



## Assessment of the Level of Satisfaction Related to Quality of Health Care at Public Health Facilities in Satara District Maharashtra

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## ABSTRACT

**Background:** Patients satisfaction represents a key marker for the quality of health care delivery and this is internationally accepted factor needs to be studied repeatedly for smooth functioning of the health care systems. This study was therefore undertaken with the aim to find out outpatient satisfaction related to quality of care at public health facilities in Satara district.

**Objective:** To assess the level of satisfaction of patients attending selected primary health centers.

**Methodology:** The study was a cross-sectional facility- based. The sample comprised 120 patients selected by stratified and systematic sampling at the primary health centers. The patients were interviewed using structured pretested closed ended questionnaire and analyzed.

**Results:** 39 (32.50%) patients from health centers were in age group of 61-75 yrs. 44 (36.67%) patients were educated up to primary level. 66 (55.00%) patients were farmers. There was direct association of funded and non-funded PHCs when waiting time and space, availability of clean drinking water, cleanliness of toilet, getting free treatment, and availability of almost all necessary investigations were taken into consideration.

**Conclusions:** It can be concluded that availability of funds under Indian Public Health Standards (IPHS) has increased the quality of health care at the primary health centres and thus patients satisfaction.

**Key words-**satisfaction, funded, non funded, IPHS, quality, health care

## INTRODUCTION

In health care organization patient satisfaction is an important measure of service quality. From a management perspective, patient satisfaction with health care is important for several reasons, first, satisfied patients are more likely to maintain a consistent relationship with a specific provider. Second, by identifying sources of patient satisfaction, an organization can address system weaknesses, thus improving its risk management. Third, satisfied patients are more likely to follow specific medical regimens and treatment plans<sup>1</sup>. Various methods have been used to assess the adequacy of patient's utilization of health services in general

and of primary health care services in particular. Patient satisfaction is considered an important indicator of the efficient utilization of health services, as it assesses an individual's attitude to health services received and the extent to which these services meet the person's requirements and needs<sup>2-4</sup>.

The quality of service means an inexpensive type of service with minimum side effects that can cure or relieve the health problems of patients<sup>5</sup>. It is difficult to evaluate the results of treatment in order to find a solution to the health problems or effects of medical treatment. On the other hand, it is easier to evaluate the patient's satisfaction towards the service than evaluate the quality of medical ser-

vices that they receive<sup>6</sup>. Therefore, a research on patient satisfaction can be an important tool to improve the quality of services<sup>7-8</sup>. All health care providers and programmes in our country have overwhelming emphasis on quantitative aspect of services delivered, which means that in a quest to chase runaway targets, we neglect the concept of quality care, which is also a right of clients<sup>9</sup>.

One of the core strategies of NRHM is strengthening existing PHCs and CHC/RH for improved curative care to a normative standard IPHS (Indian Public Health Standards) defining personnel, equipment and management standards<sup>10</sup>. Key aim of these standards is to underpin the delivery of quality services which are fair and responsive to client's needs, which should be provided equitably and which deliver improvements in the health and wellbeing of the population. Standards are main driver for continuous improvement in quality. Patient's satisfaction represents a key marker for the quality of health care delivery and this internationally accepted factor needs to be studied repeatedly for smooth functioning of the health care systems

This study was therefore undertaken with the aim to find out outpatient satisfaction related to quality of care at public health facilities in Satara district, Maharashtra.

## MATERIALS AND METHODS:

The present study was carried out in Satara district. The Satara district is situated on the western part of Maharashtra. The district is divided into 11 Tehsils. The study was a cross-sectional facility-based. Prior permission from district health officer and in charge medical officers was taken. Also necessary approval from ethics committee was taken before start of the study.

Sample size was determined using the formula  $4pq/L^2$ ; considering 50% level of patients satisfaction and allowable error of 10. Thus minimum sample size was 100. The sample comprised 120 patients selected by stratified and systematic sampling at the health centers. Using Simple random technique 6 Primary health Centers (PHCs) to whom the funds under Indian Public Health Standards (IPHS) were released continuously for at least 4 years i.e. funded PHCs and 6 PHCs to whom funds were never released at all since implementation of IPHS i.e. non funded PHCs were selected. Due representation was given to all talukas. Average daily OPD attendance was found out and sampling interval was calculated for each health centre. If patient didn't give consent for the interview immediate next patient was included in the study.

After taking consent the patients were interviewed using structured pretested closed ended questionnaire. The questionnaire included socio-demographic characteristics and patient's satisfaction regarding quality of services like accessibility, waiting time and spaces, signboards, availability of doctor, investigation facilities, health workers visits, availability of clean drinking water and cleanliness of toilet. Patients had the option of answering satisfied, not satisfied or neutral; but all study subjects answered either satisfied or not satisfied. The collected data was compiled in Microsoft Excel and statistical analysis was done using SPSS version 19.

## RESULTS:

Total 120 patients from 12 different primary health centers from Satara district constituted the study population.

Out of total 120, 39 (32.50%) patients were in age group of 61-75 years, while 37(30.83%) were in the age group of 46-60 years. 67 (55.83%) patients were females, while males were 53 (44.17%). 44 (36.67%) patients were educated up to primary level and 9 (7.50%) were illiterate. While 28 (23.33%) patients from health centers were educated up to secondary level. 66 (55.00%) patients were farmers and 34 (28.33%) were housewives (Table 1).

If ease of accessibility is considered 42 (70.00%) patients from funded health centers find it satisfied, as compared to 32 (53.33%) in non-funded health centers.

**Table1: Distribution of study population according to socio-demographic factors**

Socio-demographic factors	Patients (n=120) (%)
<b>Age group</b>	
16-30	13 (10.83)
31-45	24 (20)
46-60	37 (30.83)
61-75	39 (32.5)
>75	7 (5.84)
<b>Sex</b>	
Male	53 (44.17)
Female	67 (55.83)
<b>Education</b>	
Illiterate	9 (7.5)
Primary	44 (36.67)
Secondary	28 (23.33)
Higher Secondary	28 (23.33)
Degree	11 (9.17)
<b>Occupation</b>	
Farmer	66 (55)
Housewife	34 (28.33)
Job	14 (11.67)
Student	6 (5)

**Table 2: Distribution of Quality of services among funded and non funded health centers as reported participants**

Quality of services	Funded PHC (n=60)	Non-Funded PHC (n=60)	P value*
<b>Ease of accessibility</b>			
Yes	42 (70.00)	32 (53.33)	0.0906
No	18 (30.00)	28 (46.67)	
<b>Time required to reach health center</b>			
<30 Min	35 (58.33)	38 (63.33)	0.7086
>30 Min	25 (41.67)	22 (36.67)	
<b>Signboard at the health Center</b>			
Yes	60 (100)	60 (100)	NA
No	0	0	
<b>Waiting time and space at the health center</b>			
Satisfied	39 (65.00)	22 (36.67)	0.0033
Not Satisfied	21 (35.00)	38 (63.33)	
<b>Doctor available at the health center</b>			
Yes	42 (70.00)	30 (50.00)	0.0399
No	18 (30.00)	30 (50.00)	
<b>Clean drinking water available</b>			
Yes	37 (61.67)	25 (41.67)	0.044
No	23 (38.33)	35 (58.33)	
<b>Toilet</b>			
Clean	36 (60.00)	21 (35.00)	0.01
Unclean	24 (40.00)	39 (65.00)	
<b>Getting treatment free of cost</b>			
Free	42 (70.00)	28 (46.67)	0.0157
From outside	18 (30.00)	32 (53.33)	
<b>Investigations facilities available</b>			
Satisfied	40 (66.67)	28 (46.67)	0.0422
Not Satisfied	20 (33.33)	32 (53.33)	
<b>Health workers give regular visit</b>			
Yes	45 (75.00)	39 (65.00)	0.3193
No	15 (25.00)	21 (35.00)	

When time required to reach the respective health center was considered, about 35 (58.33%) patients from funded health centers required traveling time less than 30 min as compared to 38 (63.33) in non-funded health centers. (Table 2)

All of the study population has noticed that health centers have sign board in local language. Taking waiting time and space at the health center into consideration, it was found that 39 (65.00) patients from funded health centers, were satisfactory. There was direct association of funded/ non-funded health centers when waiting time and space were considered. (P= 0.0033)

Regarding availability of doctor (p = 0.0399), investigation facilities (P=0.0422), getting free treatment (P=0.0157) at health centre, clean drinking water (P=0.044) and cleanliness of toilet (P=0.01) significantly more number of patients from funded PHCs than non funded PHCs were satisfied. (Table 2)

## DISCUSSION

In the present study outpatient satisfaction related to quality of care at primary health centers in Sa-

tara district of Maharashtra was assessed. Most patients were from adult age group (31-45 and 61-75). Since these patients were randomly selected from the study population they represent the age group of patient visiting the health facility. It will be expected that old age people due to their various morbidities were the frequent visitor of the health facility. Anand D et al reported that patients of age group 31-40 (29%) years most commonly visited to primary health facilities and percentage of male patients seeking health facility was in majority and 65% of patients were illiterate<sup>11</sup>. While a study conducted at Egypt reported that majority those using primary health care facilities were middle-aged and female<sup>12</sup>. In the present study 44 (36.67%) patients were educated up to primary level. Since the study was conducted in rural area it was expected that the patients visiting the health facility were from lower socioeconomic strata thus have low education. Low education and thus low productivity leads to low socio-economic condition and it itself is vicious cycle which could only be broke by proper education.

In the present study 66 (55.00%) patients were farmers. Agricultural and its related activities are the most important income generating activities in rural areas hence the results. If ease of accessibility was considered 42 (70.00%) patients from funded PHC were satisfied as compared to 32 (53.33) in non-funded PHCs. When time required to reach the respective PHCs was considered, about 35 (58.33) of funded PHCs required traveling time less than 30 min as compared to 38 (63.33) in non-funded PHCs. As per definition of primary health care accessibility of health care facility is essential<sup>13</sup>. According to Kumari R et al<sup>14</sup> primary level health facilities were the most easily accessible (88.3%) and required less travel time. In a Saudi Arabian study 13% of patients were dissatisfied with accessibility to health care centres<sup>15</sup>. Though improvement was expected with IPHS fund, it was only true for newly formed PHCs. Most of the PHCs selected were established before the inception of NRHM program. Hence improvement in this field was not expected.

All of the study population has noticed that health centers have sign board in local language. This is the most basic thing any institute has and accordingly it was present. Taking waiting time and space at the health center into consideration, it was found that 39 (65.00) patients amongst funded PHCs, were satisfactory as compared only 22 (36.67) patients attending non funded PHCs were satisfied. There was direct association of funded/ non-funded when waiting time and space were considered. (P= 0.0004). Patients from funded health center were significantly more satisfied as compared to non-funded health center. According to

Kumari (2009) et al<sup>14</sup> amongst the patient visiting the health center, 99.5% satisfied with respect to waiting time and space. Anand D. et al<sup>11</sup> observed that level of satisfaction for waiting time was highest at primary level. A good space available at funded health centre and also various quality services offered during this waiting period like flex denoting various health education might be one of the reason. This was only possible because of availability of funds. Also time of waiting was relative term; a well spent time will always give positive results and no patient will have complaint against this. It was also found that there was direct association of funded/ non-funded PHCs, when availability of clean drinking water ( $P=0.044$ ), cleanliness of toilet ( $P=0.01$ ), getting free treatment ( $P=0.0422$ ), availability of almost all necessary investigation ( $P=0.0157$ ) when taken into consideration. In other words patients selected from funded health center were more satisfied than those selected from non-funded PHCs. A study reported that only 2.9% of patients attending PHC feel that the toilet is clean<sup>14</sup>. The funds released has helped to buy new instruments like Water purifiers, water coolers and fans in waiting room. Also toilets facilities available at funded PHCs have improved. Also a better funded Health center with well-equipped laboratory and all essential and desirable drugs will provide quality health services. This study indicates the same. Regarding availability of doctor and investigation facilities patients from funded PHCs were more satisfied than non funded PHCs. Physicians should be encouraged to be punctual and attentive to the appointment schedule so as not to cause too long a wait among patients<sup>16-19</sup>.

## CONCLUSION

It can be concluded that availability of funds under Indian Public Health Standards (IPHS) has increased the quality of health care at the primary health centres and thus patients satisfaction.

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