

Original Research Article

A study on waiting time and out-patient satisfaction at Gujarat medical education research society hospital, Valsad, Gujarat, India

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ABSTRACT

Background: Gujarat Medical Education Research society started GMERS medical college and tertiary care Hospital in Valsad since last 4 years. As civil Hospital is converted in to tertiary care hospital and many of the departments running in different buildings so, searching the concern OPDs is difficult for patients, waiting time and patients satisfaction is important to avail the services. Patient satisfaction is one of the important goals of any health system, but it is difficult to measure the satisfaction. Aims & objectives were (1) to study the waiting time at various Out Patient Department (OPDs). and various investigation; (2) To study the accessibility of various department of hospital; (3) To study the patient satisfaction on hospital process, behavior of hospital staff and treatment cost.

Methods: This was a cross sectional observational study conducted in G.M.E.R.S. Hospital-Valsad for the period of 2 months and total 135 patients were interviewed availing the OPD Services.

Results: The mean age of patient attending the OPD was 30.31 ± 15.65 years and majority of them are female patient (54.07%). Hospital staff (48.89%) was main source of guidance for searching the OPDs for consulting the doctor. 54.07% patient registered 20 min after standing in queue. The mean waiting time was 12.16 ± 2.35 min. 94.07% and 98.52% patients were satisfied with treatment cost and behavior of staff respectively.

Conclusions: Many patients face the difficulties in finding the various departments. On an average 12 minutes of waiting time outside the various O.P.Ds. They were also satisfied with the treatment cost and behaviour of hospital staff.

Keywords: Hospital, OPD, Patients satisfaction, Waiting time

INTRODUCTION

OPD is considered as the window to hospital services and a patient impression of the hospital begins at the OPD. This impression often influences the patient's sensitivity to the hospital and therefore it is essential to ensure that OPD services provide an excellent experience for consumer. It is also well established that 8-10% of OPD patients need hospitalization.¹

In this study, the OPD is defined as the hospital's department where patients received diagnoses and/or treatment but did not stay overnight.¹

Patients spend substantial amount of time in the clinics, waiting for services to be delivered by physicians and other allied health professionals. The degree to which health consumers are satisfied with the care received is strongly related to the quality of the waiting experience.

Patients' waiting time has been defined as, "the length of time from when the patient enters the out-patient clinic to the time patient actually leaves the OPD".¹

Waiting time refers to the time a patient waits in the clinic before being seen by one of the clinic medical staff. Patient clinic waiting time is an important indicator of quality of services offered by hospitals. The amount of time a patient waits to be seen is one factor which affects utilization of healthcare services. Patients perceive long waiting times as a barrier to actually obtaining services. Keeping patients waiting unnecessarily can be a cause of stress for both patient and doctor. Waiting time is a tangible aspect of practice that patients will use to judge health personnel, even more than their knowledge and skill.

The duration of waiting time varies from country to country, and even within country it varies from center to center. Long waiting times have been reported in both developed and developing countries. It is often one of the most frustrating parts about health care delivery system. So it is an important to improve the waiting time of the out-door patients.

Measurement of patient satisfaction has become common place in many healthcare settings due to its impact on quality of care. It has been known for some time that satisfied patients are more compliant with treatment, remaining with a physician, and maintain appointments.²

"Patient's satisfaction is a measures of the extent to which a patient is content with the health care which they received from their health care provide".¹

Patient satisfaction is one of the important goals of any health system, but it is difficult to measure the satisfaction and gauge responsiveness of health systems as not only the clinical but also the non-clinical outcomes of care do influence the customer satisfaction.³

In this it is important to know about the factors affecting the satisfaction of out-door patients. This includes.

- Out patients department services
- Logistic arrangement in the out patients department
- Waiting time
- Facilities
- Perception about the performance of the staff
- Appointment system
- Behavior of staff
- Support service.⁴

Patient's perceptions and satisfaction about health care systems seem to have been largely ignored by health care managers in developing countries. Mismatch between patient expectation and the service received is related to decreased satisfaction. Therefore, assessing patient perspectives gives them a voice, which can make public

health services more responsive to people's needs and expectations.³

In the recent past, studies on patient satisfaction gained popularity and usefulness as it provides the chance to health care providers and managers to improve the services in the public health facilities. Patients' feedback is necessary to identify problems that need to be resolved in improving the information systematically, to improve care delivery and services, this type of feedback triggers a real interest that can lead to a change in their culture and in their perception of patients.⁵

A well managed, neat and clean hospital with necessary information boards and proper directions generally provide good image. Successful and efficient management of OPD can also lighten the burden on the patient wards.⁶

As patient's satisfaction is an important component of the health care industry in this competitive modern era. So present study was conducted to know the difficulties face by patients while searching the various OPDs/departments, waiting time at OPDs, various investigation departments, patient's satisfaction and to get feedback about service provided at GMERS Hospital-Valsad.

METHODS

A cross-sectional, observational study conducted at G.M.E.R.S. Hospital-Valsad from 1st June 2015 to 31st July 2015 for the period of 2 months.

A total 135 patients enrolled for study purpose include those patients who seeking the treatment from various Outdoor Patients Departments running in this hospital. 15 Patients randomly selected from each of nine OPDs with following inclusion and exclusion criteria.

Inclusion criteria

All age and both sex of patients attending various out patients departments (OPDs). For pediatric patient response was noted from attendant.

Exclusion criteria

Those patients seeking emergency Medical Services, Those who refuse to participate, Medical Students and Hospital Staff.

In this study patients evaluation was started while presenting at hospital dispensary. Each patient was randomly selected with inclusion and exclusion criteria. The purpose of the study was explained to each participant before interviewing.

Clinical data from each patient will be recorded to identify the type OPDs. Data was collected in perform,

pretested performa containing patient's demographic details like patient's name, age, sex, address. Other part of the performa contained which OPD they visited, time spent in searching the OPD, time spent for investigation, Waiting time at OPD, time spent at dispensary and inquired whether he/she is satisfied with hospital staff and health care services available in this institute.

15 patients randomly selected from each of nine OPDs. Total 135 patients were interviewed.

Data was entered and analyzed with the help of MS Excel- 2008 and an appropriate statistical test was applied when needed.

RESULTS

Table 1 shows that majority patients attending the OPDs was belong to 20 to 40 years of age group (54.08%) followed by 0-20 years of age group (23.70%), and 40-60 years of age (17.04%). Mean age of patient attending the OPD was 30.31±15.65 years. Of which female 73 (54.07%) patients are more than the male 62 (45.93%).

Out of 135 patients 55 (40.74%) are having primary education, 20.74% having secondary level of education followed by illiterate (16.3%), higher secondary (11.85%) and graduate and post graduate (8.14%) (Figure 1). Level of education may affect the searching time for OPD.

Table 1: Age and sex wise distribution of patients attending the OPDs.

Age (years)	Male numbers (%)	Female numbers (%)	Total numbers (%)
0-10	06 (09.68)	09 (12.33)	15 (11.11)
10-20	07 (11.29)	10 (13.70)	17 (12.59)
20-30	23 (37.09)	27 (36.98)	50 (37.04)
30-40	11 (34.37)	12 (16.44)	23 (17.04)
40-50	06 (09.68)	09 (12.33)	15 (11.11)
50-60	03 (04.84)	05 (06.85)	08 (05.93)
60-70	05 (08.06)	01 (01.37)	06 (04.44)
70-80	01 (01.61)	00 (00.00)	01 (00.74)
Total	62 (45.93%)	73 (54.07%)	135 (100%)

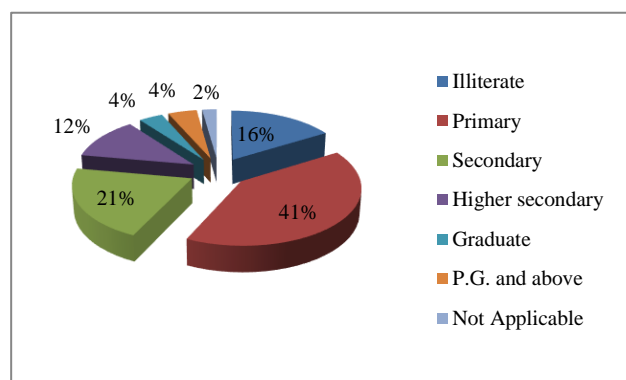


Figure 1: Education wise distribution of patients attending the hospital.

Out of 135 patients 62 (45.93%) registered within 10 minutes and 54.07% patient registered 20 minutes after standing in queue. Registration time depend upon time of visiting the counter, patients flow in hospital, numbers of registration counter etc. Longer duration of time spent for registration cause inconvenience to the patients (Table 2).

Majority of patient 95 (70.37%) were waited up to 10 minutes, while 40 (29.63%) patients waited more than 20 minutes outside the OPD while seeking for medical care in concern OPDs. The mean waiting time was 12.16±2.35

min. Longer waiting time at OPD may causes a negative impact on patient's satisfaction.

Table 2: Time spent at registration counter and waiting time outside the OPDs.

A. Time spent on Registration Counter	
Time in minutes	Number (%)
0-10	62 (45.93)
10-20	00
20-30	42 (31.11)
>30	31(22.96)
B. Waiting time outside the OPDs	
Waiting time in minutes	Number (%)
0-10	95 (70.37)
10-20	00
20-30	23 (17.04)
>30	17 (12.59)

The main source of information for finding the OPD in this hospital was hospital staff on duty 66 (48.89%) and also medical students 15 (11.11%). 48 (35.56%) of patient searches the OPD by reading the signboards (Table 3).

Table 3: Source of guidance received by patient for searching the OPD.

Source	Numbers (%)
Hospital staff	66 (48.89)
Signboards	48 (35.56)
Students	15 (11.11)
Others	06 (04.44)
Total	135 (100)

Many of time patient have impression that doctor is not present in public hospital while seeking the treatment at hospital but in contrast to this 97.4% patient told that consulting doctor is available in OPD at the time of their visit. Out of 135 patients 118 (87.41%) were told that they were examined by doctor before prescribing the medicine. Privacy was maintained in all female patients 73 (100%) with presence of female attendant 72 (98.63%) during examination (Figure 2).

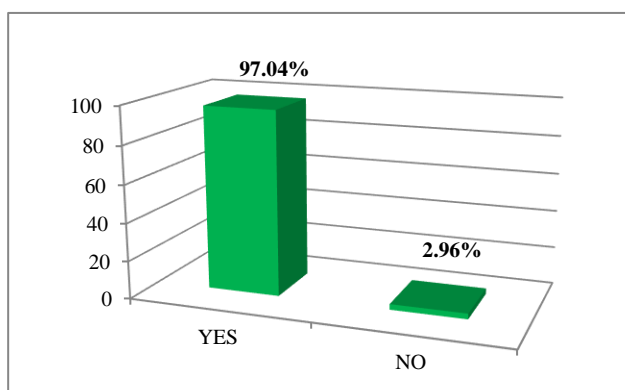


Figure 2: Availability of doctor in OPD while patient attending the OPD.

In present study 118 (87.41%) were examined by doctor in concern OPD and Privacy was maintained during examination. 12.59% of patients told that they were not examined by doctor and 103 (76.3%) told that they were examined in less than 5 minutes for their complain (Table 4).

Table 4: Distribution of patients as per examination time spent by doctor.

Examination time (min)	Number	Percentage
0-5	103	76.30
5-15	13	09.63
15-30	2	01.48
NA	17	12.59
Total	135	100

Table 5 (A) showed that 133 (98.52%) patients were satisfied with the behavior of hospital staff. 127 (94.07%) of patient were satisfied with the treatment cost while seeking the medical care at GMERS Hospital, Valsad.

Patient satisfaction directly affects the patient load of Hospital.

Table 5: Patients satisfaction.

A. Satisfaction to treatment cost for hospital services	
Cost satisfaction	Number (%)
Yes	127 (94.07)
No	06 (04.45)
No reply	02 (01.48)
B. Satisfaction on behavior of hospital staff	
Behavior of staff	Number (%)
Satisfactory	133 (98.52)
Unsatisfactory	02 (01.48)

DISCUSSION

As civil hospital is converted in to tertiary care hospital, patient’s satisfaction is important to avail the services so this study was conducted to know the patient satisfaction toward health services in this institute.

In our study majority patients attending the OPDs was belong to 20 to 40 years of age group (54.08%) followed by 0-20 years of age group (23.70%), and 40-60 years of age (17.04%). The mean age of patient attending the OPD was 30.31±15.65 years. Of which female patients are more (54.07%) than the male patient (45.93%).

A study conducted in same institute by Virmani V et al found that patients visiting the OPD constitute mostly of middle age and 61% of the OPD patients were female patients.⁷ Similar finding was noted by a Kolade J Obamiro in his study at Nigeria that majority of patients were female (65%) dominated with patients of 18 to 24 ages (45%).⁸ Nandkeshav A et al in their study at Naded, Maharashtra found that Out of 320 respondents, 40.3% were males and 59.7% were females. Mean age of the patient was 38.53 years.⁹ While Sharma A et al in their study at Madhyapradesh showed that 52% were male patient, 48% were female and majority of patients belonged to age group 15- 45 years with mean age of 42.9±19.53 years.¹⁰

Umar I et al in their study noted that 45% of the respondents were males while there were 55% females and ages of the respondents ranged from 20 to72 years with a mean age of 38 years which was low compared to the mean age of 45 years obtained in a similar study in Karachi, Pakistan.^{11,12}

In our study 40.74% patients are having primary level of education, 20.74% having secondary level of education followed by illiterate (16.3%), higher secondary (11.85%) and graduate and post graduate (8.14%). Level of education may affect the searching various department of hospital.

In study conducted by Sharma A et al noted that 22% of patients were graduate and above followed by primary education (26%), higher secondary education (20%), middle school (18%) and illiterate (14%).¹⁰ Umar I et al noted that 42.0% of the respondents had no formal education while 58% had formal education with 14% of them attaining tertiary education.¹¹ In study conducted by Nandkeshav AR et al only 59% of the patients completed their primary level education.⁹

In our study we found that 45.93% of patients were registered within 10 minutes on registration counter while 54.07% patients were registered 20 minutes after standing in queue. Registration time may be affected by factors such as number registration counter, day of visit to the hospital, timing of visit at hospital etc.

Nandkeshav AR et al in their study observed that only 4.1% respondents spent more than 30 minutes in a queue to get the OPD Card. 46.2% spent less than 10 minutes for getting card, 41.9% spent 10 to 20 minutes while 07.8% respondents got OPD cards within 20-30.⁹ Similar finding was observed by Virmani V et al in same institute and showed that 32% patients wait for approximately more than 20 minutes at the registration counter and it was observed that longest queue were seen during 8 am to 10 am at the counter.⁷

According to standard operating procedures of OPD for district level hospitals waiting time for collection of OPD ticket is one minute, waiting time of 2-3 minutes for dispensing medicine and time for lab investigation is 10 minutes.¹³ In comparison to these standards waiting time, the findings of this study showed that it is rather longer.

In present study we noted that majority of patients (70.37%) were waited up to 10 minutes, while 29.63% patients waited more than 20 minutes outside the various OPDs while seeking for medical care. The mean waiting time was 12.16 ± 2.35 min.

In study conducted by Sharma SK found the mean waiting time of patient while consulting the doctor was 13.35 minutes.¹⁴ Virmani V et al found that 33% patients have to wait for more than 20 minutes and 14% patients have to wait for 15 to 20 minutes outside the consultation room and it was observed that the waiting time is more outside the medicine, surgery and gynecology consultation rooms.⁷

Nandkeshav AR et al found significant statistical association between less waiting time and satisfaction expressed about OPD services. Increase waiting time at OPD causes a negative impact on patient's satisfaction; hence health care facility performance can be best assessed by measuring the level of patient's satisfaction.⁹ Similar finding was noted by the medical practitioners and health institute (Institute of Medicine) acknowledged that long waiting time results to patient dissatisfaction and had therefore recommended that majority (not less

90%) of patients should be served within 30 minutes of their scheduled appointment time.¹⁵⁻¹⁷

The mean waiting time observed by Umar I et al in their study at tertiary health institution in Northern Nigeria was 85 min.¹¹ This is high when compared to the findings from similar studies in other centers with lower figures for waiting time.^{12,18,19}

Umar I et al also showed that, the patients who waited longer (≥ 60 min) expressed dissatisfaction with services rendered in the OPDs ($P < 0.089$). The number of patients who expressed satisfaction (45%) with the services in the OPDs.¹¹

In present study the main source of guidance for finding the OPDs was hospital staff on duty (48.89%) and Medical students (11.11%). While 35.56% of patients searches the OPD themselves by reading the signboards.

Sharma A et al in their study said that 72% respondents were satisfied with convenient to reach appropriate OPD, 80% of respondents said that finding of consultant easy and were satisfied, 56% satisfied with convenient to reach investigation site.¹⁰

Many of time patients have impression that doctor is not present in public hospital while seeking the treatment at hospital but in contrast to this, 97.4% patient told that consulting doctor is available in OPD at the time of their visit. 87.41% patients were told that they were examined by doctor before prescribing the medicine. 76.3% told that they were examined in less than 5 minutes, 9.63% were examined in 5-15min, 1.48% were examined for 15-30 min and 12.59% were not examined by doctor for their complain.

In study conducted by Sharma A et al found that 56% were examined for Less than 5 min, 34% were examined for 5-15 min, 4% examined for 15-30 min and 6% were examined more than 30 min.¹⁰ While in study conducted by Jadhav SB et al time taken for consultation & examination by doctor was found to be satisfactory in case of 68.82% participants.²⁰

In present study we noted that 98.52% patients were satisfied with the behavior of hospital staff. We also noted that 94.07% of patients were satisfied with the treatment cost while seeking the medical care at GMERS Hospital, Valsad. Patient satisfaction directly affects the patient load of Hospital.

In study conducted by Sharma A et al found that 78% of patients were satisfied with doctor's behavior, 64% were satisfied with behavior of nurses and paramedical staff and 94% told that they preferred to recommend the same hospital to their relatives and friend also. The overall satisfaction level was excellent to good in 73% respondents, average in 22% and poor in only 5%.¹⁰

In Nandkeshav AR et al study total satisfaction of patients with OPD services was observed in 65.3% respondents.⁹ The study conducted by Chetwynd SJ reported total satisfaction was 49%.²¹ Kumari R et al in their study total satisfaction was 73%.²² Patavegar et al showed 50.89% are satisfied.²³

Ibrahim A et al showed 10% overall satisfaction in their study which was low in comparison to other studies.²⁴

Obamiro JK in his study at Nigeria showed that entire medical personnel responsiveness to patients' requests are extremely satisfactory (89%). Majority of the respondents claimed that their expectations were met (80%). Meeting patients' expectations resulted to satisfaction with service delivery.⁸

Umar I et al showed that, only 45% of the patients were actually satisfied with the services in the OPDs.¹¹ This is in contrast with the findings from Ibadan and India where high levels of satisfaction with services assessed were observed by Ajayi et al and Prasanna et al respectively. This difference could be explained by hospital and socio-cultural settings and also the availability of medical resources.^{25,26}

CONCLUSION

The present study was aimed at studying the waiting time and out patient satisfaction at our hospital. Our observation reveals that many patients face the difficulties in finding the various OPDs. On an average 10 minutes of waiting time outside the various O.P.D. and other departments. Maximum numbers of patients were female, mainly housewives and privacy was maintained with a female assistant during their examination by doctor. Patients were satisfied with treatment provided and they were also satisfied with the behavior of hospital staff.

As GMERS Medical College Hospital Valsad is coming up with the new hospital building, it is expected that infrastructural issues can be taken care during the planning and development stage. Assessment of patient's satisfaction is cost effective way for evaluation of health care services.

Recommendations

- Patient satisfaction assessment should be conducted regularly.
- In OPDs, complaint and suggestion box should be kept, so that patients can freely put their complaints and suggestions.
- A help desk facility should be provided nearby the registration counter for the patient's convenience in finding OPDs.
- Sign board directing various OPDs and other departments should be in local language, located at

properly visible sites or create some color coding method for easy access of OPDs

- All department need to be shifted in new building with better infrastructure and facilities.

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