

# A survey on the Patient Waiting Time at the Out Patient Department of a Type A Base Hospital in Galle District

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DOI: 10.29322/IJSRP.11.06.2021.p11486  
<http://dx.doi.org/10.29322/IJSRP.11.06.2021.p11486>

## Abstract- Introduction

The Outpatient Department (OPD) is the key unit of a hospital reflecting the most of its performance values and place of serving for diverse needs of attendees seeking care and services. The patient waiting time (WT) is a key indicator of performance demonstrating the patient satisfaction in an indirect manner.

## Methodology

This was a quasi-experimental study conducted in three phases. Phases I and III included key informant interviews and focus group discussions to collect qualitative data, while a Self-administered information sheet were used to collect quantitative data. Interventions were conducted in Phase II, after identifying root-causes. Evaluation of the effectiveness of the intervention was conducted in Phase III.

## Results

249 correctly filled forms were obtained with a response rate of 92.2%. The values for mean time spent for examination by MO in 3 different days were 3.78, 3.24 and 3.21 (average 3.41) minutes. Mean time to issue medicines was 2.12, 2.44, and 2.48 (average 2.34) minutes respectively. The mean time spent at OPD was 30.95 minutes. Therefore, 25.2 minutes (mean) had been spent in the queue. After implementation with patient triage system, mean time spent at OPD was 23.06 minutes and 19.02 minutes (mean) had been spent in the queue.

## Conclusion and discussion

Although the OPD waiting time is 25.2 minutes is reasonable with the congested and busy OPD setting, strategies to reduce the OPD waiting time is mandatory to improve the patient satisfaction and performance targets.

**Index Terms-** Outpatient Department, waiting time, Patent triage, Base Hospital

## I. INTRODUCTION AND JUSTIFICATION

The Outpatient Department (OPD) is the key unit of a hospital reflecting the most of its performance values and place of serving for diverse needs of attendees seeking care and services (1). The patient waiting time (WT) is a key indicator of performance demonstrating the patient satisfaction in an indirect manner (1).

OPD waiting time defines the time duration of an individual OPD attendee will have to stay in the premises for seeking care excluding the time spent for the consultation, treatment or procedures. This will reflect the time spent in the queues and time

spent on the logistical requirements including the registration process (3,4).

In the index hospital, all admissions, Emergency services and counseling, minor dressings and procedures excluding those done in the inward setting and theaters are being conducted in the OPD. Therefore, the OPD itself demonstrates a vulnerable unit for proper development targets in the overall hospital management.

The OPD waiting time assessments done in other places had focused mainly the patient satisfaction objectives and to a lesser degree the effect on the overall hospital management and resource utilization (5). Qualitative research has been used to collect data on the satisfactory scores and suggestions to improve the service delivery.

In the setting of generic values for patient waiting time parameters, individual variations exist due to the differences in the services delivered, cover geographical area, facilities and human resources available and the standards of care and services expected through the OPD service. Therefore, information obtained to set up standards in an individual hospital or the unit should anticipate all of the above factors to reach a reasonable standard working environment for the healthcare givers and patients (6).

In a congested and busy environment often observed in the OPD in most of the countries, collection of data will be challenging. Therefore, many studies would use simulation methods to extrapolate the real life observations when the patients and accompanying individuals are often not consistent with filling up questionnaires or take part in interviews by study groups (7). The most common and willing method anticipate by them would be to lodge a suggestion to the suggestion box.

Most of the developed and developing countries use computerized systems to register, arrange the flow of patients through the consultation, investigation, and issuing pharmacy and follow up strategies. This would enable more consistent and continuous collection of data (7,8).

Mainly, the recent studies done in developing countries, based on the satisfaction data, showed average values, related to patient waiting time, which had been acceptable within the busy schedules of these units. Some of these units have been dedicated to specialized care (9).

Information obtained from various studies have been utilized for improving the health standards including proper channeling and issuing of relevant records used in the subsequent clinical management options, even in the most crucial situations like the care giving in the Emergency treatment units (10).

Identification of factors like, logistics, waiting area management, time schedules and appointment schemes,

segregated areas and triage systems have been identified as steps to reduce the patient waiting time in busy schedules (11).

In the index hospital, the OPD serves as the main gate of directing patients to various treatment options, serving more than 800 individuals on a daily basis and providing services during Sundays and other public holidays as well. Consultations, investigations and minor procedures and counseling like services are all done under the same roof.

Local data are sparse on the assessment of such information in the international literature.

The hospital is planning ahead to be developed in to specialized hospital with facilities to be upgraded. Therefore understanding about this information is important to cater services to meet the current and future demands in accordance with the national and international requirements and to improve the quality of care delivered to the patient.

## II. OBJECTIVE

To calculate the patient waiting time of the Outpatient Department of type A Base Hospital in the district of Galle.

## III. METHODOLOGY

This was a Quasi-Experimental interventional study conducted in Out-patient Department, Base Hospital Eilpitiya using a qualitative and quantitative method conducted using in-depth interviews and document reviews. Self-administered information sheet was provided, where the participant entered the relevant time values on spaces provided on the information sheet. This research was conducted in three phases. During the Phase 1, identified and assess the current processes, practices, gaps and time slots. After identification of gaps, in phase 2 was develop and implement strategies to overcome the identified issues/gaps and assess the effectiveness of the interventions in phase 3.

Qualitative data collected through key informant interviews (KII) and focused group discussions (FGD) were recorded and transcribed with participants' consent. Statements were synthesized by common words and coded into thematic domains.

Each topic domain was then converted to an information domain. Quantitative data collected from the questionnaire and desk reviews were analyzed using the Statistical Package for the Social Sciences 23.

In phase 1, Two hundred and fifty (270) randomly selected OPD attendees were recruited with the consent to this study on three alternative days of the week. Each individual was provided with a form containing directions to write down by themselves the time of arrival to OPD, time of Registration, Time of consultation by the OPD medical Officer (MO), time of obtaining the pharmacy medicines and time of leaving from OPD premises. The collection of data was performed recruiting individuals in two time settings 0900 hours to 1000hours and 1100hours to 1200hours to reduce the effect on peak time congestions observed in the OPD on previous observational studies. Data was analyzed using the descriptive statistical methods. During this time period, Principal investigator was managed to negotiate with doctors to same doctors to attendant to same shift and time slots during the study period.

Phase III was the post-intervention phase, and the same study instruments in Phase I were used to evaluate post-intervention outcomes.

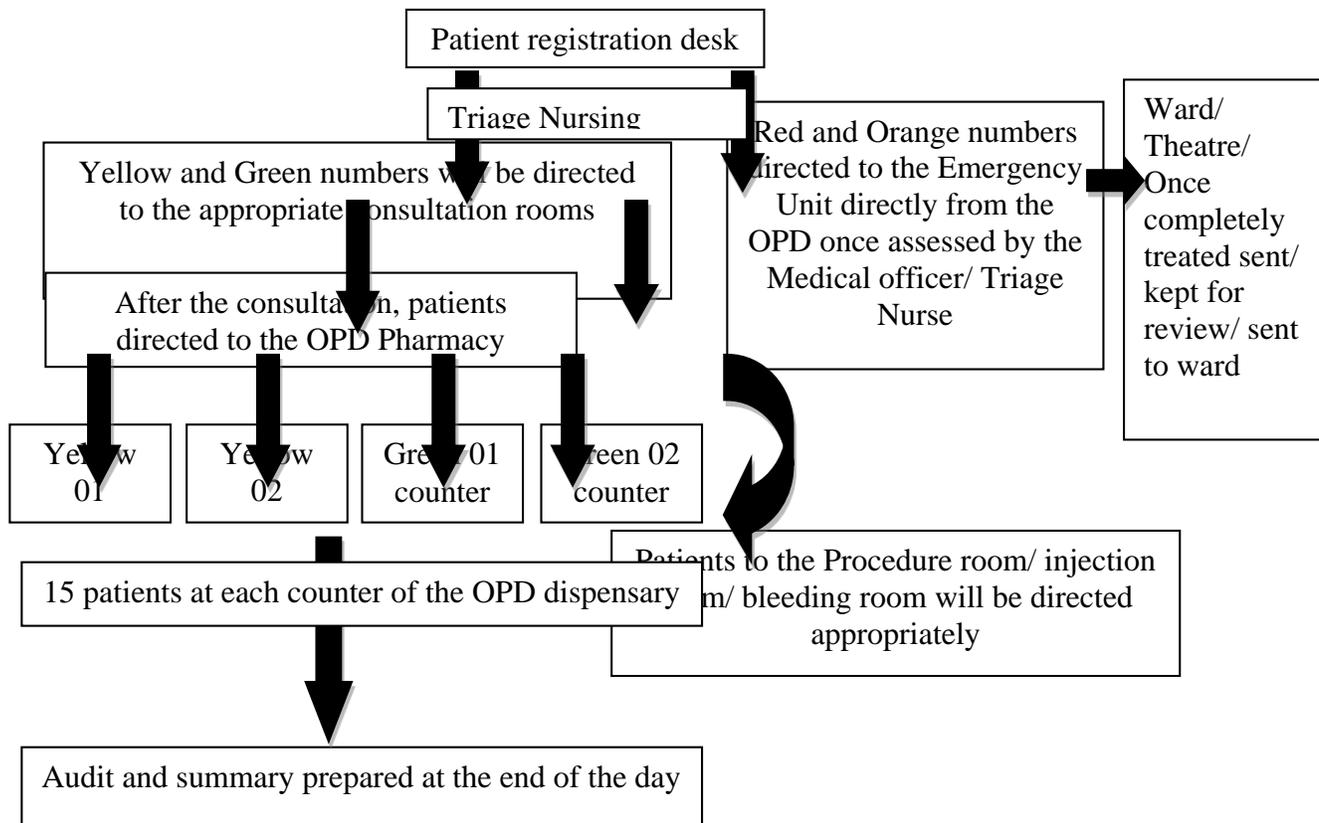
Ethical approval was obtained for the study as well as administrative approval from the appropriate authorities. Consent was obtained from the voluntary patients of the outdoor patient unit (OPD) who participate to the study.

## IV. RESULTS AND DISCUSSION

In phase1, 249 correctly filled forms were obtained with a response rate of 92.2%. The values for mean time spent for examination by MO in 3 different days were 3.78, 3.24 and 3.21 (average 3.41) minutes. Mean time to issue medicines was 2.12, 2.44, and 2.48 (average 2.34) minutes respectively. The mean time spent at OPD was 30.95 minutes. Therefore, 25.2 minutes (mean) had been spent in the queue.

In phase 2, PI was developed the bellow mention patients triage system with other key informants and OPD staff.

**Figure 1: Patient Triage system**



It was identified how long waiting queues can significantly affect to the efficiency and effectiveness of the quality-of-service provision and patient satisfaction. By implementing the above-mentioned triage system following benefits were achieved.

**Benefits to the hospital and management**

1. Proper registration with basic details necessary
2. Less congestion and burden
3. Less chances to miss important needs of patient care
4. Accountability of consumables and human resources
5. Improving the satisfaction in service care providers
6. Help to extrapolate the demands and trends of pharmaceutical needs and priorities, help in maintaining buffer stocks and reducing the waste

**For the patient**

1. Less time in the queue
2. Better satisfaction
3. Able to seek solutions to issues
4. Better time to communicate
5. Less congestion and exhaustion

In phase 3, 267 correctly filled forms were obtained with a response rate of 98.8%. The values for mean time spent for examination by MO in 3 different days were 4.48, 5.24 and 6.21 (average 5.44) minutes. Mean time to issue medicines was 1.53, 2.07, and 2.17 (average 2.05) minutes respectively. The mean time

spent at OPD was 23.06 minutes and 19.02 minutes (mean) had been spent in the queue after intervention.

**V. CONCLUSION AND DISCUSSION**

In a busy setting, the mean time spent on the consultation and issuing of medicines from the pharmacy counters is acceptable. Although the OPD waiting time is 25.2 minutes is reasonable with the congested and busy OPD setting. After implementation of strategies to reduce the OPD waiting time implementing triage system time has reduce to 19.02 minutes. Introducing triage mechanism and diverting to relevant treatment areas allocated within the same premise’s will be a suitable option to reduce the patient waiting time.

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