



Original Research Article

Patients' Waiting Time and Their Satisfaction of Health Care Services Provided at Outpatient Department of Government Medical College, Nanded (Maharashtra, India)

Aswar Nandkeshav R¹, Kale Kalpana M¹, Rewatkar Mangesh P², Jain Akanksha³, Barure Balaji S³

¹Associate Professor, ²Medical Officer, ³Post Graduate Student,
Department of Preventive and Social Medicine, Dr. S.C. Government Medical College, Nanded, Maharashtra, India.

Corresponding Author: Aswar Nandkeshav R

Received: 21/02/2014

Revised: 19/03/2014

Accepted: 22/03/2014

ABSTRACT

Background: 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.

Methods: Present time motion study was done at the OPD of Govt. Medical College and Hospital, Nanded. Study population consisted of patients attending the outpatient clinics in the hospital. Thus 320 respondents, (40.3% males and 59.7% females) were studied and interviewed for the present study.

Results: Each patient required 75.5 minutes waiting time to avail the OPD services. Various factors contributing long waiting time were- registration clerk not attending duty on time, taking more time to register the patient, difficulties in locating rooms, rush, doctors coming late on duty, doctors, pharmacists talking on mobiles, VIP patients jumping queue etc. Total satisfaction with OPD services was observed in 65.3 percent respondents. Association was observed between waiting time and total satisfaction and between times spent with doctor and total satisfaction.

Conclusion: Improving patient's satisfaction towards health care services by reducing their waiting time, attending the patient in time and sympathetic approach will create a positive image of hospital in the mind of people and also will help hospital image building in the community.

Key words: Waiting time, satisfaction, OPD.

INTRODUCTION

During the last decade the number of patients seeking out patient department services has increased many folds, but the facilities in the OPD have not increased at the same rate. Patients are attended in various OPD within the hospital system, but almost invariably, a high percentage of these patients arrive and leave the hospital at various times. The amount of time the

patient waits to be seen, is one factor which affects the utilisation of health care services.^[1,2] In a competitively managed health care environment patient waiting time play an increasingly important role in a clinics ability to attract new business. It is difficult to sell services if individuals are dissatisfied with waiting time.^[3] Patient satisfaction has emerged as an increasingly important parameter in the assessment of

quality of health care; hence health care facility performance can be best assessed by measuring the level of patient's satisfaction.^[4] Because of great volume of ambulant patients in most communities, an efficient outpatient department (OPD) in hospital is clearly of critical importance. This is more because of lower cost of outpatient services compared to in-patients.^[5] In most developing countries, the outpatient department is over-crowded. Patients are mixed together and any attempt to impose rules fails before such a huge attendance.^[6] Patients coming to hospital for treatment lose their valuable time which ultimately cause many more difficulties. So, increase waiting time causes a negative impact on patient's satisfaction.^[7] It is revealed that there is significance difference between the patients and their physician's view of patients waiting time in OPD care and perspective to improve the situation.^[8] As majority of the people come in contact with the OPD services of the hospital so it is the area of importance to satisfy and address the peoples demand accordingly and in an effective way.^[9] Waiting time is the time required just after patient's arrival at the OPD to meet his health needs. It is the total time elapsed in circulating the patient from one room to another. These include the time spent for collecting the treatment ticket, for attending the physician, for submission of samples for investigations and for collecting medicines including receiving instructions for their use. Patient's waiting depends on many factors including efficiency, sincerity and punctuality of the health care providers as well as the existing facilities of the institution.^[10] Different studies have been done on public hospitals mainly at emergency department and inpatient departments, but not as much at OPD of a government health care facility like teaching hospitals. A study of this nature is critical to public appreciation of the quality of health

care operating environment. Hence this study was aimed at assessing patients waiting time and factors affecting waiting in the OPD and their satisfaction towards some services rendered at OPD.

MATERIALS AND METHODS

This time motion study was done during September and October 2012 at the Out Patient Department of Govt. Medical College and Hospital, Nanded.

This teaching hospital in Marathwada region of the Maharashtra state of India serves as a reference Centre and has a 500 bed capacity and runs outpatient clinics in various medical specialties.

The study population consisted of patients attending the outpatient clinics in the hospital and based on the high patient turn out medicine, surgery, ophthalmology and gynecological outpatients were used for the selection of the study subjects.

Permission was obtained from the concerned authority before undertaking the study. There are four OPD registration counters. Total daily OPD census is about 800. From each registration counter daily two patients were selected from the queue. Thus daily 8 patients were interviewed. Thus during two months period total 336 patients were studied. First patient from each counter was selected as soon as the patient enters the hospital gate and joined the queue for registration ticket. The patient was followed from joining the queue at registration counter till the exit gate of the hospital without their knowledge. The next patient was selected after interviewing the first patient. At the time of their exit the respondents were greeted and told about the purpose of the study before interviewing. Data was gathered using a set of comprehensive and pretested questionnaires which sought such information as - causes of long waiting period and the level of satisfaction with services offered by the

hospital. Satisfaction was assessed using Likert's five rating scale.^[11] A stop watch was used to record the time spent in waiting at various stages.

Patient below 18 years of age, Patient himself or their relatives working in the health care facility and critically ill patients were excluded from the analysis.

Ethical approval was obtained from the institutional ethical clearance committee. Informed verbal consent of the patients was obtained and each patient enlisted was given the option to opt out when necessary.

Data was entered in the Microsoft excel sheet and analysed using the software EPI-Info version 2.3. Discrete data was analysed using Chi square test for normal distribution; value <0.05 was considered significance.

Observations: Out of 336 randomly selected patients, 16 patients were excluded which included patients age below 18 years-2, patient himself or their relatives working in

the hospital-3, critically ill- 7 and those who refuse to participate-4. Thus lastly 320 patients were studied and interviewed for the present study.

Out of 320 respondents, 129 (40.3%) were males and 192 (59.7%) were females. Mean age of the patient was 38.53 years.

174 (54.4%) patients visited the OPD first time for the present illness while 52 (16.3%) respondents visited OPD for follow up visits. 94 (29.3%) respondents visited the OPD as they were referred from other health care services like PHCs and Sub centres.

Table 1 shows time spent for various activities at OPD by respondents. It is observed that only 13 (4.1%) respondents spent more than 30 minutes in a queue to get the OPD Card. 148 (46.2%) spent less than 10 minutes for getting card, 134 (41.9%) spent 10 to 20 minutes while 25 (04.1%) respondents got OPD cards within 20-30 minutes of time.

Table I: Time spent for various activities at OPD by respondents.

Time taken in minutes	No. of respondents	Percentage	
Time taken to get OPD card(n=320)	<10	148	46.2
	10-20	134	41.9
	20-30	25	07.8
	>30	13	04.1
Time taken to attend physician/ surgeon after getting OPD card(n=320)	<10	78	24.4
	10 – 20	187	58.4
	20 – 30	27	08.4
	>30	28	08.8
Time spent to attend laboratories and get investigations done(n=157)	<20	39	24.8
	20 – 30	54	34.4
	30 – 60	55	35.0
	>60	09	05.8
Time spent for getting medicines and receiving instructions(n=320)	<10	97	30.3
	10 – 20	184	57.5
	20 – 30	28	08.8
	> 30	11	03.4

187 (58.4%) respondents spent 10 to 20 minutes to attend the doctor after receiving the OPD card, 27 (8.4%) spent 20 to 30 minutes. 28 (8.8%) spent more than 30 minutes while 78 (24.4%) spent less than 10

minutes for this purpose. Each respondent spent on an average 15.9 minutes (± 1.9 minutes) to attend the doctor after getting OPD card.

55 (35.0%) and 54 (34.4%) respondents spent 20-30 minutes and 30-60 minutes for investigation procedure. 9 (6.8%) respondents required to spend more than 60 min. for it while 39(24.8%) spent less than 20 min. for this purpose. This time was required only for giving samples to the laboratories and to get other investigations like x-ray, ECG etc done. This time did not include the time required for getting the investigation results. The average time required for investigations was 39.5 minutes (± 5.6 minutes)

Almost half of the respondents i.e. 57.5% spent 10-20 minutes for getting medicine. 30.3% spent less than 10 minutes for it. 8.8 % respondents spent 20-30 minutes while 3.4% spent more than 30 minutes for getting drugs. The average time spent by each respondent for this purpose was 10.3 minutes (± 0.56 minutes)

Average time required for Getting treatment card was 9.8 minutes, for attending physician was 15.9 minutes, for investigation procedure was 39.5 minutes and for getting medicine and instructions was 10.3 minutes. Thus total average time required for each respondent to avail the OPD services was 75.5 minutes.

Table 2 shows that time spent by respondents with doctor. 230 respondents spent more than 10 minutes with the doctor for their illness of which 212 were satisfied with the doctor's services rendered for him or her while 90 respondents spent less than 10 minutes with doctor of which 47 were satisfied about the services. The respondents who spent more time with doctor were found to be satisfied. Statistically this association is significant. ($X^2 = 69.6$, $df=1$, $p<0.05$)

Table II: Distribution of respondents by time spent with doctor for health check up and their satisfaction about it .

Time spent with doctor	No. of respondents (%)		Total
	Satisfied	unsatisfied	
<10 minutes	47(52.2)	43(47.8)	90(100)
>10 minutes	212(92.2)	18(07.8)	230(100)
Total	259(80.9)	61(19.1)	320(100)

($X^2 = 69.6$, $df=1$, $p<0.05$)

Table 3 depicts the responses of patients towards various services. Patients who scored 3 or more are considered satisfied while those who scored less than 3 are considered unsatisfied. It is observed that 209 (65.3%) respondents were satisfied about the registration services while 111 (34.7%) respondents were unsatisfied. These respondents were unsatisfied about the waiting area near registration counter and about communication and information provided by registration counter clerk.

Table III: Distribution of respondent's responses of satisfaction towards various OPD services.

Various services	Level of satisfaction (%)				
	5 (very satisfied)	4 (satisfied)	3 (neutral)	2 (dissatisfied)	1 (very dissatisfied)
Registration service	27(08.4)	71(22.2)	111(34.7)	95(29.7)	16(05.0)
Physicians services	42(13.1)	83(25.9)	134(41.9)	49(15.3)	12(03.8)
Laboratory services	38(11.9)	116(36.2)	136(42.5)	24(07.5)	06(01.9)
Pharmacy services	21(06.6)	124(38.7)	134(41.9)	24(07.5)	17(05.3)

As far as physicians services are concerned, 259 (80.9%) were satisfied while 61 (19.1%) were unsatisfied about physician's services. These respondents were unsatisfied about the examination done

by doctor, about the advice given by doctor and about the time taken by the doctor for examination.

In present study 290 (90.6%) respondents were satisfied about services

rendered by laboratory while only 30 (09.4%) were unsatisfied about these services. The reason for their unsatisfaction was –required more time for the investigations like x-ray etc.

About the pharmacy services, 279 (87.2%) were satisfied while 41 (12.8%) were unsatisfied about the services. Their unsatisfaction is related to non availability of drugs and arrogant behaviour of the pharmacy staff.

The mean of total score was found to be 13.11. For total satisfaction those securing equal and more than mean were labeled as satisfied. Similarly, those securing less than mean were classified as unsatisfied. It was noted that 209 (65.31%) respondents showed total satisfaction towards various OPD services while 111 (44.69%) were showing total unsatisfaction.

From table 4, it is found that out of 222 respondents who spent less than 30 minutes at OPD, 188(84.7%) were satisfied about the OPD services while 34 (15.3%) were unsatisfied. Out of 98 respondents who spent more than 30 minutes at OPD to avail services, only 21 (21.4%) were satisfied while 77(78.6%) were unsatisfied. There is a significant statistical association between less waiting time and satisfaction expressed about OPD services. ($X^2 = 120.07$, $df=1$, $p < 0.001$)

Table IV: Waiting time and satisfaction level.

Total Waiting time	Respondents (%)		Total
	Total Satisfaction	Unsatisfaction	
<30 minutes	188(84.7)	34(15.3)	222(100)
>30 minutes	21(21.4)	77(78.6)	98(100)
Total	209(65.3)	111(44.7)	320(100)

($X^2 = 120.07$, $df=1$, $p < 0.001$)

DISCUSSION

Patients visiting the hospital require several activities to perform at the OPD. Adding mean time of different activities a patient required 75.5 minutes on an average as waiting time.

Afzal in his study showed that patients waiting time at medical OPD was 2.35 hours.^[12] Unlike the present study, this study included the consultation time with the physician as well as the time taken for the investigations.

ErshadUr Rahim et al in their study found that each patient spent on an average 66.64 minutes to avail OPD services.^[13] This finding is similar to the present study.

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.^[14] In comparison to these standards waiting time, the findings of this study showed that it is rather longer. The various factors contributing such long waiting time were- registration clerk not attending duty on time, taking more time to register the patient, difficulties in locating rooms, rush, no one to help, doctors coming late on duty, doctors , pharmacists talking on mobiles, VIP patients jumping queue etc. Most of these problems could be overcome with little efforts from the part of health care providers. Appropriate markings showing directions, increase number of man power, making compulsions to attend duty on time, switching off mobile or its meticulous use during duty hours and sympathetic approach of the staffs will help to reduce the OPD waiting time and to increase their satisfaction towards services rendered. In the present study total satisfaction with OPD services was observed in 65.3% respondents. This result is little bit more than that observed by Patavegar et al^[15] and Chetwynd S.J.^[16] In their studies total satisfaction was 50.89% and 49% respectively. In the study conducted by Ranjeeta Kumari et al,^[17] total satisfaction was found to be 73%. In the present study, statistically significant association was

observed between waiting time and total satisfaction and between times spent with doctor and total satisfaction. Similar type of findings was also observed by Patavegar et al.^[15] Patients visiting the OPD are already in pain or sufferings. Naturally they want to visit doctor to take treatment as early as possible so that they get relieved from sufferings. Patients who wait for longer time naturally had less satisfaction level.

CONCLUSION

Thus improving the satisfaction of patients towards health care services by reducing their waiting time, by attending the patient in time and with sympathetic approach will help to create a positive image of hospital in the mind of people and also will help hospital image building in the community.

REFERENCES

1. Fernandes C.,Daya M., Barry S., Palmer N. Paediatric emergency department patient who leave without seeing a Physician: The Toronto Hospital experience. *Ann. Emer. Med.*1994; 24:1092-1096.
2. Dos Santos L. Stewart G. Rosenberg N. Paediatric emergency department walkouts. *Ped. Emer. Care.* 1994; 10:76-78.
3. Mackey TA, Cole FL. Patient waiting time in Nursing Managed Clinic. *The int. j. Adv. Nur.Practice.* 1997; 1:1.
4. Kishore J. Health Care Delivery System in India. J. Kishore's National Health Programs of India, National Policies and legislations related to Health. 9th edition. Century Publications.2010:72-75.
5. Hoque MS. In: Hospital and Health Care Management, First edition. Dhaka: Pinki Computer Service. 1994:36-40.
6. Liwwelyn, Davies R. In: Hospital Planning and Administration. Geneva: WHO. 1995:105-111.
7. Colin G. In: Hospital Management, First edition. Edinburg, London: Churchill Livingstone. 1973: 24, 104, 109, 112.
8. Richard DL, Herbert SW. In: Organisation and Administration of Health Care Theory, Practice, Environment, Second edition, Saint Louis: The CV Mosby Company. 1974:102-103.
9. Maurice K. In: Medical Care in Developing countries. London: Oxford University Press. 1966: 11:1, 12:5, 12:6.
10. Gibony Jr. MC., In: Principles of Health Administration, Second edition New York'; GP Putnam's Sons, 1959.
11. Likert R. A technique for the measurement of attitudes, *Archives of Psychology.* 1932; No. 140.
12. Afzal HT. A study on management of outpatient department of Rabeta Hospital, Cox's Bazaar. *NIPSOM.* 1992:67
13. Ershadur Rahim, MizanurRahman, Abu Mohammad Talukdar, Khwaja Shajed Anwar. Waiting Time of the Patients at Medical College OPD of Dhaka Medical College Hospital. *J. Med. Sci. Res.* 2007; 08:16-20.
14. Director General of Health Service. Standards for district hospitals. Development of health care quality assurance project. 1997:9-15.
15. Patavegar Bilkish N., ShelkeSangita C., AdhavPrakash,KambleManjunath S. Across sectional study of patient's satisfaction towards services received at tertiary care hospital on OPD basis. *National Journal of Community Medicine.* 2012; 3: 232-237.

16. Chetwynd J. Satisfaction and dissatisfaction with the public and private hospitals. New Zealand Medical journal. 1988; 101:563-69.
17. Ranjeeta Kumari, MZ Idris, Vidya Bhushan, AnishKhanna, Monika

Agrawal, SK Singh. Study on patient satisfaction in the Government Allopathic Health Facilities of Lucknow District, India. Indian J. Community Med. 2009; 34:35-42.

How to cite this article: Aswar NR, Kale KM, Rewatkar MP et. al. Patients' waiting time and their satisfaction of health care services provided at outpatient department of Government Medical College, Nanded (Maharashtra, India). Int J Health Sci Res. 2014;4(4):21-27.

International Journal of Health Sciences & Research (IJHSR)

Publish your work in this journal

The International Journal of Health Sciences & Research is a multidisciplinary indexed open access double-blind peer-reviewed international journal that publishes original research articles from all areas of health sciences and allied branches. This monthly journal is characterised by rapid publication of reviews, original research and case reports across all the fields of health sciences. The details of journal are available on its official website (www.ijhsr.org).

Submit your manuscript by email: editor.ijhsr@gmail.com OR editor.ijhsr@yahoo.com