

Original Article

PATIENT SATISFACTION QUESTIONNAIRE: A TOOL TOWARDS QUALITY IMPROVEMENT OF HEALTH CARE SERVICES.

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Objective: To quantify the satisfaction of patients visiting outdoor patient department using patient satisfaction questionnaire (PSQ-18) at District Headquarters hospital Sheikhpura.

Methods: This cross sectional study was conducted at District Headquarters Hospital, Sheikhpura in January 2018. All patients visiting outpatient department of District Headquarters hospital Sheikhpura were included. They were asked to fill patient satisfaction questionnaire (PSQ-18) after their encounter with the physician. All data was analyzed using SPSS 24 version.

Results: Out of 120 participants, 62 patients (51.6%) were males. The mean age was 35.17 + 18.16 years (Range: 8-101 years). Patients from rural areas, who were married, and patients from Gynecology & Obstetrics and surgery department had higher satisfaction scores ($P < 0.05$) whereas results for gender and level of education were not significant ($P < 0.005$) regarding satisfaction of patients.

Conclusions: Patient satisfaction was the highest in terms of "technical quality" but lower in terms of "time spent with doctor" and "communication". Marital status, area of residence and department visited, were important correlates of patient satisfaction. If hospitals wish to improve the quality of health services, they should give priority to factors responsible for patient dissatisfaction. Such type of researches should be frequently conducted to explore specific factors that form patient satisfaction.

Keywords: patient satisfaction questionnaire; PSQ-18; quality improvements; HCS.

Introduction

Patient satisfaction is defined as a subjective evaluation of health services received by patients against their expectations,¹ thus providing crucial information on discrepancy of expectations and quality care received by each individual.² It is Principally evaluated over many health services dimensions which may include general satisfaction, Interpersonal manners, technical quality, communication, financial aspects, time spent with doctor and ease of contact & availability of doctor.³ In public health sector of Pakistan there is an increase incidence of conflicts between patients and healthcare providers, the main reason of which is patient's dissatisfaction with healthcare services. In recent years patients have been given a role of consumers of health services in medical marketplace,⁴ which cannot be flourished without their satisfaction. That is why there is increasing pressure on medical care organizations to improve their service delivery to meet increasing patients demands.⁵ Healthcare professionals therefore conduct different research projects to discover improved ways of keeping themselves aware of changing patient's demands and how to adequately satisfy their needs. Several approaches have been developed to survey patient's perspectives of

healthcare services such as suggestion boxes, formal complaints or audits. However, patient satisfaction questionnaire (PSQ) is the most commonly employed method.⁶ PSQ was originally designed by RAND (Research and development corporation) in 1994.⁷ It had initially 50 number of questions, however the latest version has 18 questions. It is a validated questionnaire specifically designed for this purpose.⁸ The objective of this study was to quantify the satisfaction of patients visiting outdoor patient department using PSQ-18 at District hospital Sheikhpura.

Methods

This cross-sectional study was conducted at District Headquarters Hospital Sheikhpura over a period of 02 months, from January 2018 to February 2018. After permission from Ethical review board, this study was started. We excluded all the incomplete proformas. The investigator directly approached patients/attendants immediately after their encounter with the doctor and when they were going outside the OPD building. They were told about the objective of study and as questionnaires were anonymous, so they were explained that filling the questionnaire means giving the consent to be included into the study. The questionnaire had 02

portions: Bio data and PSQ-18. was sought for authors.⁷ PSQ-18 has 18 questions, which are assessed on a Likert scale for highly satisfied to unsatisfied (4 to 0). It assesses patients satisfaction in 07 domains namely General satisfaction, Interpersonal manners, technical quality, communication, financial aspects, time spent with doctor and ease of contact & availability of doctor. The key to assess the PSQ-18 has been provided by the authors. Patients were asked to fill the questionnaire by themselves and if they were illiterate investigator narrated all the questions and got their responses. For those visiting the pediatric outpatient department, their parents were asked to fill the questionnaire. All the data was analyzed using SPSS version 24. Mean±SD was calculated for continuous variables and frequency was calculated for categorical variables. Mean values for domains of PSQ-18 were compared for different demographic variables using independent sample t-test and keeping $P \leq 0.05$.

Results

We included 120 questionnaires into this study. Mean age of responders was 35.17 ± 18.16 years (Range: 8-101 years), out of which 62 patients (51.6%) were males. Most of patients (n=69) belonged to rural society and 86 patients (71.7%) were married. Sixty five percent of patients were below Matriculation level. All demographic details are summarized in **Table-1**. Satisfaction score was higher for following parameters i.e. technical quality, general satisfaction and interpersonal manners. Details are given in **Table-2**. In terms of gender, there was no significant difference in satisfaction score for all 7 dimensions. In addition, we calculated difference in the satisfaction score in patients from villages and urban areas. General satisfaction and time spent with doctor score was significantly higher in patients from villages ($P < 0.05$). In terms of marital status, communication and time spent with doctor component score was significantly higher in unmarried patients. All details are given in **Table-3**. For level of education, no significant difference was found for any healthcare dimension. For patients attending different outpatient departments, General satisfaction, technical quality, and financial aspects score was significantly higher in patients admitted under the services of Gynecology and Obstetrics department. Interpersonal manners, time spent with doctor accessibility and convenience score was

significantly higher in patients visiting surgery and allied outpatient department. All details in **Table-4**.

Table-1: Demographic details of patients.

Demographic detail		n (%)
Age (Mean±SD)		35.17±18.16 years
Gender	Male	62 (51.6%)
	Female	58 (48.3%)
Residence	Rural	69 (57.5%)
	Urban	51 (42.5%)
Marital Status	Single	34 (28.3%)
	Married	86 (71.7%)
Education level	Uneducated	6 (5%)
	Matriculation and below	99 (82.5%)
	Graduates	13 (10.8%)
	Above graduation	2 (1.7%)
Religion	Islam	108 (90%)
	Others	7 (5.8%)
Departments	Surgery and allied	42 (35%)
	Medicine and allied	27 (22.5%)
	Obstetrics and gynaecology	41 (34.2%)
	Others	10 (8.3%)

Table-2: Domains and their mean satisfaction scores:

Domains	Mean±SD
General satisfaction	4.3.93±1.139965
Interpersonal manners	4.2586±1.08471
Technical quality	4.4487±0.82140
Communication	4.1261±1.24059
Financial aspects	3.8034±1.24214
Time spent with doctor	4.2246±1.26017
Accessibility and convenience	3.9370±1.41144

Discussion

In this study, we have observed the level of satisfaction of patients attending outpatient department of District Headquarters Hospital Sheikhpurain association with seven dimensions of health services. In our study, about 51.6% of patients were males while the remaining 48.3% were females, giving male predominance. A study¹⁰ reported that males were more satisfied with Psychiatric treatment than females. In contrast to another study¹¹ which showed that females were more satisfied with services provided at the surgical out-patient department and another study⁽¹²⁾ similarly reported more female satisfaction on patients waiting time. There was an

Table-3: Relationship of the level of patient satisfaction with gender, marital status and area of residence.

Domains	VARIABLES Gender			Marital Status			Residence area		
	Male	Female	p-value	Married	Unmarried	p-value	Rural areas	Urban areas	p-value
General satisfaction	4.394±1.171	4.201±1.133	0.373	4.394±1.171	4.201±1.133	0.065	4.394±1.171	4.127±1.370	0.096
Interpersonal manners	4.337±0.837	4.553±0.811	0.177	4.337±0.837	4.553±0.811	0.724	4.337±0.837	4.357±0.95	0.167
Technical quality	4.354±1.108	4.131±1.071	0.282	4.354±1.108	4.131±1.071	0.370	4.354±1.108	4.186±1.135	0.278
Communication	4.263±1.153	4.008±1.322	0.274	4.263±1.153	4.008±1.322	0.003	4.263±1.153	3.951±1.397	0.162
Financial aspects	3.807±1.32	3.785±1.182	0.928	3.807±1.32	3.785±1.182	0.194	3.807±1.32	3.803±1.311	0.742
Time spent with doctor	4.428±1.203	4.008±1.309	0.078	4.428±1.203	4.008±1.309	0.013	4.428±1.203	3.970±1.221	0.06
Accessibility and convenience	4.027±1.451	3.820±1.393	0.444	3.838±1.477	4.257±1.120	0.109	4.039±1.221	3.867±1.551	0.522

Table-4: Relationship of the level of patient satisfaction with education level and outpatient departments.

Domains	VARIABLES Education level					Department				P-value
	Uneducated	Matric & below	Graduation	Postgraduation	p-value	Surgery & allied	Medicine & Allied	Gynae & Obst.	Others	
General satisfaction	5±0	4.26±1.17	4.33±1.114	4.25±1.06	0.506	4.56±0.87	4±1.4	4.52±0.74	3.25±1.13	0.002
Interpersonal manners	4.33±0.516	4.44±0.858	4.562±0.353	4.5±0.821	0.949	4.58±0.68	4.03±0.96	4.77±0.355	3.75±1.317	0
Technical quality	5±0	4.299±1.07	4.375±0.856	2.75±1.6	0.071	4.5±1.025	4.296±1.203	4.237±1.203	3.3±1.494	0.017
Communication	5±0	4.08±1.25	4.11±1.325	3.75±1.767	0.353	4.39±1.027	3.963±1.343	4.182±1.122	3.25±1.844	0.058
Financial aspects	5±0	3.716±1.25	3.87±1.245	4±1.414	0.104	3.775±1.14	3.68±1.475	4.237±0.98	2.5±1.130	0.001
Time spent with doctor	5±0	4.19±1.301	4.269±1.2	3.25±0.353	0.317	4.45±0.99	4.07±1.585	4.329±1.003	3.25±1.84	0.045
Accessibility and convenience	4.8333±0.408	3.8842±1.441	3.9583±1.413	3.62±1.411	0.453	4.2821±1.237	3.750±1.593	4.03±1.111	2.70±2.002	0.012

insignificant association between gender and average satisfaction in our study. In a study,¹³ employment status and education level (10th standard education $P < 0.001$) were strongly associated with patient satisfaction. Patients who had postgraduate degree & above were unsatisfied, probably due to high degree of expectations from health services. Similar findings were noted in another study,⁽²⁾ patients with high school education had higher satisfaction than tertiary graduates due to greater services expectations. However in one study¹⁴ no significant association was found between education and patients' satisfaction. Our study also showed no significant difference. Regarding patients satisfaction in different departments, a study¹⁵ showed that 30% of the patients accessing surgical outpatients services were generally not satisfied with the services provided. Another study concluded that surgical patients might have increased stress because of fear of complication associated with operation.¹⁶ A study showed that patient satisfaction was more dependent on the patient's perception regarding how their doctors treat their pain instead of on having their pain treated.¹⁷ As surgical patients commonly experience post-operation pain, they might think that doctors are not doing their best to treat their pain. All these factors can contribute to a

lower patient satisfaction score in these patients. Contrary to these studies, surgical patients in our study were more satisfied but in terms of few dimensions such as interpersonal manners, time spent with doctor, accessibility & convenience. As far as rest of parameters are concerned patients attending Gynecology & Obstetric department were more satisfied.

In our study we have also evaluated association between patient's satisfaction and other socio-demographic parameters i.e. residence and marital status. Patients who belonged to rural areas and who were married were more satisfied as compared to unmarried and from urban areas probably having less insight into the system and generally satisfied with every type of care.

Different scores were obtained for all seven parameters of patient satisfaction. Among all domains score was highest for technical quality followed by general satisfaction and interpersonal manners. Comparable results were found in one study which showed highest satisfaction score for technical quality.⁽¹⁸⁾ Lower scores were found for time spent with doctor, communication and accessibility and convenience of contact. One study⁽²⁾ showed results almost similar to our study i.e. Patient satisfaction was the highest in terms of "technical quality" and "accessibility and convenience," but satisfaction was

low in terms of “time spent with doctor,” “interpersonal manners,” and “communication” during consultations. The domain, which scored Lowest in our study, is “financial aspects “like a study, which showed same results for financial aspects.¹⁹

Conclusion

Patient satisfaction was the highest in terms of service factors particularly “technical quality” but satisfaction was low in terms of service orientation of doctors, particularly the “time spent with doctor” and “communication” during consultations. Marital status, area of residence and department visited, were important correlates of

patient satisfaction. If hospitals wish to improve the quality of health services, they should give priority to factors responsible for patient dissatisfaction. The findings of this study highlight a need to develop the interpersonal and clinical skills of doctors, which can be achieved through periodical professional development training programs, in order to improve the quality of healthcare services and doctor-patient interactions in public healthcare facilities of Pakistan. Such type of researches should be frequently conducted to explore specific factors that form patient satisfaction.

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