# **ORIGINAL ARTICLE**

# Measuring Patient Satisfaction Parameters: A Cross-Sectional Descriptive Study At PNS RAHAT Hospital Karachi.

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#### ABSTRACT

Objective: To describe patient satisfaction with hospital services and staff dealing.

**Materials and Methods:** This cross-sectional study was carried out between January to April-2011 at out-patient departments of PNS Rahat. Randomly selected 96 patients entitled to free medical treatment were offered to voluntarily fill the pretested structured questionnaire in URDU(with mathematical scoring for each selected satisfaction index selected) to comment on the various aspects of services offered at the hospital. The four objective satisfaction scores included: 1-seating /waiting facilities, 2-length of waiting time, 3-staff attitude and 4-Cleanliness at the outpatient departments, radiology, laboratory and pharmacy.

**Results:** The availed mean score was 80.1 + 42.6. Out of the total possible score of 170 of the questionnaires filled. The mean patient score achieved was 57.4 + 33.9. Patients scored less on the satisfaction indices pertaining to waiting time [Average score=4.73/10] and comfortable stay [Average score=6.43/10] in the waiting areas of the hospital OPDs. Patients had a higher satisfaction score on indices related to sanitation/cleanliness issues [Average score=7.52/10] and staff attitude [Average score=7.71/10].

**Conclusion:** Prolonged waiting time and non-availability of quality stay in waiting areas of outpatient departments and diagnostic centers are the cause of lesser patient satisfaction during a patient's visit to hospital.

KEYWORDS: OPDs, Diagnostics, Pharmacy, Satisfaction

### **INTRODUCTION:**

Healthcare management revolves around appropriate human and material resource utilization and developing workflow patterns in line with the requirements of the patients.1 Like various business profession and other services industries, health care delivery also has its foundations based upon public perception and demands from the consumer i.e., in need patient.<sup>2</sup> Apart from their medical or surgical ailments they harbor, they also need care in a respectful way from the caregivers, quality service provision and a chance to comment upon what they want to say about services focused for their welfare.<sup>3</sup> Thus managing patients as stakeholders and incorporating their views for improving service provision along with an effective healthcare utilization in public sector has been identified as one of the opportunity areas for improving performance.<sup>4</sup> In order to improve the process, the existing practices must be evaluated to develop benchmarks and key performance indicators from where effective management should intervene for the sake of improvement.5

Measuring healthcare quality and improving patient satisfaction have become increasingly prevalent among healthcare providers and purchasers of healthcare.<sup>6,7</sup> The measurement of satisfaction among patients as clients is a multi-dimensional concept. Such measurement does require appreciation and understanding of multiple factors,

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which need to be socio-economically compatible and culturally relevant for any effective intervention to improve patient's satisfaction.<sup>8</sup> Many developed nations have formulated systems for continuous improvements of hospital functions based upon feedbacks from their patients. These feedbacks encompass various easy to understand and answer style questionnaires, which are used to identify areas for improvement.<sup>9</sup> Present day healthcare setups suffer due to less attention being focused on patient's associated needs: Firstly, minimal efforts are being implemented to create a congenial physical atmosphere for patient stay during their visit to the hospital.<sup>10</sup> Secondly, a patient centered management approach has been shown to improved satisfaction levels among different patients as concluded by Navipour 11 Lastly, the new dimensions in healthcare management even among tertiary care set up do focus on incorporating practices which are measurable in terms of the promised benefit to the patient.12

With this rationale in background, a public opinion survey was carried out in PNS Rahat hospital to assess the degree of satisfaction of patients attending various outpatient departments. This survey was intended to serve as the measure of patient satisfaction parameter to improve hospital processes performances in line with valuable patient's input.

#### **MATERIALS AND METHODS:**

The survey was conducted from January to April 2011 at PNS Rahat. The hospital medical store dispensary was identified as the endpoint of any hospital outdoor visit. The pre-tested questionnaire was offered to randomly selected patients reporting for acquisition of prescribed medicines at the dispensary. They were all entitled patients belonging to Pakistan Navy and were requested to voluntarily fill the form and drop it in the locked drop box provided at the outer wall of medical store. The filled forms were collected on daily basis by administrative staff for coding and data entry as per the format given in figure-1. A closed ended questionnaire in Urdu was used as instrument designed as shown in figure-1. The questionnaire was developed in line with similar survey instruments used for studies to assist the measurement of the satisfaction of patients visiting outpatient clinics of National Health System (NHS) general hospitals<sup>13,14</sup>. The data was entered on Microsoft Excel and analyzed by SPSS version <sup>15</sup>. The individual scores were defined as per the scores availed in the questionnaire as per a numerical scale. The numerical scale was then defined once data was entered into SPSS. The data was described for descriptive statistics, and various bar-charts were produced through SPSS-15 data output. Mean patient

scores were compared between genders by the Independent sample t-test. A p-value of < 0.05 was considered as significant.

Operational Definitions: The various satisfaction parameters assessed during our study included following: 1-OPD attendance time score, 2- Attitude of staff score, 3- Seating area comfort score, and 4- Hospital cleanliness score. These parameters were measured as per the scale mentioned in (Table-I). Total patient satisfaction score was 170, out of which patients were marked for total availed score. Individual departments including OPD, radiology, pharmacy and lab were compared for status of various scores on a numerical scale to assess which department stands where in terms of specific satisfaction index.

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Fig-I: : Closed ended questionnaire in Urdu as distributed among patient population.

Table-I: Data scoring key for Closed ended questionnaire in Urdu.

	KEY TO INDICATOR	SCORE			
A.	OPD attendance time score	> 30 min	20-30 min	10-20 min	< 10 min
	Patient's score	1	4	7	10
B.	Attitude of staff score	Bad	Satisfactory	Better	Best
	Patient's score	1	4	7	10
C.	Seating area comfort score	Bad	Satisfactory	Better	Best
	Patient's score	1	4	7	10
D.	Hospital cleanliness score	Bad	Satisfactory	Better	Best
	Patient's score	1	4	7	10
Tota	l score Possible	170			
Patie	ent score	AVAILED			
Patie	ent	SECURED			
Patie	ent	SECURED (%)			

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## **RESULTS:**

Total respondents were 96 in our study. The mean age of patients submitting the questionnaire was 39.8 (+19.5) years. Males outnumbered females in terms of filling questionnaire, as there were 68 (71%) males. Mean of attempted score based upon number of columns filled among our data set was 80.1 + 42.6 (Total possible score was 170). The mean of patient's achieved score was 57.4 + 33.9was 57.4 + 33.9 (69.5 + 16.3%). Mean patient satisfaction score was not observed to be different among males and females [(Male: 69.4 + 16.8%) and (females: 69.5 + 15.2%]. Figure-2a,2b,3a & 3b indicate the various patient satisfaction indices across OPDs, laboratory and radiology departments, highlighting most non-satisfaction for waiting time before being attended by the physician or a concerned personnel in the department. This index was followed by seating area satisfaction score in the departments. Patients showed more satisfaction with regards to doctor or staff attitude and cleanliness status in the hospitals. Out of the various departments selected, patients seem to have the worst satisfaction scores in the OPD, followed by radiology and laboratory department. (Fig 3b).



**Fig-2a:** Patient's scores on various patient satisfaction indices in OPD department.



**Fig-2b:** Patient's scores on various patient satisfaction indices in laboratory.



**Fig-3a:** Patient's scores on various patient satisfaction indices in Radiology.



**Fig-3b:** Patient's scores availed in terms of waiting time satisfaction index across different OPD departments.

# **DISCUSSION:**

Measuring patient's feedback by formulating a structured questionnaire is not a new idea in health care set up. Westaway et al have demonstrated the validity of donabedian model of healthcare whereby the attributes of providers and settings are major components of patient satisfaction, and showed that the scale is a reliable and valid measure of patient satisfaction.<sup>15</sup> Another study that aimed at assessing patient satisfaction in government health facilities in Qatar, general satisfaction was associated with the index of availability and convenience of services, besides humaneness of doctors, quality of care, and continuity of care.<sup>16</sup> Similarly, factor analysis conducted on patient satisfaction scale and three factors showed the major items on Factor I to be helpfulness, communication, support and consideration, representing the interpersonal dimension<sup>17</sup>

Our study has highlighted that patients primary concerns during a visit in an OPD or a diagnostic centre is the time duration and quality of waiting time. The study indicates that patients prefer to be seen early for his or her visit to the respective department whether it be the physician concerned or the radiology or some phlebotomy

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procedure. While not much has been published locally, some evidence augmenting our findings is there in the literature to suggest similar results.18,19,20 One more factor which must be appreciated is the observation that the content level was observed to be higher in diagnostic departments than in OPDs. Probable reasons include the following: Firstly, the patient's are immediately taken on board by direct interaction with the dealing staff for the intended procedure which may be suggested to improve patient's satisfaction level. Secondly, few hospital OPDs have nurse stations added as a step before they are actually seen by the physician. These nurse stations do include several anthropometric measurements and recording of vital signs in details along with basic details about patient's history. This approach not only saves times for the physicians but probably adds to improvement in patient's satisfaction level as well.<sup>21,22</sup> Finally it highlights that the physician to patients statistics in primary and specialist OPDs can be enhanced to reduce the duration of time before they are dealt by the physicians. Examples are available in literature which indirectly signifies our discussed concept. 23

Some studies have highlighted that staff dealing the patient creates a major impact from patient's perspective with regards to patient satisfaction,<sup>24</sup> our study has shown the attitude of dealing staff to be lesser factor for patient's non-satisfaction. This is an important finding and suggests that the physical environment surrounding a patient during a hospital visit has to do a lot to change his perception and thought process. Other studies have also highlighted the patient's surrounding's to be tailor made as per specific patient's needs as having a major influence on his ideas about hospital improvement.<sup>25</sup>. Some of the weakness associated with the study must be appreciated: it is a hospital based study with a small sample size and non probability convenient sampling which has its own inherent weaknesses. Secondly, Hawthrone phenomena could be a factor which could affect our results.

The study has important clinical implications. This study being a descriptive study opens a Pandora box of questions, which challenge our routine functioning based mainly upon decisions of management. Incorporating patient's input and valuable thought processes in routine functioning can certainly add to improve our business prospects i.e., healthcare. Moreover, it also necessitates the creation of our national standards based upon realistic resource calculation regarding several healthcare resource indicators like patients to physician statistics. It is expected that more studies may follow this pattern and should attempt to answer the questions raised by our observations.

## **CONCLUSION:**

Prolonged waiting time and non-availability of quality

stay in waiting areas of outpatient departments and diagnostic centers are the cause of lesser patient satisfaction during a patient's visit to hospital.

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