PATIENTS' PERCEPTIONS OF QUALITY OF HEALTH CARE IN OUT PATIENT DEPARTMENT OF A TERTIARY CARE CARDIAC FACILTIY

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ABSTRACT

Objective: To assess the patients' perception of quality of health care in out-patient department of a tertiary care cardiac hospital.

Study Design: Cross sectional study.

Place and Duration of Study: Armed Forces Institute of Cardiology Rawalpindi, from Jul to Dec 2016.

Material and Methods: Data was collected by conducting hospital based exit interviews on 300 patients using convenience sampling. A standardized, reliable and valid questionnaire was extracted from literature for this purpose.

Results: Statistical analysis showed that nearly more than half (57%) of the patients had high perception of quality of care. Statistically significant association was found between education of the respondents and level of perception (p-value=0.005) as well as between occupation and level of perception (p-value=0.017).

Conclusion: In conclusion almost half the patients had high perception scores and half had low perception score. Furthermore the category of low perception score was mainly due to hospital infrastructure, medical information conveyed to the patients and doctor's behavior. Efforts should be made to address the shortcomings so as to improve quality of care and users perceptions.

Keywords: Hospital, OPD, Patient perceptions, Quality of care.

INTRODUCTION

During the evolution of the Health System over the past centuries as the burden of disease shifted from communicable to non-communicable, the focus shifted from the providers of the health services to the receivers. As health care is becoming increasingly market driven, it is imperative that those purchasing and using it define its quality and value. Need of the day is for the health systems, health care organizations and health practitioners to move to a higher level of performance and adopt a more humanistic and holistic approach to health care, where the individual who needs care is taken as the center of the approach. Patient centered care forms the foundation of health care quality improvements[1]. Patient centered care is defined as the delivery of care with respect for patients and based on their needs, preferences and values[2]. Although the hospital management and its staff is committed to providing the best possible care but the number of daily patients turn over specially in the out-patient department makes it an arduous task. Knowing the patients' perception of quality of care is the first step in the process to involve patients in the efforts to improve the care quality in an effective manner while keeping patients as central focus.

In a developing country like Pakistan, health care is a major concern. The need of the time is not only that the careful use of limited resources should have a positive impact on the peoples' health but the services should also be client centered. In a country which is still striving with the provision of primary health care, little attention has been paid to the assessment of patient's perception of the available resources. In Pakistan where the health system continue to struggle with the issues of quality, patients'

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perception of quality of care needs to be assessed as a priority and on a regular basis, in order to keep the patient at the center of health care.

This study aims to help in greater understanding of patients' point of view regarding the care they are receiving and hence contribute towards efficient use of available resources. Patients' perception studies should be a regular assignment for all the hospitals. It will help to understand the patients' perspective of quality of care and hence help to improve the quality of care. A study done specifically on cardiac patient found that higher patient satisfaction was associated with improved guideline adherence and reduced inpatient mortality rate[3].

MATERIAL AND METHODS

This was a prospective cross-sectional single centered study conducted in outpatient department of Armed Forces Institute of Cardiology using consecutive sampling for the duration of 6 Months (Jul 2016 to Dec 2016).

The patients aged 18 and above, attending the cardiology outpatient department and pa-

Table-I: Socio-demographic features of the patients availing Services at the AFIC/NIHD OPD (n=300).

S. No.	Demographiccharacteristics	Frequency (n =300)	Percentage (%)
1.	**Mean= 53.05 ; SD=14.42; Minimum=18; Maximum=86**		
	18 to 25	7	2.3
	26 to 35	21	7
	36 to 45	78	26
	46 to 55	75	25
	56 and above	119	39.7
2.	**Gender**		
	Male	214	71.3
	Female	86	28.7
3.	**Marital Status**		
	Married	246	82
	Unmarried.	54	18
4.	**Education**		
	Illiterate	97	32.3
	Primary	43	14.3
	Matriculation	58	19.3
	Intermediate	52	17.3
	Graduate	40	13.3
	Post-Graduate	10	3.3
5.	**Occupation**		
	Unemployed	135	45
	Government employee.	84	28
	Private employee.	44	14.7
	Others	37	12.3
6.	**Monthly Family Income**		
	Rs. 10,000 and less	145	48.3
	Rs. 10,001 to 20,000	78	26
	Rs. 20,001 to 30,000	29	9.7
	Rs. 30,001 to 40,000	27	9
	Rs. 40,001 and above	21	7
7.	**Number of visits to this OPD (time)**		
	Less than 5	177	59
	5 to 10	80	26.7
	More than 10	43	14.3

tients who will be willing to give verbal consent. The patients who need emergency attention were excluded from the study.

A standardized, reliable and valid questionnaire to measure patients' perception of health care quality was used[4].

Data Analysis

To simplify the data entry a code sheet was prepared. Data recording, storage, assessment and analysis were done by using SPSS software version 21. Continuous variable data is presented in mean and standard deviation. Categorical variable data is presented in frequencies and percentages. For inferential statistics the 5 point likert scale data was converted into two categories by taking the median of the total score. Those with a total score of median and above were put in the high perception score category and those with a score of below median were categorized as low perception score category. Chi-square test is used to find association between perception categories and socio-demographic variables.

A *p*-value <0.05 was taken as significant and *p*-values of different variables are reported. Ethical approval was sought from institutional review board coupled with patients signing written informed consent.

RESULTS

Categorical Perception Score

For each part of the section B of the questionnaire, median was taken for the score of that part and then each part was divided into two categories. Those with a score equal to median and above were put in high perception category and those with a score below median were put in low perception category.

A total of 62% had high perception score for hospital infrastrcture, 75.7% had high perception score for hospital staff's behaviour, 63% had high perception score for doctor's behavior, 62.7% scored high perception for medical information and 81% scored high perception for pharmacy services.

Table-II: Perception score category of respondents for different aspects of quality of care. (n=300).

Aspect Of Quality of Care	Perception			
	Low (Less than Median)		High (Median and above)	
	Number	Percentage	Number	Percentage
Hospital Infrastructure. Median=9	114	38	186	62
Staff's Behavior. Median=4	73	24.3	227	75.7
Doctor's Behavior. Median=12	111	37	189	63
Medical Information. Median=7	112	37.3	188	62.7
Pharmacy Services. Median=4	57	19	243	81

Total Perception Score

As shown in table-III, the total perception score of all respondents was computed. The median of the total score came out to be 37 with a minimum value of 24 and a maximum value of 49. The perception was divided into two categories; high (those scoring 37 and above) and low (those scoring below 37). It showed that 57% had high perception for quality of care whereas 43% had low perception.

Association between Independent and Dependent Factors

As shown in table-IV, the relationship between independent variables of socio-demographic characteristics and the total perception score taken as the dependent factor

was assessed by doing cross tabulation and using chi-square score and *p*-value. Level of significance was taken as 0.05. The results showed that among the seven independent variables of socio-demographic characteristics, pharmacy services. The level of perception was measured by using Likert scale. In the end overall perception was divided into two groups, median and above as high perception score and below

Table-III: Association between socio-demographic characteristics and total perception score of the respondents (n=300).

Demographic Charateristics	Level of Perception n (%)		Chi-Square	*p*-value
	Low	High		
Age(years)			3.55 df=4	0.469
18 to 25	4(3.1)	3(1.8)		
26 to 35	11(8.5)	10(5.8)		
36 to 45	38(29.5)	40(23.4)		
46 to 55	30(23.3)	45(26.3)		
56 and above	46(35.7)	73(42.7)		
Gender			0.00 df=1	1.00
Male	92(71.3)	122(71.3)		
Female	37(28.7)	49(28.7)		
Marital Status			0.273 df=1	0.602
Married	108(83.7)	138(80.7)		
Unmarried	21(16.3)	33(19.3)		
Education			16.832 df=5	0.005*
Illiterate	32(24.8)	65(38)		
Primary	17(13.2)	26(15.2)		
Matriculation	22(17.1)	36(21.1)		
Intermediate	29(22.5)	23(13.5)		
Graduate	26(20.2)	14(8.2)		
Post-Graduate	3(2.3)	7(4.1)		
Occuptation			10.249 df=3	0.017*
Unemployed	49(38)	86(50.3)		
Govt. Employed	37(28.7)	47(27.5)		
Private Employed	28(21.7)	16(9.4)		
Other	15(11.6)	22(12.9)		
Monthly Family Income			8.464 df=4	0.076
Rs. 10,000 and less	58(45)	87(50.9)		
Rs. 10,001 to 20,000	28(21.7)	50(29.2)		
Rs. 20,001 to 30,000	16(12.4)	13(7.6)		
Rs. 30,001 to 40,000	17(13.2)	10(5.8)		
Rs. 40,001 and above	10(7.8)	11(6.4)		
No. of Visits to the OPD (Times)			0.732 df=2	0.692
Less than 5	77(59.7)	100(58.5)		
5 to 10	36(27.9)	44(25.7)		
More than 10	16(12.4)	27(15.8)		

education and occupation had statistically significant relationship with the perception level of the respondents.

DISCUSSION

Patients' perception was assessed in terms of hospital infrastructure, staff's behavior, doctors' behavior, medical information conveyed and median as low perception score.

The results showed that slightly more than half (57%) of the respondents and high perception score and 43% had low perception score. A similar research conducted to measure patients' satisfaction level in oupatient department in Pakistan Institute of Medical

Sciences concluded that 54% of the respondents had high satisfaction score whereas 46% had low satisfaction score[5]. Another study conducted in ireland found that 92.9% of the respondents had an overall high saticfaction score[6]. The difference in overall score may be due to the difference in quality of care beinf provided or due to different patient expectation from health system.

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When perception of quality of care was considered in terms of various grouping i.e, hospital infrastructure, staff's behaviour, doctors' behaviour, medical information conveyed and pharmacy services it was fond that level of perception varies between 62% to 81% (table-VII). The lowest percentage for high perception was for hospital infrastructure and the highest percentage was for pharmacy services. So in general patients had least perception for hospital infrastructure and highest for pharmacy services. When the hospital infrastructure component was further explored it was found that the mojarity of the patients had lowest perception about the conditions of the toilets in the out patient department (table-II). These result regarding the perception of hospital infrastructure are similar to results obtained in another perception study conducted in India[7]. Sodani *et al* concluded that majority of the patients were not satisfied with the conditions of the toilets in the healthcare facilities.

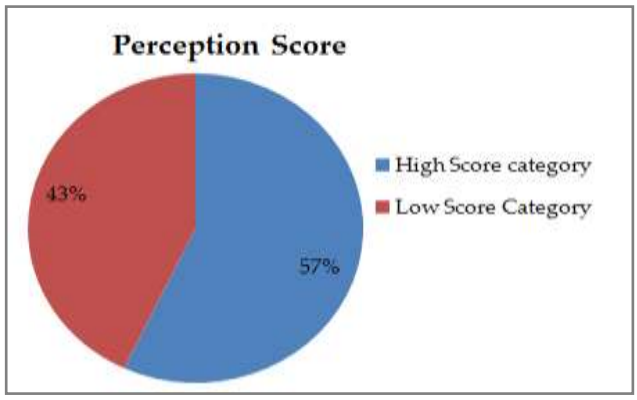

Figure: Pie Chart representing total perception score categories of respondents n=300.

Elder patients had higher level of perception but age was found to have no statistically significant relation with the level of perception (*p*-value=0.469). This is in contrast to many studies which have found association of age with the level of perception of care. One such study found that the relationship between the patients' perceptions ofthe adequacy of resources and the mean age of the patientscared for in a unit was positive 8 with elder patients generally having higher level of satisfaction than younger patients. Whereas another study found that younger patients tend to rate satisfaction little higher than elder patients[9].

Education was found to have a statistically significant relationship with level of perception (*p* value=0.005). This is similar to the results found in study conducted by Koberich *et al*[10], which found significant assosiation between education level of the respondents and level of perceived quality and another study conducted by Vadhana in Cambodia[11]. Similar findings were reported in another study conducted by Johansson *et al*[12].

Occupation of the respondents also proved to have a statistically significant assosiation with the level of perceived quality of care (*p*-value=0.01). Unemployed and public employed respondents generally had a high level of perception as compared to private employed respondents. These findings are consistent with findings in other studies[12].

The main themes that emerged from the suggestions of the respondents regarding the improvement of quality of care in the outpatient department were regarding improvement in the cleanliness of the toilets, to decrease the waiting time for doctors' consultation and to ensure availability of all the prescribed drugs from hospital pharmacy.

It is beneficial to understand that there is an opportunity for the improvementof the Outpatient Department service. Hence, it can be concluded that theoutpatient department services

form a vital element to draw a good image of thehospital services and the patients' opinion are essential in quality improvement.

RECOMMENDATIONS

Although slightly more than half of the patients had a high level of perception but still the analysis of this study was able to identify some of the factors for which respondents had low perception. The results of this study will be communicated with the relevant hospital managers and administration so that relevant modifications can be implemented.

CONFLICT OF INTEREST

This study has no conflict of interest to be declared by any author.

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