Peshawar. J Ayub Med Coll Abbottabad 2023;35(1):64–7.

**DOI:** 10.55519/JAMC-01-10914

## INTRODUCTION

Patient satisfaction (PS) is considered to be the basic tool for measuring the performance of all healthcare services as well as the quality of services and efficiency of service providers.<sup>1</sup> The quality of services in health is targeted to focus on an least expensive type of services that are able to manage the health problems of the patients.<sup>2</sup> Research on gauging the level of PS is important to allow decision-makers to take initiatives and actions to improve the level of satisfaction of patients with an ultimate goal of enhancing the quality of life of patients.<sup>3-5</sup>

Healthcare institutions are operating in a very competitive atmosphere, and since it is ever improvable, PS has been now thought of as a game-changing indicator.<sup>6</sup> Also, to measure the quality of healthcare services delivery, out of nine significant indicators, PS has been considered by the World Health Organization (WHO) as a core indicator.<sup>7</sup> Hence, PS is now an indispensable factor in healthcare service delivery.<sup>8</sup> This has been endorsed by a South African study that suggested that PS is a fundamental indicator of the equitable quality of care

and better inter-personal interactions are most satisfying to the patients.<sup>9</sup>

A significant research gap exists in current healthcare literature for developing countries regarding the assessment of PS, with very few studies conducted on the topic.<sup>4,5,10,11</sup> This research is very pertinent in the backdrop of the current healthcare system of Pakistan, which is in a serious resources struggle due to an economic crisis.<sup>4</sup> Therefore, this study was planned with the objective of finding out the level of satisfaction of patients, attending outpatient department of teaching hospitals of Peshawar-Pakistan, to bridge the knowledge gap.

## MATERIAL AND METHODS

A cross-sectional study was conducted in the outpatient department of five different private and public sector hospitals of Peshawar from January 2019 to December 2020. Ethical approval from the ethical review committee of Peshawar Medical College was obtained before starting the study. All the patients, consenting to participate were invited to fill the questionnaires and were enrolled after their

implied consent and provision of information about the instruments. The information was kept confidential. The patients attending OPD who have visited these hospitals for their treatment more than one time were included in the study. Patients having impairment, mental retardation, psychotic disorder and those who were attending the outpatient department for the first time, were excluded. The participation was entirely voluntary. Informed verbal consent was taken from all the participants before, asked questions on patient satisfaction questionnaires.

Patient satisfaction questionnaire-18 (PSQ-18) was used, it measures seven different dimensions of PS including “general satisfaction, technical quality, interpersonal manner, communication, financial aspect, time spent with the doctor, and accessibility and convenience”. Patients were generally asked how they feel about medical care received. Responses, ranging from strongly agree to strongly disagree, were obtained on a 5-point scale.<sup>12</sup>

The Inter-scale correlation using the Pearson correlation coefficient between patient satisfaction with its subtypes showed a significant positive and moderate correlation ( $p=0.000$ ). Complete details are given in table-1.

SPSS version 25 was used to analyze the data. Descriptive analysis was used for finding the frequency and percentage of demographic information. The Chi-square test was applied to find out the gender difference and difference between

private and public sector institutions. An independent sample *t*-test was used to find out the gender and institute-wise differences on PSQ and its subtypes. Pearson correlation test was used to find out the inter-scale relationship between patient satisfaction with its subtypes. The results of all the tests of significance were considered significant at  $p<0.05$  level.

## RESULTS

The mean age of the sample ( $n=1025$ ) was  $37.58\pm 15.60$  years. The majority of them were females ( $n=725$ , 70.1%) and from public sector institution ( $n=596$ , 58.1%). Out of 1025 patients, 589 (57.5%) reported higher than the mean score on PSQ. They were satisfied with the equipment in the OPDs, behaviour of the consultant, waiting time, money spent on treatment and the access to the consultant. Details are given in table-2.

Insignificant difference was observed in terms of gender using Chi- Square test with PSQ ( $p=.542$ ). However, patients of public sector institutions were more satisfied ( $p=0.001$ ). Further details are given in Table-3.

No significant difference was observed in terms of gender and institution using *t*-test with PSQ and its subtypes ( $p>0.001$ ), except in accessibility and convenience subtype where private sector was considered significantly better ( $p=0.000$ ). Details are given in Table-4.

**Table-1: Inter-scale correlation using Pearson correlation coefficient between patient satisfaction questionnaire and its subtypes (n=1025)**

S. No	Scales	I (p-value)	II (p-value)	III (p-value)	IV (p-value)	V (p-value)	VI (p-value)	VII (p-value)	VIII (p-value)
I	PSQ Total	1							
II	General satisfaction	.797** (.000)	1						
III	Technical Quality	.838** (.000)	.647** (.000)	1					
IV	Interpersonal manner	.791** (.000)	.612** (.000)	.626** (.000)	1				
V	Communication	.775** (.000)	.592** (.000)	.626** (.000)	.571** (.000)	1			
VI	Financial aspect	.448** (.000)	.235** (.000)	.197** (.000)	.280** (.000)	.268** (.000)	1		
VII	Time spent with doctor	.740** (.000)	.526** (.000)	.578** (.000)	.553** (.000)	.563** (.000)	.171** (.000)	1	
VIII	Accessibility and convince	.792** (.000)	.573** (.000)	.586** (.000)	.543** (.000)	.488** (.000)	.238** (.000)	.508** (.000)	1

**Table-2: Basic demographic details of the study (n=1025)**

S.NO	Variables	Frequencies (%)	
1.	Gender	Male	300 (29.3%)
		Female	725 (70.1%)
2.	Institution	Private	429 (41.9%)
		Public	596 (58.1%)
3.	PSQ-18	Satisfaction with care	589 (57.7%)
		No satisfaction with care	436 (42.7%)

**Table-3: Gender and institute wise differences using chi-square test on patient satisfaction questionnaire (n=1025).**

S.NO	VARIABLES	GENDER		Chi-square (p-value)	INSTITUTION		Chi-square (p-value)
		Male (%)	Female (%)		Private (%)	Public (%)	
1.	Satisfaction with care	168 (16.4)	421 (41.1)	.372(.542)	272 (26.5)	317 (30.9)	10.65** (.001)
2.	No satisfaction	132 (12.9)	304 (29.7)		157 (15.3)	279 (27.2)	

**Table-4: Mean difference and t value on gender difference and private and public sector patients on patients satisfaction and their subtype (n=1025).**

Variables	Male	Female	t value (Sig)	Private	Public	t value (Sig)
	(n=300)	(n=725)		(n=429)	(n=596)	
	M±SD	M±SD		M±SD	M±SD	
Total PSQ	60.79±12.09	61.24±12.57	-.525 (.600)	62.08±13.13	60.41±11.86	2.131 (.0333)
General Satisfaction	7.10±2.02	0.19±2.04	-650 (-.515)	7.21±2.09	7.13±2.001	.650 (.516)
Technical Quality	13.63±2.87	13.83±3.09	-.969 (.333)	13.58±3.26	13.91±2.85	-1.703 (.089)
Interpersonal Manner	7.09±1.96	7.28±1.96	-1.470 (.142)	7.28±2.03	7.19±1.91	.676 (.499)
Communication	7.32±1.96	7.21±2.05	.783 (.434)	7.29±2.08	7.21±1.98	.618 (.537)
Financial Aspects	6.10±2.24	5.53±2.25	3.618 (.560)	5.93±2.23	5.55±2.28	2.704 (.007)
Time Spent with Doctor	6.72±2.15	7.22±2.09	-3.459 (-.501)	7.25±2.003	6.94±2.19	2.255 (.024)
Accessibility & Convenience	12.84±3.27	12.97±3.22	-565 (-.126)	13.55±3.02	12.48±3.31	5.266 (.000)

**DISCUSSION**

It is believed that PS is one of the most desirable outcomes of the healthcare system and is directly related to healthcare services.<sup>1</sup> Improving PS is an important and core indicator of healthcare quality which is important to understand by healthcare providers, in order to fill their gaps.<sup>10</sup> PS is, therefore, associated with perceived needs, expectations and experience of care. Measuring PS can help in evaluating healthcare services from the point of view of the patient; facilitating in the identification of problem areas and helping in creating solutions towards resolving the identified problems.<sup>13</sup>

In our study more than half of the patients showed satisfaction and patients attending public sector hospitals were more satisfied than the patients attending private sector hospitals. Our results are in line with another study, where 96% of patients were satisfied with the behaviour of the reception staff, which is somewhat the equivalent of an outpatient setting.<sup>14</sup> Another study in alignment with our study, it was found that more than 72% of Romanian patients were satisfied with the way they were attended by the doctor, and more than 60%, trusted the doctor to whom they referred.<sup>15</sup> A Bangladeshi study found a high level of satisfaction with healthcare services (4.17 out of 5.0), which is in line with our study results.<sup>16</sup>

In our study, PS was slightly lower than the other studies conducted in different private and public sector hospitals of Nekemt hospital in both private and public sector outpatient department (68.8% & 58.2%), Chitwan Medical College teaching hospital (75.9%), Jimma University hospital (77.0%), and Hawassa University teaching hospital, (80.1%), respectively.<sup>17-20</sup> However, few of the studies showed the similar percentage of satisfaction with that of our study, i.e., University of Calabar teaching hospital (59.3%), Bahirdar Felegehiwot hospital (57.8%), Debrebirhan

hospital (57.7%), and Wolaita Sodo University teaching hospital (54.2%), respectively.<sup>21-24</sup>

Contrary to our results, an Ethiopian study found dissatisfaction among patients with the quality of services provided, in the domains of tangibility and empathy.<sup>19</sup> Similarly studies conducted in Tanzania and Ghana, found gaps in reliability, assurance and responsiveness domain but the scores were positive on tangibility and empathy domains of PS.<sup>25,26</sup>

There is dearth of national and international literature regarding the public and private sector institutions and the evidence is very limited in comparing PS and associated factors in private and public sector healthcare institutions. However, one study conducted on the topic, showed insignificant difference between public and private sector healthcare institutions, and these results are in contrast with our research findings.<sup>27</sup>

**LIMITATIONS**

The current study, despite its valuable contribution, has a few limitations. The patients were from different educational backgrounds and would have had a different set of expectations. Also, the patients were visiting different consultants and this is a well-established fact that patients visiting different specialties (medical and allied vs. surgical and allied) have different criteria for their satisfaction. Further empirical research is needed on the factors influencing patient satisfaction in order to understand their view points on ideal ways for being taken care of.

**CONCLUSION**

The study concluded that more than half of the patients showed satisfaction with the healthcare services. Patients attending public sector hospitals showed better results in terms of satisfaction than the patients attending private sector hospitals.

## ACKNOWLEDGEMENT

We acknowledge all the participants of the study for their cooperation in becoming a part of this study.

## AUTHORS' CONTRIBUTION

LK: Conceived the idea and helped in data collection. HH, IH, JK, HA: Data acquisition, data collection and data entry. MRS: Write-up, data analysis and final production of results. MI: Study design, revision and supervision. All the authors contributed significantly to the completion of the study.

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Submitted: July 15, 2022

Revised: October 24, 2022

Accepted: October 24, 2022

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