

DISSERTATION PRESENTATION – STUDY ON TURNAROUND TIME OF PATIENTS IN EMERGENCY DEPARTMENT

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ROLL NO – 1263 BATCH HM 2021-2023

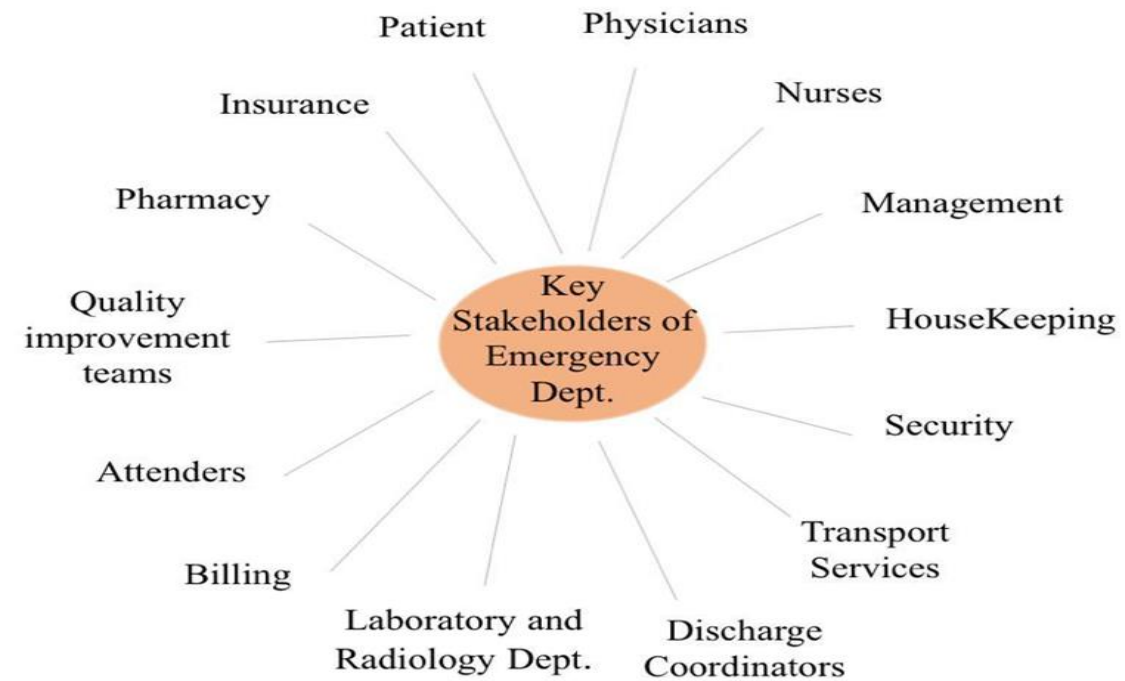
Under the guidance of Dr.ALOK KUMAR MATHUR (PROFESSOR)



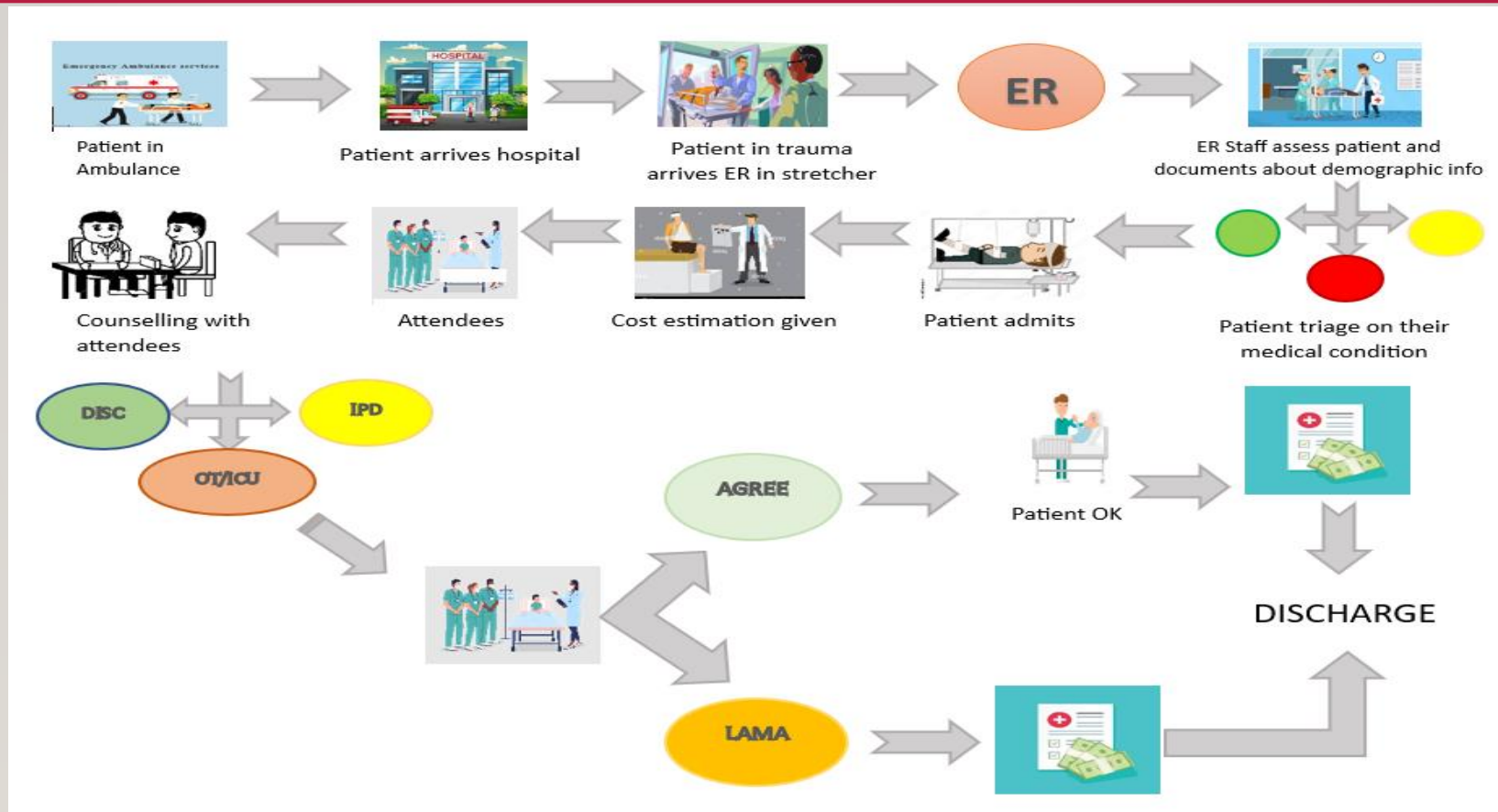
INTRODUCTION:

- Emergency department TAT (Turnaround Time) refers to the duration from patient arrival to either transfer to ward / ICU or discharge
- Turnaround time in the emergency department is a crucial indicator of how efficiently and effectively emergency care is provided and is an important performance metric used to evaluate the efficiency and quality of care
- The goal of reducing TAT is to ensure timely assessment, treatment, and disposition of patients in the ED
- A shorter TAT can lead to improved patient outcomes, increased patient satisfaction, and better utilization of healthcare resources
- Efforts to improve ER TAT involve - streamlining workflows, optimizing resource allocation, enhancing communication among healthcare providers, implementing strategies such as rapid assessment protocols and fast-track pathways for patients with less severe conditions

KEY STAKEHOLDERS



OVERVIEW OF PROCESS IN THE EMERGENCY DEPARTMENT



RESEARCH QUESTION AND OBJECTIVE

RESEARCH QUESTION

“What factors influence turnaround time in the emergency department and what interventions can be effective in reducing it?”

OBJECTIVES

- To observe, understand and map the process flow
- To determine the Turnaround Time of patients
- To identify problems and perform a gap analysis of the process

PLACE OF STUDY: MEDICOVER HOSPITALS, VENKOJIPALEM, VISAKHAPATNAM

STUDY DESIGN: Cross-Sectional Study

STUDY POPULATION: Patients admitted in emergency and discharged between 20th March 2023 to 20th May 2023

Inclusions:

- Patients arriving to ER between 9:00 AM to 6:00 PM

Exclusions:

- Patient arriving to ER before 9:00 AM and after 6:00 PM and Sundays
- Brought dead
- Patient who died during the treatment in the ER

DURATION OF STUDY: From 20th MARCH 2023 TO 20th MAY 2023

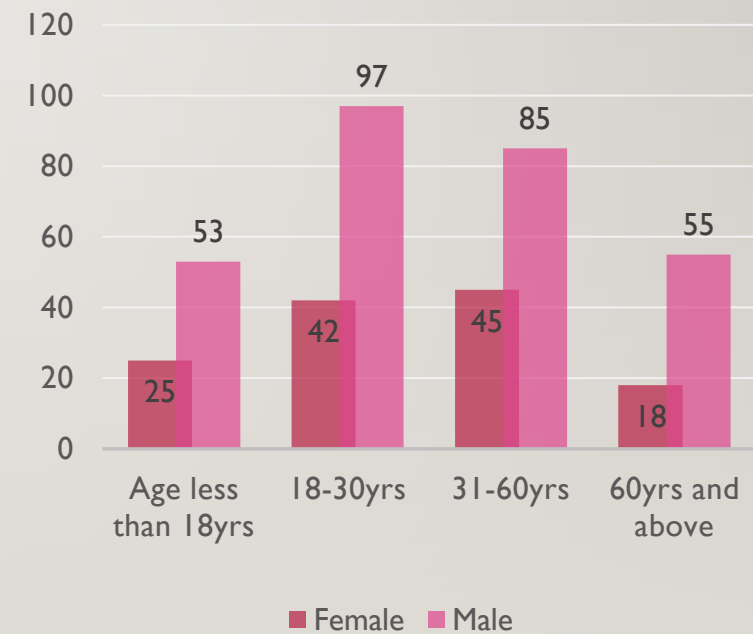
SAMPLE SIZE: 420

SAMPLING TECHNIQUE: Convenient sampling

FINDINGS

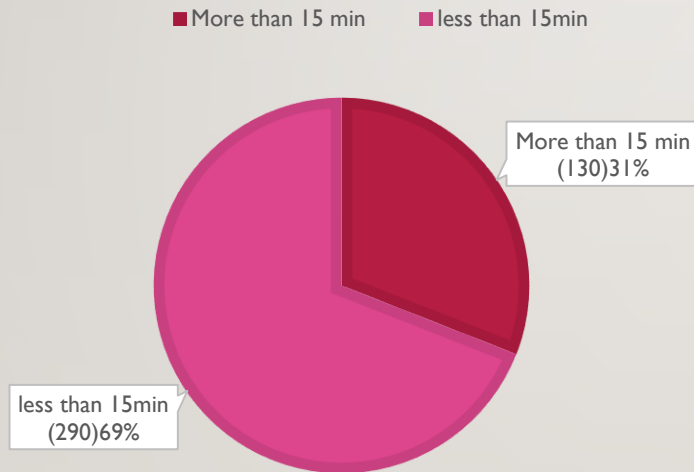
	TIME DURATION
INITIAL ASSESSMENT BENCHMARK TIME	Within 15 minutes of patient entry to ER
DIAGNOSTIC TEST TAT / LABORATORY TAT	1 HOUR 5 MINUTES
AVERAGE TAT	3 hours 35 minutes
STANDARD DEVIATION	2 hours
NUMBER OF CASES SHIFTED UNDER AVERAGE TAT (3 HOURS)	330
NUMBER OF CASES DELAYED (MORE THAN 3 HOURS)	90
MINIMUM TAT	1 hour 15 minutes
MAXIMUM TAT	5 hours

CHART SHOWING DISTRIBUTION OF AGE GROUPS BY GENDER (n=420)



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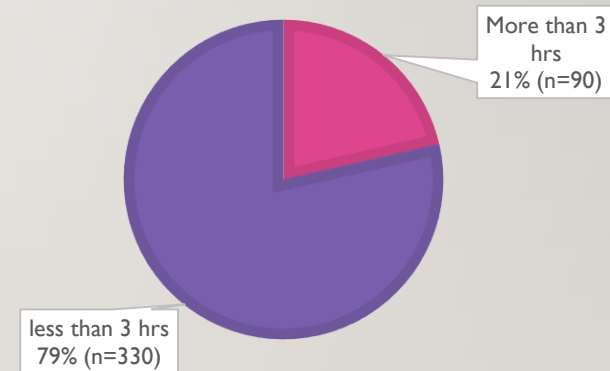
PIE CHART SHOWING TIME TAKEN BY HCP TO ATTEND THE PATIENT FOR INITIAL ASSESSMENT



- The main factor for delay is due to lack of adequate manpower.

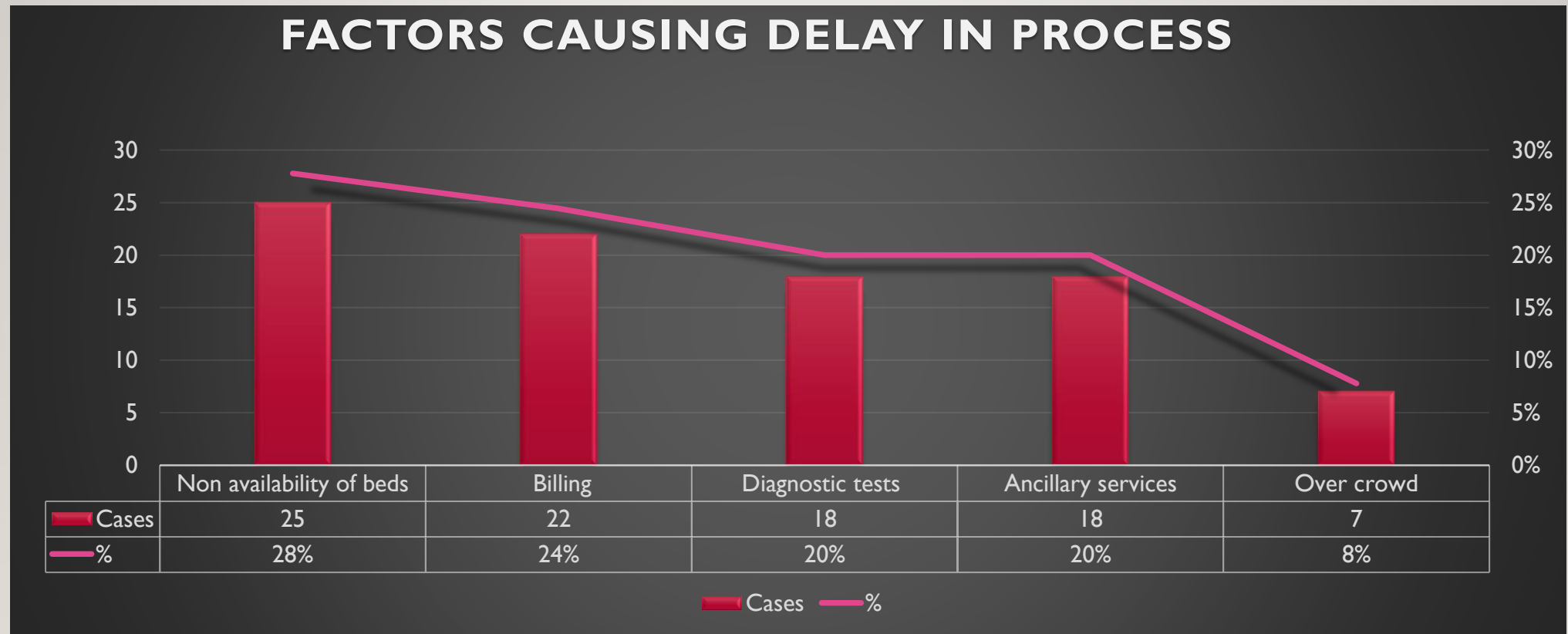
PIE CHART SHOWING DURATION OF PATIENT'S STAY IN ER

■ More than 3 hrs ■ less than 3 hrs

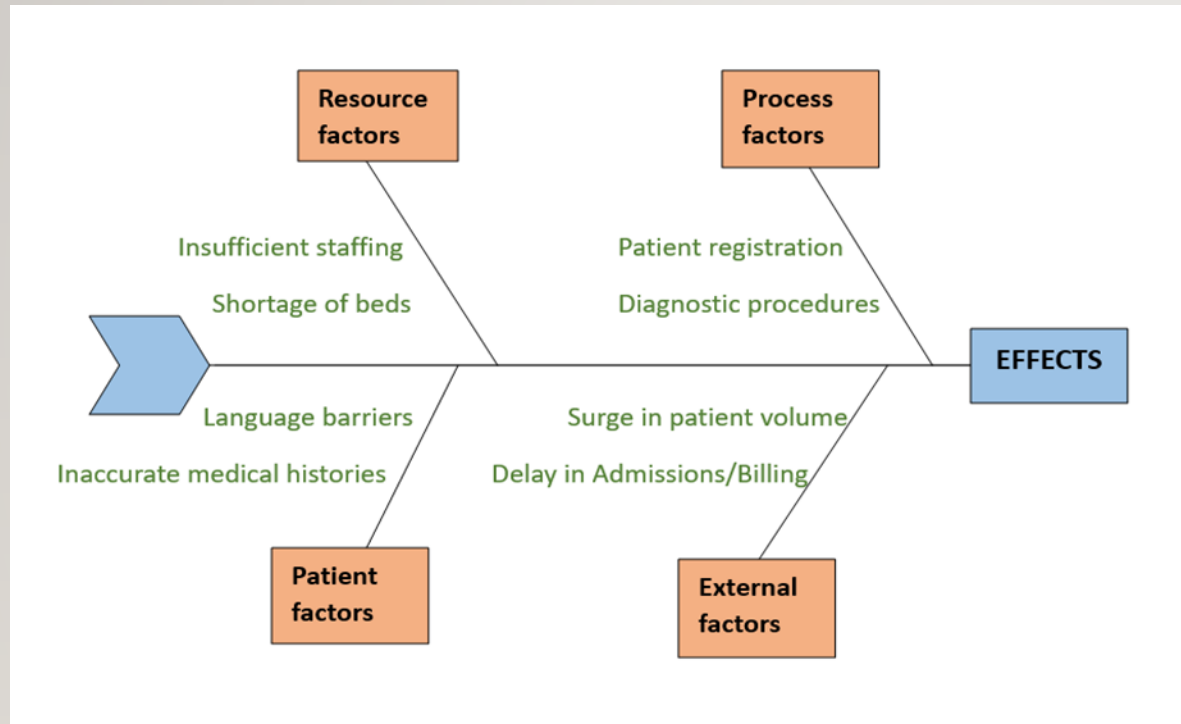


- The main factor for increase in wait time in ER is due to nonavailability of adequate transport staff, non-availability of beds in IPD/ICU, and noncompliance by patient and their attenders in ER.

CONTINUED



OBSERVED REASONS FOR DELAY OF TAT



- Delay in Admissions/ billing in the hospital
- Lengthy diagnostic testing procedures
- Insufficient staffing levels
- Shortage of beds in other departments or inpatient units
- Patient past history, demographics, and social factors
- Surge in patient volume in peak hours

RECOMMENDATIONS

- ✓ Decrease in patient wait time by improving resource allocation and workflow management
- ✓ Development and implementation of protocols for rapid diagnostic testing and delivery
- ✓ Increase staffing level based on patient volume and acuity level
- ✓ Strengthening of communication and coordination with inpatient units
- ✓ Establish efficient communication channels among healthcare providers
- ✓ Establish quality improvement teams for continuous quality improvement, and monitor performance metrics

