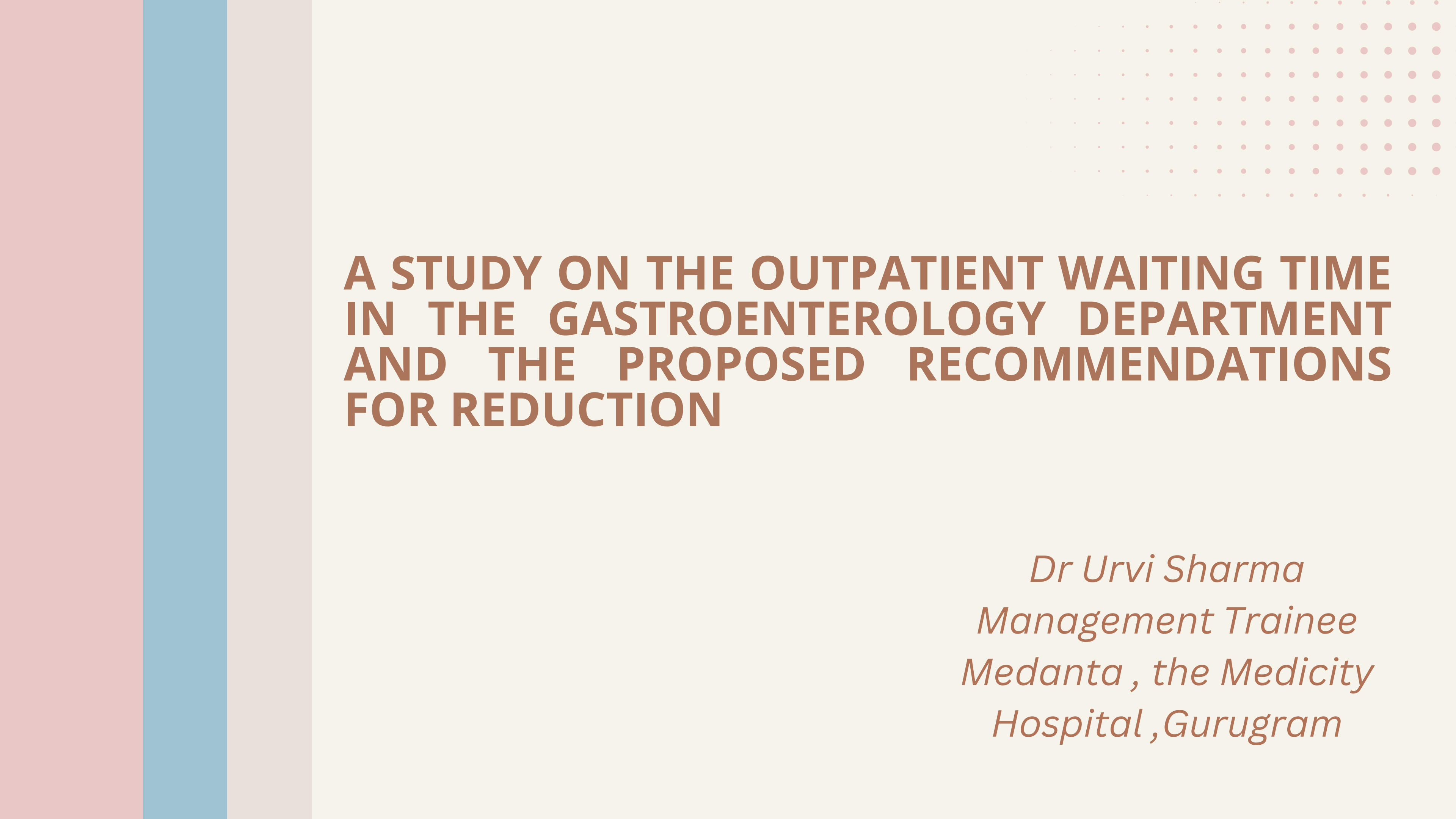




# A STUDY ON THE OUTPATIENT WAITING TIME IN THE GASTROENTEROLOGY DEPARTMENT AND THE PROPOSED RECOMMENDATIONS FOR REDUCTION

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# OVERVIEW



**INTRODUCTION ABOUT OPD**  
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# INTRODUCTION ABOUT OPD

The Outpatient Department (OPD) represents a crucial as well as a vital component of hospital – based healthcare systems, and plays a critical role in delivering the healthcare services and serves as the initial touchpoint for the individuals who wish to come to the Hospital. The OPD provides a wide range of services that involve

- medical consultations
- diagnostic services
- advising admissions
- formulation of the treatment plan
- follow up care



# LITERATURE REVIEW

| RESEARCH TOPIC                                                                                                                                                          | AUTHORS                                                                                                                                                                                | SUMMARY                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.To study the Association Between Waiting Time, Service Time, and Patient Satisfaction in the Out-Patient Department of a Tertiary Care Hospital in Maharashtra        | <u>A</u> Acharya,<br>Varsharani Kendre,<br>Yallapa Jadhav,<br>Muralidhar Tambe<br><br>Journal:<br>International<br>Journal of the<br>Community Medicine<br>and Public Health<br>(2023) | The study found that shorter waiting times significantly increased patient satisfaction. The mean waiting time was approximately 59 minutes, and patients with lesser waiting times reported higher satisfaction levels.    |
| 2. A Study on the relationship between the waiting time and the out-patient satisfaction at Gujarat Medical Education Research Society Hospital, Valsad, Gujarat, India | Ravikant Patel, Hina R. Patel<br><br>Journal:<br>International<br>Journal of the<br>Community Medicine<br>and Public Health<br>(2017)                                                  | The study reported a mean waiting time of 12 minutes. Despite relatively short wait patients faced difficulties locating various departments, indicating that hospital layout and signage also impact patient satisfaction. |



## AIM

- Understand the patient flow /journey in the OPD
- Identify the causes behind the prolonged waiting times
- Analyze operational inefficiencies
- Recommend practical, data driven solutions that aim at reducing the waiting time of the patients without compromising the quality of care provided to the patients

## RESEARCH QUESTION

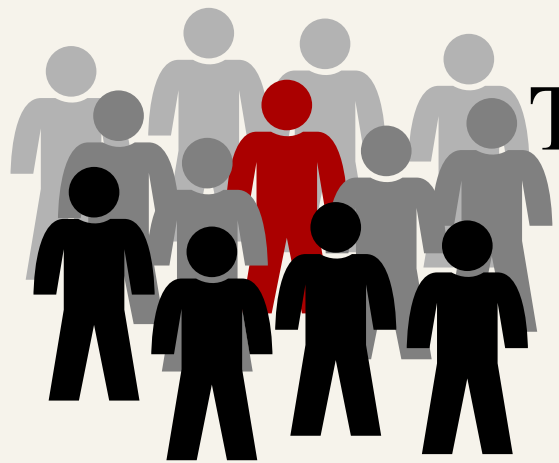
1. What is the average outpatient department (OPD) waiting time for the different category of patients (Walk in & Appointment) in the Gastroenterology department at Medanta Hospital?
2. What are the primary contributors to increased waiting times in the Gastroenterology OPD?
3. What is the average time for consultation in the Gastroenterology Department of the OPD?



# OBJECTIVES

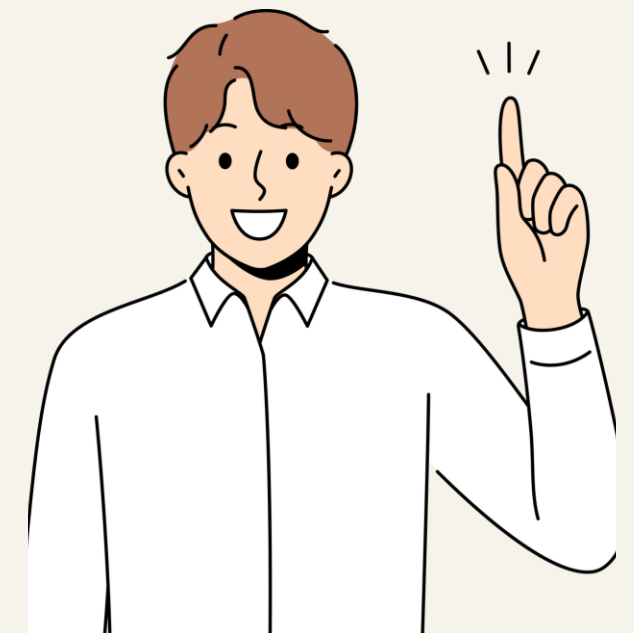
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**To determine the waiting time in the Gastroenterology OPD**



**To understand possible reasons resulting in increased patient waiting time**

**To suggest evidence-based solutions to reduce the problem of long waiting time**



## DURATION OF THE STUDY

The duration of the study is three months , starting from the month of March till May

## SAMPLE SIZE

The cohort size for this study includes a total of 100 participants, selected to represent both major patient categories—walk-in patients (who visit without prior appointments) and appointment-based patients (who have scheduled consultations or follow-ups).

## DATA COLLECTON PROCEDURE

**The study is being conducted in the Gastroenterology OPD located on the 11th floor. Primary Data is being collected manually over a period of 3 months from March 2025 to May 2025 .Primary data is collected manually, involving direct observation and recording of relevant time points for each patient**

# STUDY DESIGN



It is an Observational Study, and adopts a **cross-sectional study** design, which is appropriate for understanding the current patterns and the factors affecting the waiting times in the hospital set – up

**Observational nature of the study** – The study involves observing and recording the following time for the patients visiting the Gastroenterology OPD -

- **Completion of billing (Billing time)**
- **Entry into the consultation room**
- **Exit from the consultation room**

**Waiting time** is defined as the interval between the completion of billing and the moment the patient enters into the doctor's consultation room.

For the follow- up cases, the patients are enquired about the time when they enter the OPD, as they do not have the billing time, so for the follow-up cases, the waiting time will commence from the time the patients enter the OPD till they exit from the doctor's room after consultation.

**Cross-sectional research design -**

The data is being collected from March 2025 to May 2025 .

# STUDY POPULATION



The study includes all the patients visiting the Gastroenterology OPD during the period of the study . **These patients are further categorized as follows:**

## **Walk-in Patients:**

These are individuals who visit the OPD without prior appointments. Their visits may be for initial consultations or for follow-up sessions without prior appointments.

## **Appointment-Based Patients:**

These patients have scheduled visits, either for new consultations or follow-ups.

## **Inclusivity criteria:**

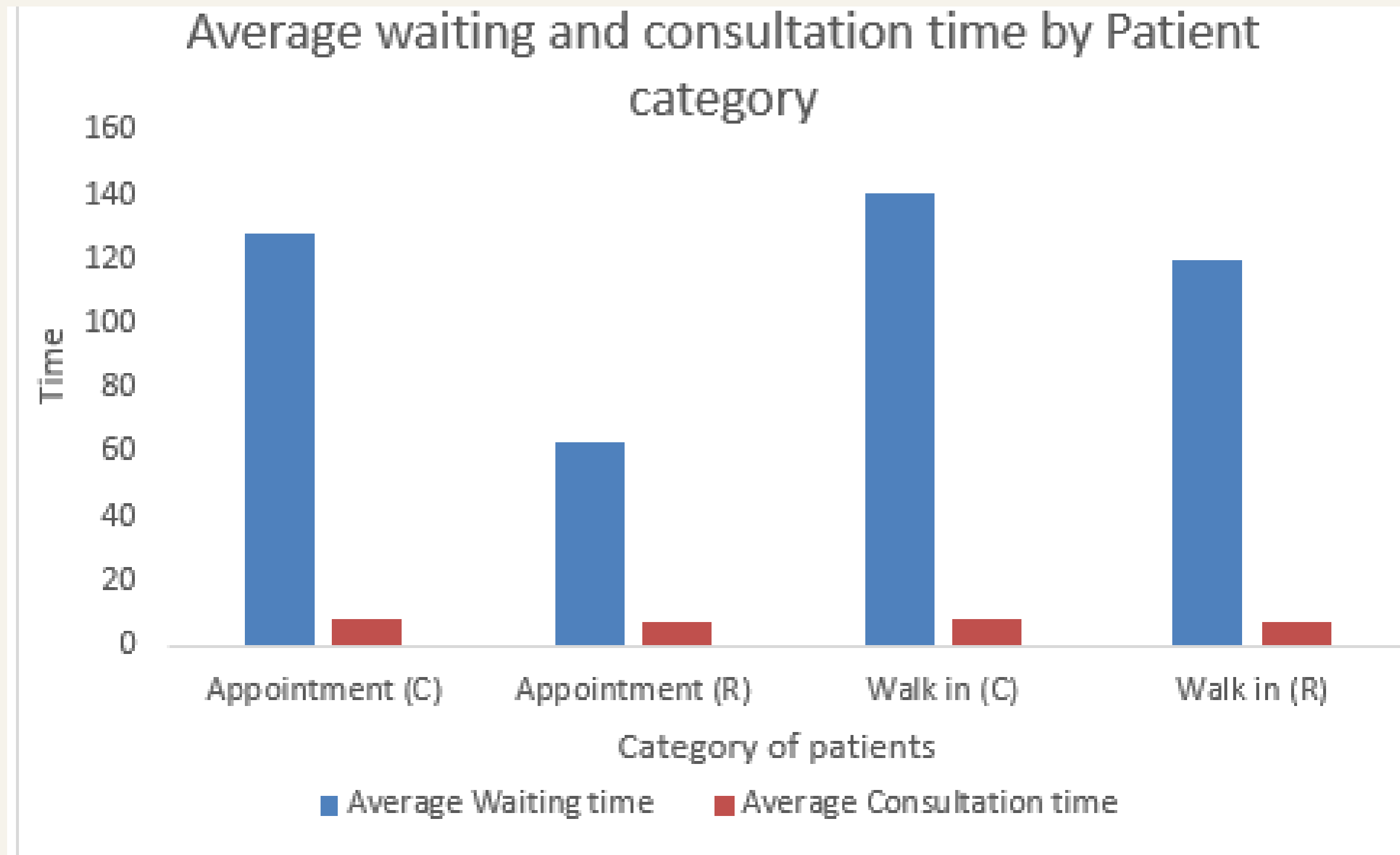
All patients, regardless of age or gender are included in the study<sub>9</sub>

## DATA ANALYSIS :

The average OPD waiting time in the Gastroenterology Department calculated is as follows –

| <b>Category of patients</b> | <b>Average Waiting Time (Min)</b> | <b>Average time for consultation (Min)</b> | <b>Average total time (Min)</b> |
|-----------------------------|-----------------------------------|--------------------------------------------|---------------------------------|
| <b>Appointment (C)</b>      | 128                               | 8                                          | 136                             |
| <b>Walk in (C)</b>          | 141                               | 8                                          | 149                             |
| <b>Appointment (R)</b>      | 63                                | 7                                          | 70                              |
| <b>Walk in (R)</b>          | 120                               | 7                                          | 127                             |

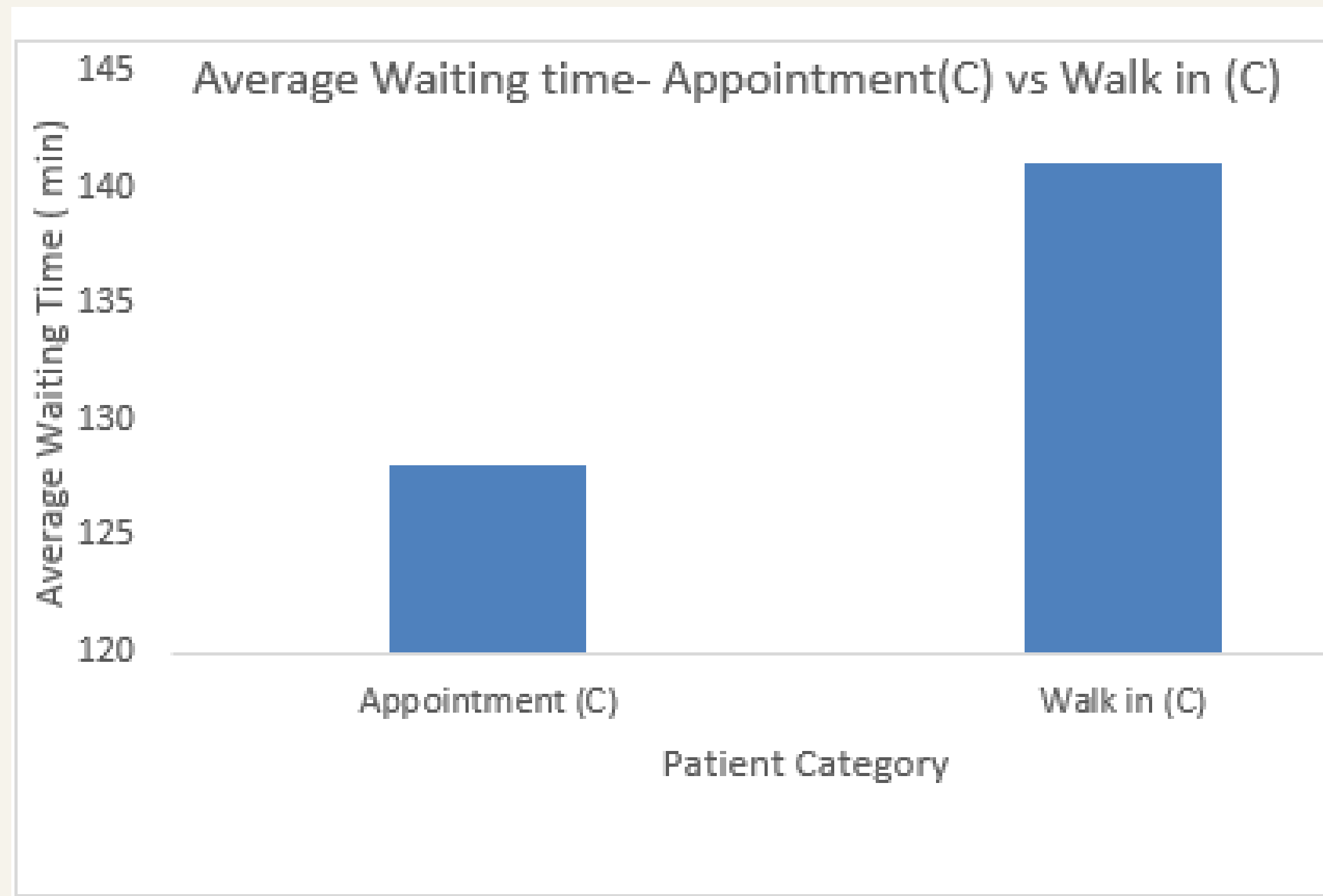
Thus, it can be analyzed that the waiting time is prolonged for the walk in patients whether they come for consultation or follow up in comparison to the patients who visit the OPD after taking scheduled appointments



The (Graph1) below shows a bar graph comparing the average waiting time (AWT in minutes) between the two categories of patients in the Gastroenterology OPD for the consultation visits:

### Patient categories compared:

- Appointment (C) – Patients who schedule an appointment for a consultation.
- Walk-in (C) – Patients who arrive without an appointment for a consultation.



## ● 1. Longer Wait for Walk-in Patients:

Walk-in patients experience 13 minutes longer average wait time than those with scheduled appointments.

This increase is expected, as walk-ins are typically seen based on the availability of the slots and come without a predefined consultation time.

## ● 3. OPD Management Insight:

The data supports the need for encouraging patients to schedule appointments rather than arriving unannounced. Efficient scheduling can help to reduce the overcrowding and improve time management for both the staff as well as the patients.

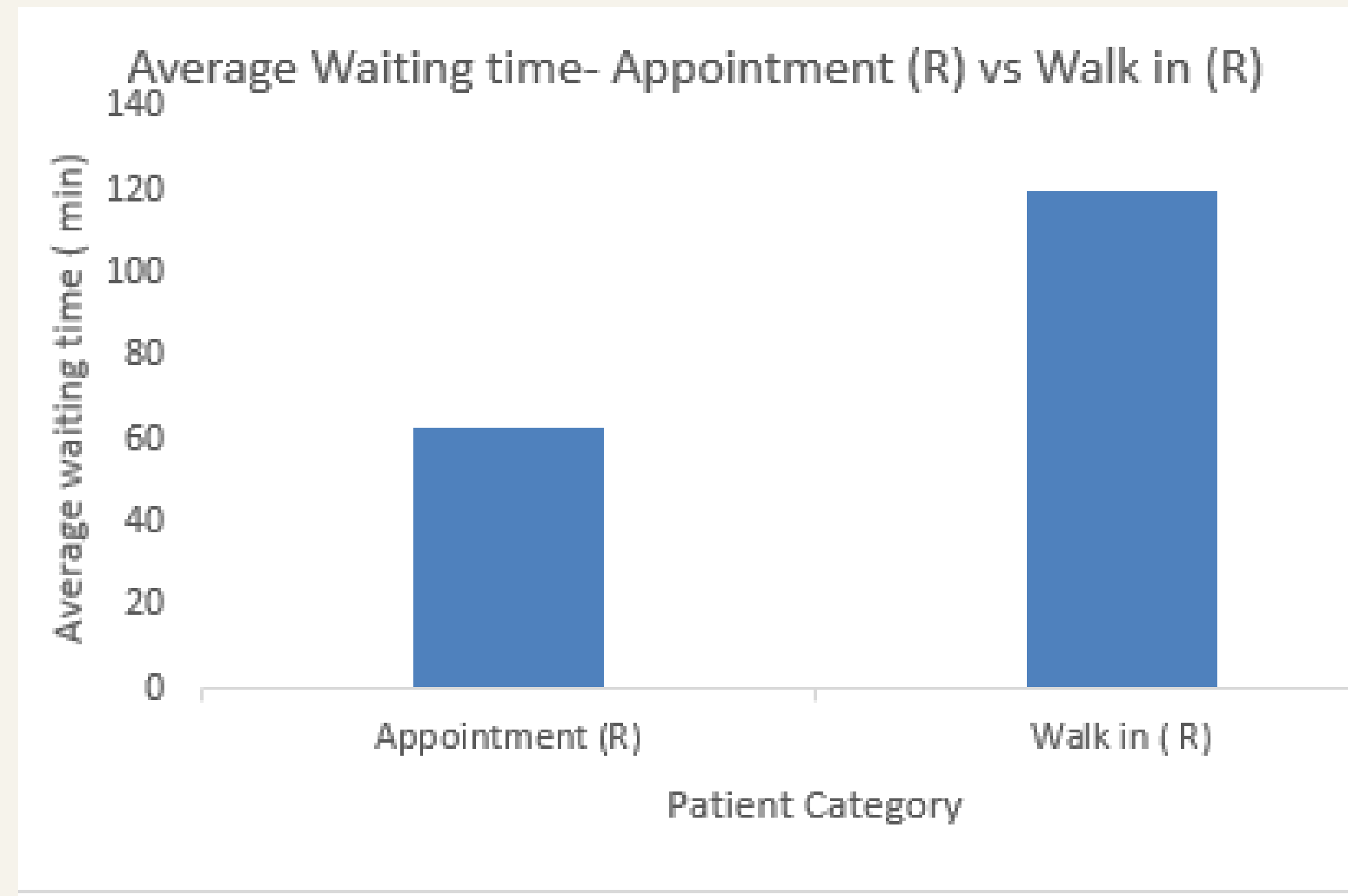
## ● 2. Efficiency of Appointment System:

The difference indicates that the appointment system helps in reducing the waiting time. Patients with appointments are often prioritized in the scheduling process.

The bar graph (Graph 2) below compares the average waiting time (AWT in minutes) for two categories of patients attending follow-up visits in the OPD.

### Patient categories compared:

- Appointment (R) – Patients who had scheduled appointments for their reports or follow -up visits.
- Walk-in (R) – Patients who came for follow -up visits without a prior appointment.



# DISCUSSION

## 1. Longer Wait for Walk-in Patients:

There is a notable 50-minute difference between the two groups.

Walk-in patients for follow-up visits waited almost twice as long as those who had appointments.

This gap emphasizes the operational strain unplanned visits can create.

## 3. Resource Allocation:

High waiting time for walk-ins indicates potential strain on staff and infrastructure during peak hours.

Proper appointment scheduling can lead to better allocation of healthcare personnel and consultation slots.

## 2. Benefits of Scheduling:

The data underscores the efficiency of using scheduled appointments even for follow-up visits.

Scheduled patients are likely accommodated into the system's existing flow, reducing unnecessary delays.

## 4. Implication on Patient Experience:

Long waiting times for walk-in patients may lead to patient dissatisfaction, especially for those returning for care.

Encouraging appointment adherence can improve throughput and patient satisfaction in the OPD.

The factors that have led to increased waiting time in the OPD are as follows:

- **Interruptions due to procedures:**

IMPACT:

- 1.The consultation flow gets disrupted
- 2.Patients already waiting in the OPD experience delays
- 3.New patients continue to arrive, causing the queue to grow

- **Delayed arrival of doctors:**

IMPACT:

- 1.Patients arrive punctually at or before 9:30 AM expecting to be seen.
- 2.Any delay in doctor arrival results in the accumulation of waiting patients, creating a backlog that can persist throughout the day.
- 3.Delayed starts snowball into higher waiting times for even later appointments.
- 4.Systemic Insight: This indicates poor coordination between scheduling and actual doctor availability. This reflects a need for improved accountability and perhaps a scheduling buffer or staggered appointment planning.

- **Doctors have to attend the meetings for which there are no definite timings, which is a cause of delay in the OPD**

**IMPACT:**

1. Mid-session disruptions
2. Patients may be left waiting with no communication or estimation on when the doctor will return
3. Resumption of OPD activities becomes uncertain, further lengthening patient wait times

- **Patient absence during call time:**

**IMPACT:**

- Time is wasted calling out the patients who are absent
- Each skipped or recalled patient has to be called out again which leads to disruption in flow of patients in the OPD
- This leads to increased consultation time per patient slot

## RECOMMENDATIONS:

### Strategies to minimize the prolonged wait time in the Gastroenterology OPD:

#### 1. Schedule Surgical Procedures in Advance

Explanation: Surgical procedures like endoscopies and other interventions should be planned in advance as these procedures often take a significant amount of time and require doctors' undivided attention.

#### 2. Avoid Booking Appointments During Procedure Periods

Explanation: Appointments should not be scheduled when doctors are already engaged in surgical procedures.

This prevents overlapping responsibilities, which can cause delays.

#### 3. Maintain Continuity in OPD Services

Explanation: Even if one doctor is occupied with a procedure, OPD services should not be halted. The other doctors in the team should take over the OPD responsibilities.

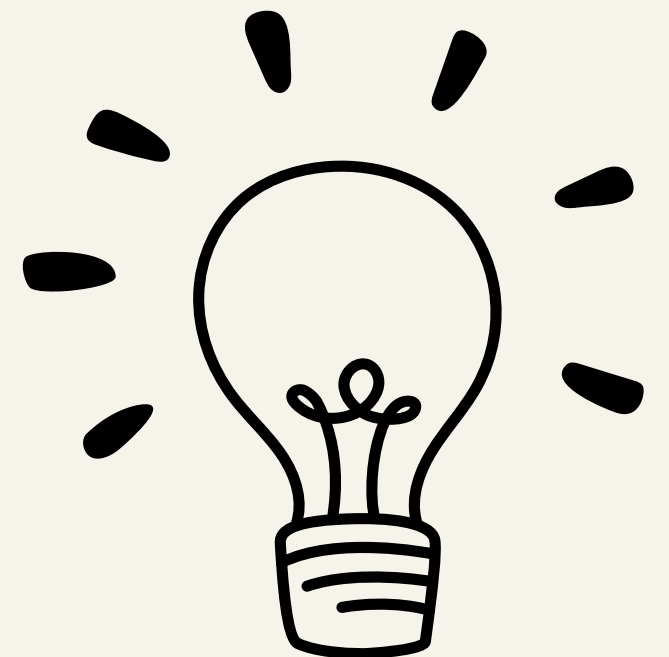
#### **4. Use of Team-Based Approach**

Explanation: If a doctor is unavailable, other team members should handle patient cases.

This includes reviewing medical history and preparing documentation, so the consulting doctor can efficiently resume without delays.

#### **5. Implement Virtual Consultations**

Explanation: Offer online or virtual consultations for follow-up patients. Follow-up patients may only need to discuss reports or minor concerns that don't require physical presence. Virtual visits can significantly decongest the OPD, saving time and space for new or critical cases.



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