Original Research Paper
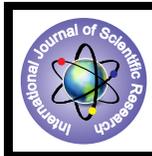
A Study on Total Waiting Time with Respect to Preventive Health Check-Up Programme" in Tertiary Care Hospital

Medical Science

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ABSTRACT

Introduction: As the world develops, the health care sector also develops and gets new horizons in the world. In these recent days, people are very conscious about their health and so they are very keen to go to specialized hospitals as well as consult specialized doctors. As people come to the hospital, they prefer maximum satisfaction and minimum stay. Hence hospital management is obliged to give it to people.
Aim: To study the Customer's waiting time, with a view to identify the factors that affect waiting time and recommend ways of minimizing the delay. Methods: Descriptive study on waiting time of patients visiting a tertiary care hospital. Patients demographic details and study specific questions was asked. Patients were followed in each department to obtain waiting time.
Results: 100 patients were included in the study. 66% of patients were in 35 to 65 years. Highest waiting time was noted in collecting the reports 108.15 minutes, followed by Treadmill test 48.95 minutes. Ultra sound and consulting physician are recorded as 44.45 minutes and 45.5 minutes respectively. Conclusion: Turn around time of each department must be a concept to reduce the waiting time of patients. Quality of healthcare and time taken by patients to complete the visit must be monitored.

Introduction

Health care is the diagnosis, treatment, and prevention of disease, illness, injury, and other physical and mental impairments in humans. Health care is delivered by practitioners in medicine, optometry, dentistry, nursing, pharmacy, allied health, and other care providers. It refers to the work done in providing primary care, secondary care, and tertiary care, as well as in public health. Health care is conventionally regarded as an important determinant in promoting the general health and well-being of people around the world.

Patients spend more time in hospitals waiting for services to be done. The extend to which patients are satisfied with the care received is strongly related to the quality of the waiting time. Healthcare organizations that strive to deliver exceptional services must effectively manage their clinic wait. Failure to incorporate consumer-driven features into the design of wait experience could lead to patient and provider dissatisfaction.

Waiting time refers to the time a patient waits in the hospitals before being seen by the healthcare staffs in the hospital. Patient 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.

Aim

To study the Customer's waiting time, with a view to identify the factors that affect waiting time and recommend ways of minimizing the delay.

Materials and Methods

A descriptive study on patients waiting time was conducted in tertiary care hospital. Patients were enrolled randomly; their consent was obtained before collecting data. Proforma which contains questions to be asked were created. Patient's demographic details were collected. Patients were followed individually to calculate the waiting time in each department and noted in Proforma. Waiting time before and after the tests and consultation were noted and analyzed.

Results

100 Patients, 34% patients come under the age group of 51-65, 32% are in between 35-51, 19 % come under the age group of 21-35. (Table 1)

Table 1 Distribution of study patients in age groups

Age group (Years)	Number of Patients	Percentage
Less than 20	1	1%
21-35	19	19%
36-50	32	32%
51-65	34	34%
Above 65	14	14%
Total	100	100%

Among total respondents more than half of the patients (58%) are male and the rest (42%) are female. (Table 2)

**Table 2 Distribution of study patients in gender**

Gender	Number of Patients	Percentage
Male	58	58%
Female	42	42%
Total	100	**100%**

33 % patients come from the distance of 5-10 Kms, 24% come from the distance of 2-5 Kms, 22% come from the distance of 1-2 Kms, 9% of patients come from the distance above 10 Kms and 12 % come from the distance below 1 Kms. (Table 3)

Table 3 Distribution of distance travelled by patients to visit hospital

Distance to Hospital (Kilometers)	Number of Patients	Percentage
<1	12	12%
1-2	22	22%
2-5	24	24%
5- 10	33	33%
>10	9	9%
Total	100	**100%**

Patients were followed in each department they are advised. FBS with minimum waiting time of 1 minute and maximum of 15 minutes. Mean waiting time is 5.39 minutes, which occurred due to number of patients waiting for FBS. Mean waiting time of ECG, Dietician consultation, X-ray, PFT are less than 15 minutes. Important diagnostics test like ECHO, USG, TMT are take 33.55, 44.45, 48.95 minutes respectively. These procedures required extra time for each patient, so the waiting time has been increased. Physician consultation took 45.5 minutes mean waiting time, maximum 90 minutes waiting was recorded. Patients spend more time in waiting for their reports, mean waiting time 108.15 minutes, with minimum of 30 minutes and maximum of 180 minutes were recorded. (Figure 1)
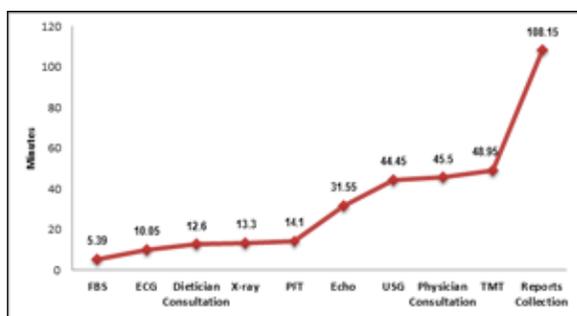
Figure 1 Graphical representation of Mean Waiting Time

Table 4 Time spent before each test in the hospital

Time Spent	Number of Patients	Percentage
Doing Nothing	54	54%
Tried to get other Tests done	6	6%
Food Court	18	18%
Personal Works	13	13%
Went Home	9	9%
Total	100	100

Discussion

Patient visiting tertiary care hospital require several activities to perform before and after visiting physician according to their diseases. Waiting time is one of the main factors of patients' satisfaction and it became one of the important standard in which health care is measure.[7] Long waiting time may induce negative impact in the quality of the hospitals. Reducing the patients waiting time is not only valuable for patients' satisfaction but it also to reduce the workload of the health care staffs.[8,9] In our study 88% of time taken due to queue of patients waiting to perform FBS, 12% is due to staff was not ready. In treadmill test 11% of patients were waited due to improper guidance, this should be reduced by implementing sign boards and also guiding the patients properly. Report collection, 93%

were delayed due to the processing time. This must be reduced by implementing TAT (Turn around time) concept which should be monitored and changed according to the processing time which helps the patients to know the exact time the reports get ready. 93% of patients were waited in physician consultation room due to lunch time. This must be taken care by providing guidance to patients to go take lunch at the time the physician leave. 36% of patients were found uncomfortable during waiting time.

Conclusion

Implementing hospital standard procedure with TAT (Turn around Time) concept may help in reducing the waiting time of patients. Health care staffs must train in giving 100% performance during the peak hours. Quality of the health care and time taken by patients to complete a hospital visit must be monitored every week.

Reference

1. Rondeau KV. Managing the clinic wait: An important quality of care challenge. J Nurs Care Qual. 1998;13:11–20.
2. Rossiter CE, Raynolds FA. Automatic monitoring of the time waited in an outpatient clinic. [Last accessed 2010 Oct 07];Journal Storage: Med Care. 1968 1:218–25.
3. Maxwell RJ. Quality assessment in health. Br Med J (Clin Res Ed) 1984;288:1470–2.
4. Fernandes CM, Daya MR, Barry S, Palmer N. Emergency Department patients who leave without seeing a physician: The Toronto Hospital experience. Ann Emerg Med.1994;24:1092–6.
5. O'Malley MS, Fletcher SW, Fletcher RH, Earp JA. Measuring patient waiting time in a practice setting: A comparison of methods. J Ambul Care Manage. 1983;6:20–7.
6. Singh H, Haqq ED, Mustapha N. Patients' perception and satisfaction with health care professionals at primary care facilities in Trinidad and Tobago. Bull World Health Organ.1999;77:356–60.
7. Shea AM, Curtis LH, Hammill BG, DiMartino LD, Abernethy AP, Schulman KA. Association between the medicare modernization act of 2003 and patient wait times and travel distance for chemotherapy. JAMA. 2008; 300: 189-196.
8. Su HY, Sykes PH, Su HY, Sykes PH. Waiting times for gynaecological cancer surgery. N Z Med J. 2009; 122: 26-33.
9. Kawakami J, Hopman WM, Smith-Tryon R, Siemens DR. Measurement of surgical wait times in a universal health care system. Can Urol Assoc J. 2008; 2: 597-603. 19.