



**“CHARACTERIZING 72-HOUR RETURN VISITS TO
THE EMERGENCY DEPARTMENT: A
RETROSPECTIVE STUDY”**



Society for Emergency Medicine India

DR POONAM SEKHON

**CERTIFICATE OF COMPLETION OF TRAINING IN
EMERGENCY MEDICINE (CCT – EM)
SOCIETY OF EMERGENCY MEDICINE, INDIA**

SEPTEMBER 2022 TO SEPTEMBER 2025

DR. L.H. HIRANANDANI HOSPITAL

**HILLSIDE AVENUE, HIRANANDANI GARDENS, RAMABAI
AMBEDKAR NAGAR, POWAI, MUMBAI, MAHARASHTRA 400076**

Thesis title: Characterizing 72-Hour Return Visits to the Emergency Department: A Retrospective Study

Name: Dr Poonam Sekhon

Course: Certificate of completion of training in Emergency Medicine (CCT - EM)

Duration of study: January 2023 – December 2024

Place of study: Dr. L.H Hiranandani Hospital, Powai, Mumbai , Maharashtra

**SOCIETY OF EMERGENCY MEDICINE INDIA
DR. L.H HIRANANDANI HOSPITAL, POWAI,
MUMBAI, MAHARASHTRA**

DECLARATION BY THE CANDIDATE

I hereby declare that this dissertation entitled, **Characterizing 72-Hour Return Visits to the Emergency Department: A Retrospective Study**, is a bonfide and genuine research work carried out by me under the guidance of Dr. Samrat Chavan (HOD and Consultant Emergency Medicine at Dr. L.H. Hiranandani Hospital, Powai, Mumbai.). I also hereby declare that the SOCIETY OF EMERGENCY MEDICINE INDIA, shall have the right to preserve, use and disseminate the thesis in print or electronic formnat for academic or research purpose.

Date:

Signature of candidate

Place: Mumbai

Dr Poonam Sekhon

SOCIETY OF EMERGENCY MEDICINE INDIA
DR. L.H HIRANANDANI HOSPITAL, POWAI,
MUMBAI, MAHARASHTRA

DECLARATION BY THE PROGRAMME DIRECTOR

This is to certify that **DR POONAM SEKHON** has been a post graduate of CCTEM in Emergency Medicine Department, from the tenure of September 2022 to September 2025, in this institution. Her dissertation entitled, “**Characterizing 72-Hour Return Visits to the Emergency Department: A Retrospective Study**”, is an authentic and genuine research work carried out by her in the partial fulfillment of the requirement for the degree of CCTEM in Emergency Medicine.

Date:

Signature of guide

Place: Mumbai

Dr. Samrat Chavan
HOD and Consultant Emergency Medicine
Dr. L.H. Hiranandani Hospital, Powai,
Mumbai.

SOCIETY OF EMERGENCY MEDICINE INDIA
DR. L.H HIRANANDANI HOSPITAL, POWAI,
MUMBAI, MAHARASHTRA

ACKNOWLEDGEMENT

I wish to express my sincere thanks to Dr. Samrat Chavan, HOD and Consultant, Emergency Medicine, Dr. L.H. Hiranandani Hospital, Powai, Mumbai for constant encouragement and valuable suggestions in preparation of the thesis.

I also want to thank Staff Members of Emergency Department, Dr. L.H. Hiranandani Hospital, Powai, Mumbai for their constant advice and support extended to me.

I also take this opportunity to thank my family members (Parents, Brother, Partner), my colleagues and all the Staff Members of Dr. L.H. Hiranandani Hospital, Powai, Mumbai, for their help and encouragement.

I thank the management of the hospital for providing me all the necessary facilities to complete my thesis.

Date:

Dr Poonam Sekhon

Place: Mumbai

ABSTRACT

Background:

Emergency Department (ED) revisits within 72 hours of discharge are increasingly recognized as key indicators of care quality, patient safety, and healthcare system performance. This retrospective study aims to characterize the nature, causes, and contributing factors associated with 72-hour return visits to a tertiary care hospital's ED.

Methods:

A retrospective review of 155 patient records from January 2023 to December 2024 was conducted. Data were collected on demographic characteristics, primary complaints, revisit timings, and reasons for revisits. Statistical analysis, including chi-square tests, was used to assess associations between revisit causes and variables such as age, gender, and year of admission.

Results:

Of the 155 return visits, the most common causes were disease-related recurrence (37.42%) and progression (33.55%). Patient-related factors, including failure to follow or understand discharge instructions, accounted for 20.65% of revisits, while physician-related causes such as premature discharge represented 8.39%. The age group 30–49 years showed the highest frequency of revisits (43.23%). No significant associations were found between gender or year of admission and revisit causes; however, a statistically significant relationship ($p = 0.0021$) was observed between age group and reason for revisit.

Conclusion:

The findings underscore that while many ED revisits are due to unavoidable disease-related factors, a substantial portion can be prevented through better discharge planning, enhanced patient education, and systematic follow-up care. Interventions tailored by age group and improved interprofessional communication are essential for minimizing avoidable ED returns and improving overall healthcare outcomes.

LIST OF ABBREVIATIONS

EDs	-	EMERGENCY DEPARTMENTS
ED	-	EMERGENCY DEPARTMENT
NEDS	-	NATIONWIDE EMERGENCY DEPARTMENT SAMPLE
MI	-	MYOCARDIAL INFARCTION
EHRs	-	ELECTRONIC HEALTH RECORDS
AEs	-	ADVERSE EVENTS
RVs	-	RETURN VISITS
QA	-	QUALITY ASSURANCE
HR	-	HEART RATE
BP	-	BLOOD PRESSURE
OS	-	OXYGEN SATURATION
PALS	-	PEDIATRIC ADVANCED LIFE SUPPORT
PCP	-	PRIMARY CARE PHYSICIAN
LIJMC	-	LONG ISLAND JEWISH MEDICAL CENTER
EDDC	-	EMERGENCY DEPARTMENT DISCHARGE CENTER
IQR	-	INTERQUARTILE RANGE
LOS	-	LENGTH OF STAY
GBTM	-	GROUP-BASED TRAJECTORY MODELLING
PED	-	PEDIATRIC EMERGENCY DEPARTMENT
ACEs	-	ADVERSE CHILDHOOD EXPERIENCES
URVs	-	UNSCHEDULED RETURN VISITS
PEC	-	PEDIATRIC EMERGENCY CENTER
CGRD	-	CHANG GUNG RESEARCH DATABASE
VC	-	VOTING CLASSIFIER
LR	-	LOGISTIC REGRESSION
SVM	-	SUPPORT VECTOR MACHINE
RF	-	RANDOM FOREST
ML	-	MACHINE LEARNING
GBM	-	GRADIENT BOOSTED MACHINE
LWBS	-	LEFT WITHOUT BEING SEEN
EMR	-	ELECTRONIC MEDICAL RECORDS

DSD	-	DUAL SEQUENTIAL DEFIBRILLATION
ROSC	-	RETURN OF SPONTANEOUS CIRCULATION
HIE	-	HEALTH INFORMATION EXCHANGE
AHRQ	-	AGENCY FOR HEALTHCARE RESEARCH AND QUALITY
HCUP	-	HEALTHCARE COST AND UTILIZATION PROJECT
MARS	-	MULTIVARIATE ADAPTIVE REGRESSION SPLINES

TABLE OF CONTENTS

Contents	Page No
DECLARATION BY THE CANDIDATE	iii
DECLARATION BY THE PROGRAMME DIRECTOR.....	iv
ACKNOWLEDGEMENT	v
ABSTRACT.....	vi
LIST OF ABBREVIATIONS	vii
TABLE OF CONTENTS.....	ix
LIST OF TABLE	xi
LIST OF FIGURE.....	xii
INTRODUCTION	1
1. Background and Significance.....	1
2. Conceptual Understanding of Return Visits	2
3. Prevalence and Trends	4
Epidemiology and Global Prevalence	4
Global Prevalence and Variability	5
4. Clinical and Operational Implications	5
5. Factors Influencing Return Visits	6
Quality of Care and Safety Indicators	6
6. Review of Previous Research	7
7. Relevance in the Indian Healthcare System	7
8. Rationale for the Study	7
9. Scope and Limitations	8
Study Objectives	8
CHAPTER-2	9
REVIEW OF LITERATURE	9

CHAPTER-3	28
METHODOLOGY	28
Study Setting	28
Study Population:	28
Type of Sampling	28
Sample Size:.....	28
Duration of Study	28
Inclusion criteria :.....	28
Exclusion criteria:	28
Data Collection Tools.....	29
Data Collection Procedures	29
Data Variables	30
Data Analysis Plan	30
CHAPTER 4	31
RESULTS AND ANALYSIS	31
CHAPTER -5	52
DISCUSSION	52
Implications for Practice and Policy	54
Strengths and Limitations.....	54
SUMMARY	55
CONCLUSION.....	56
REFERENCES	57
SCIENTIFIC COMMITTEE APPROVAL	62
MASTERCHART.....	65
PLAG REPORT.....	69

LIST OF TABLE

Table No.	Page No.
Table 1: Reported Rates of 72-Hour Return Visits in Various Countries	4
Table 2- Distribution of Participants According to Gender	31
Table 3- Distribution of Participants According to Gender	32
Table 4- Distribution of Participants According to Age Group	33
Table 5- Distribution of Participants According to Age Group Year wise	34
Table 6- Distribution of Participants According to Monthly PATIENT in Year 2023	36
Table 7- Distribution of Participants According to Monthly PATIENT in 2024	37
Table 8- Distribution of Participants According to PATIENT 1ST VISIT Time	39
Table 9- Distribution of Participants According to PATIENT 2 nd VISIT Time	40
Table 10-- Distribution of Participants According to PATIENT COMPLAINTS in Year 2023	41
Table 11-- Distribution of Participants According to PATIENT COMPLAINTS in Year 2024	44
Table 12-- Distribution of Participants According to PATIENT Reason for Revisit ..	47
Table 13- Association Between Revisit Reason and Year	48
Table 14- Association Between Age Group and Reason	49
Table 15- Association Between Reason and Year of admit	51

LIST OF FIGURE

Figure No.	Page No.
Figure 1- A simplified framework showing the interplay of patient, provider, disease, and system-level factors contributing to 72-hour return visits.	3
Figure 2- Bar Chart Showing Distribution of Participants Based Gender.....	31
Figure 3- Bar Chart Showing Distribution of Participants Based Gender.....	32
Figure 4- Bar Chart Showing Distribution of Participants Based Age Group.....	34
Figure 5- Bar Chart Showing Distribution of Participants Based Age Group Year wise	35
Figure 6- Bar Chart Showing Distribution of Participants Based Monthly PATIENT in Year 2023.....	37
Figure 7- Bar Chart Showing Distribution of Participants Based Monthly PATIENT in Year 2024.....	38
Figure 8- Bar Chart Showing Distribution of Participants Based PATIENT 1ST VISIT Time	39
Figure 9- Bar Chart Showing Distribution of Participants Based PATIENT 2 nd VISIT Time	40
Figure 10- Bar Chart Showing Distribution of Participants Based PATIENT COMPLAINTS in 2023.....	43
Figure 11- Bar Chart Showing Distribution of Participants Based PATIENT COMPLAINTS in 2024.....	46
Figure 12- Bar Chart Showing Distribution of Participants Based on PATIENT Reason for Revisit.....	47
Figure 13- Bar Chart Showing Distribution of Participants Based on Association Between Reason and Year	48
Figure 14- Bar Chart Showing Distribution of Participants Based on Association Between Age Group and Reason	50
Figure 15- Bar Chart Showing Distribution of Participants Based on Association Between Reason and Year	51

INTRODUCTION

1. Background and Significance

Emergency departments (EDs) are crucial to the healthcare system because they are the primary point of entry for imperative and unscheduled care. They are indispensable in the treatment of wounds, medical emergencies, flare-ups of chronic illnesses, and unknown medical issues. Increasing patient numbers, shifting disease patterns, and limited resources are putting snowballing pressure on emergency care systems worldwide. Among the numerous problems that emergency rooms encounter, unscheduled follow-up visits within a limited time frame—for instance, within 72 hours after discharge—have become a crucial constituent of patient safety, treatment consistency in and high-quality healthcare.

Characterizing these early return interactions and identifying their causes may yield crucial information regarding system inefficient processes, healthcare deficiencies, and patient behavior. Return visits can be classified as either preventable or controlled; preventable returns may be prevented by improved initial care or patient education. The rate of 72-hour ED revisits is thought to be between 2% and 5% worldwide, however this varies depending on institutional, demographic, and regional factors^[2]. These subsequent trips increase the risk of medical bills for patients and strain ED resources.

A 72-hour return visit occurs when a patient returns to the emergency department within 72 hours of being released from the hospital's confines. Misdiagnosis, inadequate treatment, early discharge, inadequate follow-up, or patient-related problems, such as failure to comply or misreading of discharge instructions, can all result in these visits. While not always preventable or intended, return visits may be due to administrative inefficiencies or shortcomings in the creative treatment provided. According to a number of studies, early return visits may encompass 2% to 10% of released patients, contingent on hospital practices, patient information, and local healthcare dynamics^{[1][2]}.

Emergency department (ED) return visits within 72 hours of discharge represent a significant challenge in healthcare systems worldwide. These unplanned revisits have emerged as an important quality indicator for emergency care, serving as a metric to evaluate patient safety, quality of care, and resource utilization efficiency. The

monitoring of unplanned ED revisits has become a standard practice in many healthcare institutions and is increasingly used by regulatory bodies and quality improvement organizations to assess emergency care performance.

The global prevalence of ED revisits within 72 hours ranges from 0.9% to 5.8%, with variations attributed to differences in healthcare systems, patient populations, and methodological approaches.

However, the reasons behind these returns can be multifactorial—ranging from disease progression and inadequate discharge planning to misdiagnoses or system-level gaps. Understanding the characteristics and root causes of such revisits can guide targeted interventions, improve patient safety, and optimize resource utilization.

Return visits raise concerns about the preciseness of the diagnosis, the suitability of discharge, the continuation of care, and the patient's understanding of commands, even though some may be the result of new, unrelated circumstances or the normal development of an existing condition. Therefore, it is essential to analyze and describe these 72-hour return visits in order to improve the safety of patients and ED workflow, as well as to save healthcare costs and prevent needless admissions^[3].

Return visits within 72 hours have a number of consequences. In a clinical setting, they can indicate the need for a different level of care, missed or changing diagnoses, or insufficient symptom control. Operationally, they add to staff load, ED overcrowding, resource reutilization, and higher expenses. From the standpoint of the public's health, they draw attention to deficiencies in primary healthcare access, follow-up, and continuity of care. Improved outcome for patients, optimal utilization of resources, and focused quality improvement activities all depend on an understanding of the complex factors that contribute to these repeat visits ^[3].

2. Conceptual Understanding of Return Visits

Return visits to the ED can be classified based on their cause and relationship to the initial visit. Broadly, they fall into two categories:

- **Related Return Visits:** These are due to the same complaint or a complication arising from the initial condition.
- **Unrelated Return Visits:** These involve a different, unrelated medical issue.

Further classification can be made based on preventability:

- **Preventable Visits:** Resulting from modifiable issues like misdiagnosis, inadequate treatment, or poor discharge planning.
- **Possibly Preventable Visits:** May involve elements of disease progression but also reflect system or provider-related factors.
- **Non-Preventable Visits:** Due to inevitable disease progression or unrelated acute conditions.^[4]

The 72-hour criterion is a common assessment of performance criterion in emergency care that is consumed worldwide. It is believed that a patient's return during this time frame can be a sign of issues with clinical treatment, patient comprehension, or follow-up procedures. But it's also acknowledged that not all of these reconsiders are necessarily bad or unwanted. These could be signs of proper patient behavior in reaction to problems or worsening symptoms.

Figure 1: Conceptual Model of Factors Influencing 72-Hour ED Return Visits

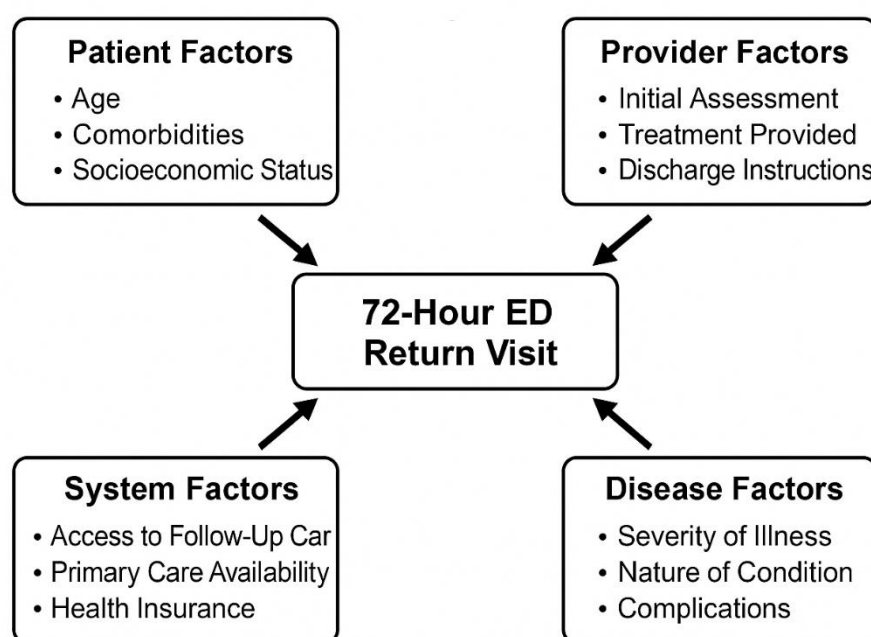


Figure 1. Conceptual Model of Factors Influencing 72-Hour ED Return Visits

Figure 1- A simplified framework showing the interplay of patient, provider, disease, and system-level factors contributing to 72-hour return visits.

Figure 1 shows the main factors that contribute to a 72-hour return appointment to the emergency room in a simplified conceptual framework. The model delineates four domains that are dependent on one another: Patient characteristics (e.g., age, socioeconomic status, comorbidities), Provider characteristics (e.g., quality of

evaluation, sufficiency of treatment, clarity of discharge), System characteristics (e.g., affordability of primary care, insurance, follow-up access), and Disease characteristics (e.g., severity, complications, recurrence).

3. Prevalence and Trends

Different medical settings have quite different rates of 72-hour return visits. While pediatric emergency departments estimate return rates ranging from 1% to 3%, estimates for adult patients in the US show a range of 3.5% to 5% [5]. Recurrence rates may be higher in nations with little resources or primary care access, such as regions of South America, Africa, and Asia. For example, a Taiwanese study indicated that the revisit rate was 5.5%, but an Indian study discovered that the rate in urban government-run healthcare facilities was approximately 6.8% [6][7].

Table 1: Reported Rates of 72-Hour Return Visits in Various Countries

Country	Study Year	Return Visit Rate	Population Focus
United States	2016	3.5%–5%	Adults and older adults
Canada	2010	4.1%	General ED population
Taiwan	2010	5.5%	Secondary teaching hospital
India	2012	6.8%	Urban tertiary care centers
Saudi Arabia	2017	5.0%	Mixed-age population

Several factors influence the prevalence of early ED returns:

- **Demographic Variables:** Elderly patients, infants, and people with chronic diseases are more likely to return.
- **Socioeconomic Status:** Lack of health insurance, poor health literacy, and inadequate access to outpatient care contribute to higher revisit rates.
- **Hospital-Level Factors:** High patient turnover, time constraints on clinicians, and limited diagnostic resources increase the likelihood of premature discharge.^[8]

Epidemiology and Global Prevalence

There are differences in the prevalence of 72-hour ED repeat visits between nations and medical facilities. Data from poor countries like India and Taiwan indicate return rates of 5% to 8% amongst patients who are released, whereas investigations from industrialized countries like the US and Canada find rates between 2% and 5%.^[6,7]

Factors influencing these rates include:

- Patient demographics (age, comorbidities)
- Clinical condition (acute vs chronic)
- Hospital type (tertiary vs secondary)
- Healthcare approachability (obtainability of primary care)

According to a study that employed the NEDS in the US, 3.5% of adult ED patients experienced 72-hour returns. While the rate in Canada was about 4.1%, a Taiwanese study showed a higher rate of 5.5%.^[8,10]

Global Prevalence and Variability

Studies and medical facilities have very different rates of 72-hour ED return visits. Various factors, including study design, patient profile, institutional features, and healthcare infrastructure, influence estimated rates, which vary from 2% to 10%.^[4] For instance:

- Return visit rates varied from 3.5% to 5.4% in a US-based investigation, with greater rates observed in patients with persistent illnesses and older persons.^[5]
- The Pain management and incorrect diagnostics were found to be common factors to a 72-hour return rate of 4.9% in a Canadian study^[15].
- The slightly higher repeat visit rates in a number of Asian nations, such as China and India, were frequently attributed to overworked healthcare workers and insufficient follow-up care^[7].

These results highlight how worldwide the problem is and how assessments must be contextualized based on regional patient demographics and healthcare systems.

4. Clinical and Operational Implications

Early follow-up appointments may reveal recurrent or worsened symptoms, which, from a clinical standpoint, may increase morbidity or mortality. An incorrect diagnosis of myocardial infarction (MI) or sepsis, for example, could cause a catastrophic deterioration within 72 hours. The importance of thorough evaluation and threat assessment at the initial visit is highlighted by these circumstances.

Operationally, a lot of return visits lead to overcrowding in the emergency department, lengthier wait times, and excessive use of facilities at the hospital. Throughput, the happiness of patients, and even employee morale may be impacted. Moreover, recurrent visits might be an indication of care coordination deficiencies or bottlenecks

in the discharge procedure. Administrators and doctors alike are prioritizing the reduction of unnecessary revisits as EDs struggle with budget constraints^[9].

Early return visits pose substantial implications for emergency care:

- **Clinical Risk:** Patients returning within 72 hours are more likely to experience adverse outcomes, including the need for hospitalization or intensive care. Some return visits have been associated with increased mortality^[9].
- **Diagnostic Accuracy:** Revisit data can reveal patterns of misdiagnosis or conditions that were underappreciated during the initial visit.
- **Healthcare Costs:** Repeated ED utilization significantly adds to healthcare expenditure, especially when revisits require admission or advanced diagnostics.
- **System Burden:** Unnecessary revisits exacerbate ED overcrowding, increase wait times, and reduce care efficiency for other patients.

5. Factors Influencing Return Visits

Numerous interrelated factors contribute to early return visits to the ED:

- **Patient-Related Factors:** Age extremes (infants and elderly), comorbidities, language barriers, lack of social support, and health literacy.
- **Provider-Related Factors:** Physician experience, diagnostic uncertainty, inadequate patient education at discharge, and treatment errors.
- **Disease-Related Factors:** Natural progression of illness, pain management issues, and recurrence of symptoms.
- **System-Related Factors:** Limited access to outpatient care, unavailability of follow-up appointments, insurance coverage, and resource limitations.

Each of these factors plays a variable role depending on the setting, patient population, and hospital infrastructure^[10].

Quality of Care and Safety Indicators

The Joint Commission and the Centers for Medicare & Medicaid Services (CMS) are two healthcare quality organizations that view early ED repeat visits as a sign of inadequate care. Although they are not always avoidable, high 72-hour revisit rates usually result in internal audits, clinical retraining, and quality improvement programs. For organizations with integrated EHRs and assistance with decisions technologies,

improved record keeping, decision-making, and discharge processes may lead to fewer preventable revisits ^[14].

6. Review of Previous Research

Numerous studies have explored the incidence and causes of early ED return visits. For example:

- Pham et al. (2011) analyzed data from U.S. EDs and found that 3.2% of patients returned within 72 hours, with varying causes including inadequate symptom resolution and poor discharge planning ^[11].
- Vashi et al. (2013) used qualitative methods to explore patient perspectives and reported that lack of clarity in instructions and poor pain control were major drivers of revisits ^[12].
- A Canadian study by Palmer et al. (2010) found that 18% of return visits were potentially preventable, often due to incomplete evaluation or misdiagnosis. ^[13]

These research emphasize the complexity and multidimensional character of ED revisits and the significance of context-specific examinations, despite differences in approach.

7. Relevance in the Indian Healthcare System

Due to the large number of patients, inadequate funds, and disparate accessibility to basic treatment, India's emergency medical facilities are usually overburdened. Following discharge, there are no set protocols for follow-up care, and the number of unplanned follow-up visits is still underreported. Some of the causes that exacerbate the issue include a lack of EHRs, financial constraints, and inadequate departmental communication. Understanding the 72-hour return visit trends in the Indian context is therefore crucial to improving the effectiveness of treatment and patient safety.

8. Rationale for the Study

While return visits are not always unnecessary, depicting their causes and occurrence provides essential understandings for quality enhancement. By identifying risk factors and trends, hospitals can:

- Develop targeted interventions to reduce preventable revisits.
- Improve discharge protocols.
- Strengthen communication and education strategies for patients.
- Optimize triage and diagnostic processes.

Such efforts can lead to reduced ED overcrowding, improved resource allocation, and better patient outcomes.

9. Scope and Limitations

A single tertiary care hospital's retrospective information served as the basis for this investigation. Although the results offer valuable perspectives, they might not be applicable in every situation. Furthermore, it could be more difficult to record all factors, including patient satisfaction or prescriptions compliance, due to the retrospectively design. The report does, however, provide a basis for future investigation and policy formation.

Our hospital, which serves as a major referral center for a diverse urban and suburban population. Our ED managed approximately 12,000-15,000 patient visits annually, with an average daily census of 40-60 patients.

Study Objectives

1. To determine the incidence and demographic profile of patients who return to the ED within 72 hours.
2. To classify the reasons for return visits (e.g., progression of illness, new complaint, treatment-related, or system-related issues).
3. To evaluate the outcomes of return visits, including admission rates, interventions, and mortality.
4. To identify potentially preventable factors associated with early return visits.

CHAPTER-2

REVIEW OF LITERATURE

Cynthia M. Gaudet *et al.* (2025)^[16] conducted a retrospective study to assess the rate of 72-hour return visits to the emergency department (ED) based on the location of initial physician evaluation, particularly focusing on patients assessed in the waiting room due to ED crowding. The study was conducted at a single tertiary hospital ED and categorized patients into three groups: those evaluated and discharged from the waiting room only, those evaluated in the waiting room followed by a treatment space, and those assessed entirely in a treatment space. The researchers hypothesized that due to overcrowding, some patients might successfully complete their evaluation without occupying a treatment room. An analysis of the patients seen and released from the waiting area showed that they were predominantly treated throughout night shifts, were younger on average, were more probable to be male, and had lower sensitivity scores (Emergency Severity Index). One-way ANOVA with Bonferroni adjustments and chi-squared tests were used for statistical comparisons. Crucially, the study had no discernible difference in 72-hour ED return rates between patients who were first assessed in a waiting area and those who were examined in a treatment setting. According to these results, waiting room assessments could be a secure and effective method of controlling overcrowded emergency departments without sacrificing clinical results if they are properly triaged.

Elham Pishbin *et al.* (2025)^[17] discovered the link between AEs and early RVs to the ED in older patients, a demographic that is more susceptible to problems after discharge. People 65 and older who went back to the emergency department within 72 hours of being discharged were the focus of this retrospective study. During the course of six months, 9,439 (13.6%) of the 69,557 total ED visits involved senior people, with a median age of 75. 373 (3.9%) of these patients came back in less than 72 hours. Fifty-nine RVs (24.4%) were associated with adverse events, according to a thorough secondary analysis of 201 return cases. Management-related problems were the second most frequent reason, behind diagnostic mistakes (34.7%). Interestingly, 63.4% were judged avoidable and 36.7% were categorized as severe adverse events. These results highlight how important AEs are in causing older persons to return to the ED early,

especially when diagnosis and care administration are done incorrectly. According to the study, 72-hour ED return visits are a useful way to find and treat underlying adverse effects. It draws attention to the pressing need for focused quality improvement programs to lower preventable mistakes and improve the security and treatment of elderly people in emergency situations.

Zoe Grabinski *et al.* (2024)^[18] discovered that it's critical to examine ED visits, especially those that result in hospitalization within 72 hours, in order to spot areas for development and deal with any potential disparities in care transfers. Their research evaluated potentially avoidable 72-hour returns with admission (PPRA-72) utilizing a tiered equity analysis and a structured QA approach. A secondary examination committee verified the reliability of a categorization tool that was created to differentiate returns as directed, unrelated, unexpected, or associated with the progression of sickness, with a 93% agreement rate ($\kappa = 0.51$). Self-reported languages and race/ethnicity (R/E) data were employed by the authors to guarantee thorough demographic evaluation. In 2022, 4.8% of ED return visits met the criteria for PPRA-72. There were notable differences in ED dispositions by R/E ($p < 0.001$), with Black patients having the highest 72-hour rate of readmission and White patients being admitted more frequently during the initial visit. R/E and language did not, however, substantially influence PPRA-72 rates. This study shows how important it is to incorporate equity-focused indicators into assessments of ED revisits. By incorporating triage refinements, provider feedback, and informatics enhancements, the framework provides actionable insights to improve care quality and promote equitable health outcomes.

Rhonda J. Rosychuk *et al.* (2024)^[19] conducted a wide-ranging reconsidering observational study to calculate the physiognomies and conclusions of COVID-19 patients who reimbursed to the ED after an preliminary discharge. Utilizing data from 47 Canadian EDs between March 1, 2020, and March 31, 2022, the study analyzed 44,862 COVID-19-related visits among 39,809 adult patients. Of these, 89% (35,468) had a single ED visit (SV group), while 11% (4,341) returned within 30 days (MV group), with a mean of 2.2 visits. Forty-one percent of MV patients who were not admitted at first needed to be admitted again. Hospitalization occurred during the initial

visit for 40% of MV clients as well as 16% of SV patients. With a median revisit interval of 4 days, 49% of MV patients notably returned within 72 hours. Those who had their vaccinations complete or boosted, as well as females, had significantly lower probabilities of getting back, according to multivariable analysis. The results indicate that unplanned return visits to the emergency department during the COVID-19 pandemic were frequent and frequently reflected unfulfilled treatment needs or clinical worsening. The study emphasizes how crucial it is to identify at-risk individuals after discharge and advocates for better ED care and follow-up tactics in order to minimize recurrent visits and maximize resource use.

Sriram Ramgopal *et al.* (2024)^[20] discovered the importance of recording vital signs and how it relates to hospitalization or transfer for young patients in EDs. The completeness of vital signs (temperature, respiration rate, HR, BP, and OS) and their compliance with PALS criteria were the main focus of this retrospective, cross-sectional study, which used data from the National Hospital Ambulatory Medical Care Survey (2016–2021). Just 58% of the 162.7 million pediatric ED visits that were weighted by the survey had full vital sign record. In cases involving children who were older in accumulation to those with higher levels of perspicacity, wholeness was more common. Seventy-three percent of contacts with complete documentation had at least one aberrant vital sign that met PALS criteria. These abnormalities, particularly elevated respiratory and heart rates, were significantly associated with increased odds of hospitalization or transfer (odds ratio 1.51; 95% CI: 1.11–2.04). The study underscores a concerning gap in comprehensive vital sign recording in pediatric emergency care, highlighting the need to enhance pediatric preparedness standards. Furthermore, the findings reinforce the clinical importance of routine and accurate vital sign assessment, as specific abnormalities serve as critical indicators for higher levels of medical intervention in children presenting to the ED.

Mohammed A. Alazzawi and Ahmad O. Hamdan (2023)^[21] discovered that the Since emergency departments (EDs) serve as a convenient gateway to the healthcare system, many patients consider them to be their first choice when they have medical issues. To assess the quality and result of care, it is necessary to take into account the burden, the causes, and the frequency of ED visits. Investigating the factors that influence the rate of return to the emergency room within 72 hours was the researcher's

goal. Moreover, to identify the fundamental causes of unforeseen ED follow-up visits. The study was cross-sectional and retrospective. Out of 53387 ED visits, 1535 were unscheduled, according to the study's findings. It was 2.9%. Unscheduled ED return visits accounted for 339 (22%) of all ED hospital stays, making up 8% of the total. The study found that some presenting issues, including fever, cough, and throat pain related to a respiratory tract infection, have been linked to a higher likelihood of unplanned return; this was 33% (513). The results of the study highlight the necessity of programs that improve patient education via efficient communication and access to follow-up care. Additionally, monitoring the rate of unplanned ED returns on a regular basis and linking it to each ED physician's performance review may help reduce the rate while improving the standards and outcomes of care.

Lisa O. Iyeke *et al.* (2023)^[22] discovered that the impact of organized discharge assistance on ED outcomes, particularly for vulnerable groups, was examined. Although the majority of ED patients are sent home with commands regarding following up with a professional or PCP, the study highlighted that discharge procedures vary momentarily. Follow-up care is difficult for many patients, especially those without insurance or with inadequate health literacy, which raises the risk of 30-day readmissions and 72-hour ED visits. In order to solve this, the LIJMC established an EDDC with treatment coordinators on staff to actively arrange patient post-discharge visits. Compared to patients discharged under regular processes, those who got EDDC assistance had a decreased rate of 30-day hospitalizations (3.4% vs. 4.2%) and 72-hour ED returns (5.3% vs. 6.5%) between July 2020 and July 2021. Most follow-up appointments were scheduled within a week, and nearly 90% were with new providers. Though ED length-of-stay increased slightly by around 10 minutes, patient satisfaction remained unchanged. The EDDC model demonstrates potential in improving follow-up care coordination, particularly benefiting elderly and uninsured populations, and may serve as a scalable intervention for reducing avoidable ED revisits.

Molly Curtis *et al.* (2023)^[23] evaluated the effectiveness of an Emergency Department Discharge Coordination (EDDC) program aimed at improving outpatient follow-up and reducing return visits. The study found that scheduled follow-up appointments through the EDDC were usually secured within one week and were associated with a slight but

statistically significant reduction in 72-hour ED returns and 30-day admissions, compared to standard discharge referrals. Although the EDDC group experienced a minor increase in ED length of stay (approximately 10 minutes), patient satisfaction remained unchanged. Adjusted analyses considering factors like age, insurance status, primary care access, and appointment attendance were proposed for future research. The study also analyzed pediatric emergency department (PED) encounters involving children with fever (ICD-10 code R50.9) at a tertiary care center in 2019. Out of 1,813 visits, 788 met the final inclusion criteria. Children categorized as under-immunized (UnderI) or unimmunized (UnI) showed significantly higher rates of diagnostic testing and medical interventions than fully immunized (FI) counterparts. However, no significant differences were observed in hospitalization rates, 72-hour return visits, or chest radiograph usage. These findings suggest heightened clinical suspicion and caution in managing febrile UnI and UnderI children, underscoring the need for evidence-based guidelines amid growing vaccine hesitancy.

Jessica Hauser Chatterjee *et.al.*, (2023)^[24] discovered that a common presenting ailment for children who visit the pediatric ED is a headache. Although intranasal (IN) sumatriptan is a safe and well-tolerated therapy for migraine headaches, pediatric emergency departments rarely use it. Using IN sumatriptan as a first-line therapy, we describe an ED migraine route in this study. We examined a cohort of patients treated on an ED migraine pathway between October 2016 and February 2020 using retrospective chart analysis from a single center. Clinical characteristics, LOS, discharge the medication prescriptions, medication trends, pain score changes, patient demographics, ED charges, and unscheduled follow-up visits were all investigated. Of the 558 patients in this study, 66% were female and ranged in age from six to twenty-one. The median pain score was 7 (IQR: 5 to 8) prior to therapy, and 2 (IQR: 0 to 4) following treatment. Of the patients who received a medication called sum, 48% received at sumatriptan at the emergency room, whereas 36% received oral a medication called sum after being discharged. Treatment of headaches with intravenous, access was associated with significantly longer length of stay and higher ED expenses. IN sumatriptan is a promising first-line treatment for kids migraine in the emergency department that may save ED expenses, decrease hospital stays, and eliminate the need for intravenous therapies. Further research is needed to determine

how well IN sumatriptan works in light of other well-known first-line therapies for pediatric migraine in the ED.

Sriram Ramgopal *et al.* (2022)^[25] discovered that the commonly used 72-hour return visit measurement for pediatric patients being released from EDs was analyzed, raising doubts about its empirical foundation. The goal of the study was to identify a more precise cutoff criterion for describing return visits to the pediatric emergency department. A retrospective cohort analysis was carried out using data from 44 pediatric EDs. The analysis focused on the first return visit that transpired within 30 days following an index contact in 2019. By using cumulative hazard curve analysis and multivariable adaptive deterioration spline modeling, a hinge point at 7 days was determined to be a statistically sound threshold for determining early return visits. A return visit was conducted for 193,605 (9.7%) of the 1,986,778 index releases. The adjusted odds ratio for hospital admission was 1.73, which was substantially greater for early return visits (within 7 days) than for late return visits (15.1%). These results held true for various age groups, geographical locations, and medical disorders. Furthermore, 46.3% of early follow-up visits were in the same assessment group as the first visit. According to the research, a 7-day threshold could be a more reliable and significant way to measure pediatric emergency department repeat visits, which would strengthen the basis for quality evaluation and healthcare strategy.

Ofir Ben Assuli and Joshua R. Vest (2022)^[26] found that different patient risk groups, or latent classes, can be identified with the aid of classification modeling in the healthcare industry. The frequency and cost of frequent ED visits make them a potential option for risk classification modeling. A sample of 37,416 patients who visited an urban safety-net emergency department between 2006 and 2016 were subjected to a technique known as GBTM. During the study period, patients visited the ED up to ten times. The EHR of the hospital, the state-wide health information exchange system, and social determinants of health factors at the local level were among the data sources. Three different trajectory groups were identified by the results. More patients with behavioral illnesses, injuries, alcohol and drug addiction, stroke, diabetes, and other conditions had trajectories with a higher probability of return. Health care organizations can gain a better understanding of the underlying hazards of their huge patient populations by applying sophisticated computational approaches like GBTM.

Healthcare companies can stratify patients by risk level and create early, focused interventions by identifying individuals who are likely to be on high-risk trajectories.

Rachel Weigert *et.al.*, (2022)^[27] discovered that while the impact of parental ACEs on PED utilization has not been investigated, ACEs, such as physical, emotional, or sexual abuse; neglect; and/or exposure to household instability, have been linked to adult ED utilization. Finding out whether parental ACEs affect resource use as shown by (1) PED utilization frequency, (2) PED visit acuity, and (3) 72-hour PED return rates was the main goal. Determining whether resilience and the effect of parental ACEs on PED use interact was the secondary goal. This study is a cross-sectional survey that uses social determinants of health screening, resilience, and ACEs measures that have been previously validated. From October 17, 2019, to November 27, 2019, research assistants in our institution's PEDs used iPads to deliver surveys. Data taken from the electronic health record was connected to survey answers. Our study population was described using descriptive statistics. ACEs, socioeconomic determinants of health, and PED usage metrics were found to be correlated using Pearson correlation. Complete data was available for 251 parents. The frequency of PED visits was positively correlated with parental ACEs (incidence rate ratio: 1.013). Furthermore, a lower number of 72-hour return visits and a weaker correlation between parental ACEs and the number of severe acuity visits were linked to high levels of parental resilience (incidence rate ratio, 0.49). Parental ACEs seem to have a negative correlation with parental resilience and higher-acuity PED visits, and a positive correlation with the frequency of PED use.

Margaret Eason *et al.* (2022)^[28] investigated the clinical appropriateness of patient transfers from pediatric urgent care centers to pediatric EDs, particularly focusing on the utilization of ED resources and the potential to reduce unnecessary visits. Building on previous research that found 27% of transfers from general urgent care clinics were discharged with minimal ED intervention, this study hypothesized that transfers from pediatric-specific urgent care centers would result in higher ED resource utilization and fewer nonacute cases. Over an 11-month period, a retrospective chart review of 240 pediatric patients transferred from pediatric urgent care centers was conducted. Data on

demographics, diagnoses, reasons for transfer, ED procedures, disposition, and 72-hour return visits were extracted from electronic medical records. Just 10.8% of these patients satisfied the requirements for nonacute payment transfers, and 66.7% of them were unconstrained from the ED. Pediatric urgent care transfers were substantially less prospective to be categorized as nonacute than general urgent care referrals (odds ratio: 0.34; 95% CI: 0.18–0.93). These results imply that pediatric urgent care facilities can more precisely determine which children need emergency care, which could minimize needless ED visits, maximize resource usage, and improve the general effectiveness and caliber of pediatric emergency services.

Kenneth M. Rintaari *et al.* (2021)^[29] discovered the traits and results of URVs to a private tertiary hospital in Nairobi, Kenya's PEC within a 72-hour period. In addition to contributing to ED overcrowding, the study sought to evaluate how these URVs impact healthcare delivery and reflect overall care quality. 1.6% (n=172) of pediatric patients who had numerous PEC visits throughout the study period (conducted between July and December 2018) returned within 72 hours, according to the retrospective analysis. A little male majority (58%), and a median age of 36 months were observed. Presently, the majority of patients (84.3%) had coverage and had either gastrointestinal (21.5%) or respiratory (59.5%) diseases. Compared to initial visits, URV patients were more likely to be non-ambulatory and classified as urgent. Of the URV group, 18% required hospitalization. Key factors associated with hospital admission included ambulatory status, lab test results, and acuity level. While some URVs were clinically justified and improved outcomes, others underscored gaps in initial assessment and discharge planning. The study emphasizes the importance of comprehensive initial evaluation and effective communication with caregivers to reduce unnecessary return visits and enhance pediatric emergency care.

Colton Margus *et al.* (2021)^[30] conducted a study during the peak of the COVID-19 pandemic to evaluate ED discharges of suspected COVID-19 patients who were subsequently admitted within 72 hours. The study, spanning from March 2 to April 15, included 7,433 adult discharges from five EDs in New York City. Of these, 139 patients (1.9%) returned and were admitted within 72 hours, highlighting a significant

readmission risk. Compared to those not readmitted, return patients were older (mean age 55.4 vs. 45.6 years), predominantly male, and had higher incidences of diabetes (OR 1.58), obstructive lung disease (OR 2.77), cancer, heart failure, and renal disease. Clinical indicators such as fever, dyspnea, tachycardia, gastrointestinal symptoms, abnormal chest X-rays, ambulance arrival, high triage acuity, and lab abnormalities (e.g., low platelets and lymphocytes) were also associated with higher readmission risk ($p < .05$). Fifteen percent of the readmitted patients died, five percent needed breathing apparatus, and 65.5% needed more oxygen. The study emphasizes the significance of identifying warning signs at the time of ED discharge in order to stop potentially preventable decline. It implies that these factors should be carefully taken into account when making treatment decisions for suspected COVID-19 patients in order to enhance post-discharge results.

Chun-Chuan Hsu et al., (20210)^[31] found that 72-hour URVs are an important clinical measure for evaluating the quality of care in EDs. In order to predict 72-hour URVs for ED patients with abdominal pain, this study developed a machine learning algorithm. The CGRD was used to collect electronic health record information for 25,151 emergency department visits by patients with abdominal discomfort, and 617 features in total were included for analysis. Our supervised machine learning models—VC, LR, SVM, RF, and extreme gradient boosting (XGB)—were used to forecast URVs. Overall, the VC model performed better than the other models (AUROC: 0.74; 95% CI: 0.69–0.76; sensitivity: 0.39; specificity: 0.89; F1 score: 0.25). Using all clinical features, the simplified VC model performed similarly to the complete models (AUROC: 0.72; 95% CI, 0.69–0.74). For both all-features and reduced-features models, the VC model performed best in predicting 72-hour URVs for patients experiencing stomach pain. Following validation, using the VC model in a clinical setting could aid doctors in making wise choices and lowering URVs.

David G. Beiser et al. (2021)^[32] addressed a key clinical challenge of identifying COVID-19 patients at risk of deterioration after discharge from the ED. The study aimed to develop a prediction model for 30-day return hospitalizations among discharged COVID-19 patients. A retrospective cohort analysis was conducted on

7,529 adult ED patients with confirmed SARS-CoV-2 infection across 116 hospitals in the National Registry of Suspected COVID-19 in Emergency Care. Of these, 571 patients (7.6%) were readmitted within 30 days of discharge. The study evaluated four ML models—RF, GBM, Least Absolute Shrinkage and Selection Operator (LASSO), and Classification and Regression Tree (CART). The RF model achieved a receiver operating characteristic (ROC) area of 0.74 (95% CI: 0.71–0.78), with a sensitivity of 0.46 and specificity of 0.84, outperforming the simpler CART model. Common predictors across all models included vital signs (e.g., temperature, lowest oxygen saturation) and comorbidities such as diabetes, hypertension, hyperlipidemia, and obesity. The study shows that ensemble machine learning approaches may accurately predict the probability of hospitalization after discharge, which supports their incorporation into clinical workflows for enhanced resource utilization and triage. To improve patient outcomes, future studies should examine the use of these tools in real-time.

Mohammed Alshahrani *et al.* (2020)^[33] discovered that a retrospective examination was conducted to assess the burden, causes, and frequency of 72-hour repeat visits to the ED, with a focus on how these visits affect the quality of care. Recurrence causes were divided into three categories by the study, which analyzed the paper and electronic medical records of patients who visited the emergency department again between January and May 2016. The mean age of the 1,000 patients (1.3%) who returned within 72 hours after their 79,279 ED visits was 31.5 years, with a little male preponderance (51.3%). Return visits were mostly caused by patient-related reasons, namely continuation of the same symptoms (63.5%). The majority of physician-related reasons (16.7%) were caused by insufficient early intervention or a failure to ameliorate symptoms, whereas system-related problems accounted for 4.2% of instances. Remarkably, fever accounted for 29.1% of all complaints that resulted in a return. There was little morbidity or mortality from the majority of revisits, which led to discharge (96.7%). According to the results, fewer needless follow-up visits may result from enhanced guidelines for discharge, better administration of symptoms, and more open communication. Addressing these factors may enhance patient satisfaction, optimize ED resource use, and improve the overall quality of emergency care.

Sophia Sheikh *et al.* (2020)^[34] explored the risk factors associated with emergency department (ED) return visits for pain among middle-aged and older adults. The study was a subanalysis of a prospective observational study involving patients aged 55 and above who presented to a large urban academic ED within 30 days of a previous visit. The analysis aimed to identify demographic and clinical predictors of return visits specifically related to pain. Among the 130 patients included, the majority were African American (78%) and aged between 55–64 years (67%). High acuity levels at the index visit (levels 1 or 2) were recorded in 56% of patients, and 62% demonstrated low health literacy, as measured by the Rapid Estimate of Adult Literacy in Medicine (REALM). Additionally, 69% lived in highly deprived areas and 61% were admitted during their initial visit. Notably, 57% returned for pain-related reasons. The frequency of pain-related follow-up visits was found to be substantially correlated with younger age, higher index pain scores, and, surprisingly, higher health literacy, according to logistic regression analysis. According to these findings, older persons' ED utilization patterns are influenced by both clinical seriousness and social variables. They also emphasize the necessity of customized arrangements for discharge and methods for controlling pain.

Raheel Sharfeen Qureshi *et al.* (2020)^[35] discovered that a retrospective study was conducted to assess the percentage of URVs to the ED that were caused by mistakes made by emergency doctors (EPs) in diagnosis or treatment. All follow-up visits within 48 hours of discharge were documented in the study using the EMR of a high-volume ED with 460,000 visits annually. Every URV case was examined separately by two groups of three EPs and divided into three groups: unclassifiable (Category 3), connected to EP quality (Category 2), and unrelated to EP quality of care (Category 1). 1.7% (n=615) of the 34,649 ED visits during the study month were classified as connected to physician treatment, while the URV rate was 5.1% (n=1753). Interestingly, 575 URV cases involved patients who had LWBS, yet none of them died within a month or needed to be admitted to the intensive care unit. The high inter-rater agreement ($\kappa = 0.94$) between reviewers indicates strong reliability in URV classification. According to the results, the majority of URVs were not associated with medical mistake, and there is strong consensus among reviewers that using simplified

single-physician reviews for quality assurance in settings with limited resources is a good idea.

K. Morch *et al.* (2019)^[36] discovered that the use of EDs by the elderly is on the rise, with a particular focus on the Edmonton Zone in Canada. Between April 1, 2017, and March 31, 2018, all emergency department visits by patients 65 and older at eleven hospitals—categorized as tertiary (T), urban community (UC), and rural community (RC)—were scrutinized in this retrospective cross-sectional analysis. In all, 100,813 elderly ED visits were documented, demonstrating 18.7% of all ED visits in the area. Shortness of breath, back discomfort, weakness, chest pain with cardiac symptoms, and abdominal pain were among the greatest common presenting grievances. These visits were mostly high acuity cases (CTAS levels 1–3), especially in tertiary institutions (86.3%), accounting for 77.8% of the total. Remarkably, 27.3% of patients had visited the ED in the aforementioned 30 days already. There was an extensive variation in hospital admission rates: 42.8% in tertiary hospitals, 19.4% in urban hospitals, and 7.1% in rural hospitals. At 11:38 hours, the average LOS was the longest across UC hospitals. The research indicates that hospital type affects patient outcomes and emphasizes the significance of modifying emergency department resources to meet elderly demands. These findings are important for geriatric-centered emergency care initiatives and regional healthcare planning.

Lauren R. Beck *et al.* (2019)^[37] demonstrated that DSD is a promising new treatment for tachycardia (VF/VT) and refractory ventricular fibrillation (RVF) in out-of-hospital cardiac arrest (OHCA). As a backup plan in the event that normal defibrillation fails, DSD entails the quick application of two defibrillators with distinct pad positions (anterior-lateral and anterior-posterior). Data from a big metropolitan fire-based emergency medical service from 2013 to 2016 were examined in this retrospective analysis, which concentrated on adult OHCA patients who had at least three standard shocks. DSD was administered to 71 of the 310 patients, while 239 received conventional defibrillation. ROSC, hospitalization survival, 72-hour survival, and discharge survival were among the important outcomes evaluated. Although there were no significant differences in the baseline patient information across the groups, the DSD group had significantly reduced ROSC rates (39.4% vs. 60.3%, adjusted OR 0.46). No

statistically significant differences were observed for hospital admission, 72-hour survival, or hospital discharge. The findings suggest that although DSD is a novel approach, it may be associated with reduced ROSC and does not confer additional survival benefits over standard defibrillation in refractory VF/VT OHCA cases. Further research is necessary to clarify its clinical utility.

Jake Hayward *et al.* (2018)^[38] explored the 72-hour unscheduled return visit (URV) as a key emergency department (ED) performance metric and aimed to differentiate between URVs resulting in hospital admission (URVA) and those that do not (URVNA). Conducted across 10 emergency departments in the Edmonton Zone, this retrospective cohort study analyzed data from January 1 to December 31, 2015. A total of 40,870 adult URV cases were reviewed, including 3,363 URVA cases. Multivariable analysis identified several predictors for URVA during the index ED visit. Key factors included older age (>65 years; OR 3.6), higher initial acuity (CTAS 2; OR 2.6), gastrointestinal complaints (OR 2.2), fewer annual ED visits (<4 visits; OR 2.0), longer ED stay (>12 hours; OR 2.0), and presentation to a referral hospital (OR 1.4). A decline in triage acuity score upon return (i.e., worsening condition) also significantly increased admission likelihood (OR 2.6). Interestingly, ED crowding at the time of the index visit did not predict URVA. The study concluded that URVAs represent a distinct patient subgroup, and the identification of risk factors at the index visit could enable early intervention to prevent deterioration and improve patient outcomes.

Marion R. Sills *et al.* (2017)^[39] investigated whether children admitted during a return emergency department (ED) visit experience worse in-hospital outcomes than those admitted during their initial (index) ED visit. This retrospective study analyzed pediatric patients aged 0 to 17 across 321 hospitals in Florida and New York in 2013. Based on visit patterns, children were categorized into three groups: readmissions (admitted at both index and return visits), ED return admissions (discharged at index, admitted on return), and index admissions without a return admission. Out of 1,886,053 index ED visits, there were 1,333 readmissions, 7,561 ED return admissions, and 75,437 index admissions without subsequent readmission. The study found that ED return admissions had a slightly lower intensive care unit (ICU) admission rate (11.0%

vs. 13.6%; adjusted OR = 0.78), a marginally longer hospital stay (3.51 vs. 3.38 days), and no statistically significant difference in hospital costs compared to index admissions without return. These findings challenge the notion that return ED visits reflect poor quality care, suggesting instead that children admitted during a return visit generally experience comparable or better outcomes than those admitted initially. The study supports reconsidering how return admissions are used as performance metrics in pediatric emergency care.

Nidhya Navanandan *et al.* (2017)^[40] conducted a study to understand the causes of unplanned 72-hour return visits to pediatric emergency departments (ED) or affiliated urgent care (UC) centers from the perspective of caregivers. Between November 2014 and June 2015, surveys were completed by caregivers of children who returned within 72 hours of an initial visit. The study excluded those treated at external facilities, scheduled for return, or non-English/Spanish speakers. The survey assessed caregivers' understanding of four key discharge instruction components: diagnosis, duration of illness, home care, and return precautions. Of the 500 surveys analyzed, 495 children had unplanned return visits. The majority of caregivers were around 33 years old, with 62% having a college degree. Most children were under two years of age (47%), male (52%), Caucasian (55%), and publicly insured (64%). Return visits were primarily due to the caregiver's perception that the child's illness had either not improved (51%) or worsened (41%). Notably, 41% of caregivers reported not receiving complete discharge instructions, and 47% lacked clarity on illness duration. Complete delivery of discharge instructions significantly improved satisfaction (OR 5.7; 95% CI: 3.8–8.5). Enhancing communication at discharge may reduce unnecessary returns and improve caregiver satisfaction.

Mimi Truong *et al.*, (2017)^[41] discovered that return trips to the emergency department (RTED) may be a measure of the quality of service and contribute to overcrowding. Factors predicting returns to and from the same center were the focus of earlier research. RTEDs across a variety of community and specialty hospitals over a wide geographic area are not well understood. In a wide catchment region, we aimed to quantify the frequency of pediatric RTEDs and characterize their directional distribution across

centers. A multicenter retrospective cross-sectional study of pediatric emergency visits within a year was carried out on the lower mainland of Vancouver. Visits were connected among 17 research locations, which ranged from sizable regional facilities to smaller community emergency departments (EDs), as well as one pediatric quaternary care referral facility. Found that congestion is a result of repeat visits to the emergency department (RTED), which may be a gauge of service quality. Previous studies focused on factors that predict returns to and from the same center. There is a lack of knowledge regarding RTEDs in a broad geographic area across a range of community and specialty hospitals. We sought to measure the prevalence of pediatric RTEDs and describe their directional distribution among centers in a large catchment area. On Vancouver's lower mainland, a multicenter retrospective cross-sectional study of pediatric emergency visits within a year was conducted. Visits were linked to one pediatric quaternary care referral center and 17 research sites, ranging from large regional facilities to smaller community emergency departments (EDs). This study, which linked hospitals across a wide geographic area, found a larger percentage of RTEDs with a disproportionate load on the PED than single-center studies.

Amy Hui Sian Chan *et al.* (2016)^[42] conducted a significant study emphasizing the 72-hour emergency department (ED) reattendance rate as a widely recognized metric to assess patient safety and healthcare quality. Patients returning to the ED within 72 hours post-discharge are often presumed to have received inadequate care or assessment during their initial visit. The study, based at a tertiary hospital in Singapore, employed a retrospective cohort analysis of ED visits over one year (January 1 to December 31, 2013), involving 104,751 unique patients. Out of these, 3,065 individuals (2.93%) revisited the ED within 72 hours. Using multivariate data analysis, the following characteristics were found to be associated with a higher probability of reattendance: male gender, older age, Chinese ethnicity, arrival of the ambulance, triage designation as P2, and illnesses such as viral contaminations, heart problems, or stomach pain ($p < 0.001$). The attending physician's seniority, interestingly, had no discernible effect ($p = 0.419$). According to these conclusions, early ED returns may be influenced by both clinical factors and patient demographics. The study encourages further research into the underlying grounds of reattendance and highlights the need for beleaguered

therapies for high-risk individuals. These findings will help guide engagements to enhance emergency care competence and condense avoidable ED visits.

Bradley D. Shy *et al.* (2016)^[43] established that the application of HIE can enhance the identification of 72-hour repeat visits to EDs, a critical metric generally used to enhance the customary of emergency care. Healthix, a regional HIE in the New York metropolitan expanse, provided deidentified patient evidence from 31 EDs over a 5-year period for the study. This data controlled information from a previous HIE system with 11 sites. The homecoming visit rates obtained from different site data and the aggregated HIE were distinguished. A total of 6.3 million patient interactions from the last HIE were included in the assessment of over 12.6 million patient encounters. Aggregated HIE data showed greater variability of 1.8% to 15.5% (median 6.8%), whereas site-specific 72-hour return rates varied from 1.1% to 15.2% (median 5.8%). When juxtaposed with non-HIE approaches, the average improvement in return visit identification was 11.16% when HIE was used. This finding underscores the potential of HIE systems to enhance the accuracy of return visit analysis, providing more comprehensive insights for emergency care quality monitoring and patient safety initiatives. The study advocates for broader implementation of HIE to support data-driven healthcare improvements.

Amber K. Sabbatini *et al.* (2016)^[44] examined the clinical outcomes and healthcare resource utilization among patients who were hospitalized following an unscheduled return to the emergency department (ED), evaluating its validity as a quality-of-care measure. The study analyzed over 9 million index ED visits across 424 hospitals. Of these, 1.76 million patients were admitted during the initial visit, while 7.28 million were discharged. Among discharged patients, 8.2% returned within 7 days, 11.5% within 14 days, and 16.6% within 30 days. A portion of these returnees required hospitalization, yet their clinical outcomes differed notably from those admitted during their initial visit. Specifically, patients admitted after a return ED visit within 7 days had lower in-hospital mortality (1.85% vs. 2.48%), fewer ICU admissions (23.3% vs. 29.0%), and lower average costs (\$10,169 vs. \$10,799), despite having slightly longer hospital stays (5.16 vs. 4.97 days). Similar trends were noted for 14- and 30-day returns. Conversely, patients readmitted after hospital discharge had worse outcomes. These findings challenge the assumption that early ED returns universally reflect poor quality

care, suggesting that short-term ED revisit admissions may not serve as reliable indicators of care deficits and require more nuanced interpretation in hospital performance evaluations.

Kristin L. Rising *et al.* (2015)^[45] explored patient perspectives to understand the underlying reasons behind recurrent emergency department (ED) visits, a dimension often overlooked in administrative data analysis. The study's objective was to identify the unique circumstances and developmental experiments that patients face after being discharged from the emergency department. The researchers conducted semistructured qualitative interviews with 60 elderly patients who returned to the emergency department within nine days of their innovative discharge using a modified grounded theory strategy in instruction to identify significant themes. Many patients expressed dissatisfaction with the insufficient evaluation and treatment they received on their initial visit, despite the fact that furthermost were satisfied with the discharge process. Their readmission to the emergency room was primarily instigated by insecurity and fear about their health. Most people did not seek casualty care before returning to the emergency room, even nonetheless they had access to a PCP. Among the factors that led them to return were opportuneness, speedier diagnosis, and the discernment that they were incompetent to receive timely follow-up care. A lack of speedy care and worry during the course of the syndrome are two postdischarge concerns that have a significant impression on recurrent ED usage, the study found. According to the research, patients may be intelligent to reduce unnecessary follow-up visits if they are given better discharge information as well as unconventional networks of maintenance to help them accomplish their therapy after leaving the emergency department.

Kristin L. Rising *et al.* (2014)^[46] discovered that the widely-used 72-hour ED reenter metric was thoroughly considered, with the supposition that it lacked a solid experimental basis. The study sought to ascertain the best window of time for detecting ED revisits that are clinically meaningful. From April 2010 to March 2011, the researchers examined more than 4.78 million emergency department discharges in Florida and Nebraska using retrospective cohort data from the AHRQ, HCUP. They tracked patients' ED revisits to any hospital within the same state over 30 days. Findings revealed that 7.5% of patients revisited within 3 days, while a significant 22.4% returned within 30 days. Through both parametric and nonparametric modeling, a

double-exponential distribution fit the data best, and MARS identified 9 days as the optimal cutoff for detecting acute revisits. This suggests that the traditional 72-hour window overlooks nearly 70% of meaningful return visits. The authors advocate for revising the standard metric and shifting focus toward understanding the underlying causes of potentially avoidable ED revisits, rather than solely their timing. The quality of care could be more accurately reflected using this method, which could also reveal actual inadequacies in patient management.

Sandra Verelst *et al.* (2014)^[47] discovered that the purpose of the retrospective study was to investigate any correlation with ED crowding and to look at the distinctive features of patients who went back to the ED on related, unscheduled trips. Patients who were over 16 and returned to the emergency department within a year were included in the study. Out of the total cases, 837 patients (1.9%) made unscheduled return visits. Analysis showed that the length of stay (LOS) for return visits was significantly longer (6 hours 51 minutes) compared to the initial visit (5 hours 54 minutes). Additionally, a greater percentage of return patients were admitted upon re-presentation (46.1% vs. 11.6%). Persistent symptoms (85.1%), inaccurate initial diagnosis (12%), and treatment-related negative outcomes (2.9%) were the main causes of return. Interestingly, although alcohol-related complaints were less common during initial visits, they had the highest return rate (9.4%). Importantly, the study found no correlation between unscheduled return visits and ED crowding, suggesting that crowding was not a contributing factor. Despite longer LOS and higher admission rates during return visits, the hospital's low return rate indicates a relatively high standard of care. Return visit frequencies are a useful quality assurance parameter in emergency healthcare settings, according to the research.

Cho Christine S. *et al.* (2012)^[48] investigated the frequency and characteristics of pediatric 72-hour return visits (RVs) to emergency departments (EDs) in the United States from 2001 to 2007. The study used data from the National Hospital Ambulatory Medical Care Survey and discovered that, on average, 698,000 pediatric return visits took place each year, making up around 2.7% of total pediatric ED visits. During the research period, there was a notable rising trend in the RV rate. The study identified several clinical and demographic characteristics associated with an increased likelihood of follow-up visits using multiple logistic regression models. Patients who received

healthcare in the western United States, those who attended amongst seven in the early afternoon and three in the evening, patients who had recently been discharged from the hospital, and children fresher than one year or between thirteen and eighteen were among the characteristics scrutinized. Follow-up visits were supplementary often linked to hospitalization and full blood amount monitoring, but less often to analyzes of trauma or grievance. Surprisingly, the likelihood of a follow-up visit was not significantly obstructed by insurance status. This analysis at the national level provides valuable comprehensions into changes in pediatric emergency department utilization and give emphasis to the need for targeted engagements to reduce unnecessary returns while antibacterial high-quality care for high-risk progenies and adolescents. It is commanding that these discoveries inform healthcare policy and ED management strategies.

Christian Martin Gill and Robert C. Reiser (2004)^[49] discovered that determining risk variables for return and hospitalisation within 72 hours of ED discharge was the aim of this investigation. 493 (0.47%) of the 104,584 patients who were seen and released from the emergency department over a two-year period resurfaced within 72 hours and needed to be admitted. Age, sex, race, health insurance coverage, and initial diagnosis have been compared as risk factors. The day of the week, the mode of transportation, the time of arrival and discharge, and the interval between visits were all used to describe the initial visits. Patients who had Medicare or other senior healthcare and those who were older, particularly those over 65, were more vulnerable. Symptom-based diagnoses (0.76%), genitourinary system illnesses (0.93%), and mental disorders (1.2%) were the greatest risk initial diagnoses categories. Additionally, a significant number of patients arrived via ambulance. In order to reduce high-risk early ED readmissions, anticipatory prevention measures should prioritize patients who have been recognized as having a higher risk of early admission.

CHAPTER-3 METHODOLOGY

This study utilized a retrospective observational design to analyze the characteristics and patterns of 72-hour return visits to the Emergency Department (ED). A retrospective review of patient records was undertaken to identify relevant clinical and demographic data related to return visits.

Study Setting

The research was conducted at a tertiary care teaching hospital in a metropolitan area. The hospital provides round-the-clock emergency services to a diverse patient population across all age groups.

Study Population:

All patients presenting to the ED who return within 72 hours of their index visit during the study period.

Type of Sampling: Total enumeration sampling, also known as census sampling, is a type of non-probability sampling where all eligible cases that meet the inclusion criteria within a defined period are included in the study.

Sample Size: 155 Patients

Duration of Study: 2 Years (January, 2023 – December 2024).

This data was then noted and documented in an excel sheet for analysis .

Inclusion criteria :

The study included all patients who returned to our ED within 72 hours of discharge from their initial ED visit during the study period and met the following criteria:

- (1) Return for the same or related complaint as determined by clinical evaluation;
- (2) Unplanned return (not specifically instructed to return by the initial treating physician);
- (3) Discharged home from the initial ED visit;

Exclusion criteria:

We excluded patients who:

- (1) Returned for a complaint clearly unrelated to the initial visit as determined by the treating physician and confirmed by the research team;
- (2) Were specifically instructed to return for planned reevaluation or test results;
- (3) Left against medical advice during the initial visit;
- (4) Were discharged from an inpatient service rather than the ED during the initial visit;
- (5) Were transferred from another hospital for the revisit;
- (6) Visited another ED for their initial presentation; or
- (7) Had made more than three ED visits in the preceding 30 days (to exclude frequent ED utilizers whose patterns of care might confound the analysis of typical revisit patterns).

Data Collection Tools

Medical health records will be reviewed to extract demographics, triage data, diagnoses, treatment given, discharge instructions, and details of the return visit.

Data Collection Procedures

screening all ED visits daily using the medical record system to identify patients who returned within 72 hours of a previous visit. For each eligible patient identified through systematic random sampling, the research team conducted a structured review of the medical record. Medical records from both the initial and return visits were comprehensively reviewed to extract demographic data, chief complaints, vital signs, laboratory and imaging results, diagnoses, treatments, disposition decisions, and clinical outcomes. The time interval between visits was calculated to the nearest minute using time-stamped ED registration records.

Patient was questioned about reason for revisit at A&E and recorded

Data Points: Age, gender, presenting complaints, time to return, reason for return, initial vs. final diagnosis, outcome of return visit (discharge/admission), and any adverse events.

Data Variables

A structured data collection sheet was used to extract the following variables:

A. Demographic Variables

- Age
- Sex
- Residential location (urban/rural)
- Socioeconomic status (as per hospital registration data)

B. Clinical Variables

- Presenting complaint at both visits
- Triage category (red, yellow, green)
- Vital signs (temperature, pulse, BP, respiratory rate)
- Comorbidities (e.g., diabetes, hypertension, COPD)
- Final diagnosis (ICD-10 code if applicable)

C. Visit-Related Variables

- Date and time of initial visit and return visit
- Time interval between visits (categorized as 0–12 hrs, 12–24 hrs, 24–48 hrs, 48–72 hrs)
- Duration of stay in ED during first visit
- Disposition at return visit (discharged, admitted, referred, LAMA)

D. Care Process Variables

- Investigations ordered (lab, radiology, etc.)
- Treatment administered during both visits
- Discharge instructions documented
- Whether a follow-up referral was provided

E. Outcome Variables

- Whether the revisit was related to the initial complaint
- Whether the revisit was preventable (assessed by clinical review)
- Adverse events or escalation of care during revisit

Data Analysis Plan

- Data were entered into Microsoft Excel and analyzed using SPSS version 25.0. Descriptive statistics such as mean, median, standard deviation, frequency, and percentage were used. Chi-square test and t-tests were used for comparisons between groups. Multivariable logistic regression was applied to identify predictors of return visits. A p -value < 0.05 was considered statistically significant.

CHAPTER 4

RESULTS AND ANALYSIS

This section presents a detailed analysis of the data collected from 155 participants who returned to the Emergency Department (ED) within 72 hours of discharge between 2023 and 2024. The findings have been summarized across multiple demographic, clinical, and temporal variables using descriptive statistics and inferential tests such as the chi-square test to identify significant associations.

Table 2- Distribution of Participants According to Gender

GENDER	Frequency	Percentage
MALE	70	45.16%
FEMALE	85	54.84%
Grand Total	155	100.00%

The data presented in Table 2 illustrates the gender distribution of participants who returned to the Emergency Department (ED) within 72 hours. Out of a total of 155 cases, 85 (54.84%) were female and 70 (45.16%) were male. This indicates a slightly higher incidence of 72-hour return visits among female patients compared to their male counterparts. The observed predominance of females may be influenced by a range of factors, including greater health-seeking behavior among women, specific medical conditions more prevalent in females (such as gynecological or urinary issues), or increased symptom sensitivity leading to earlier re-presentation.

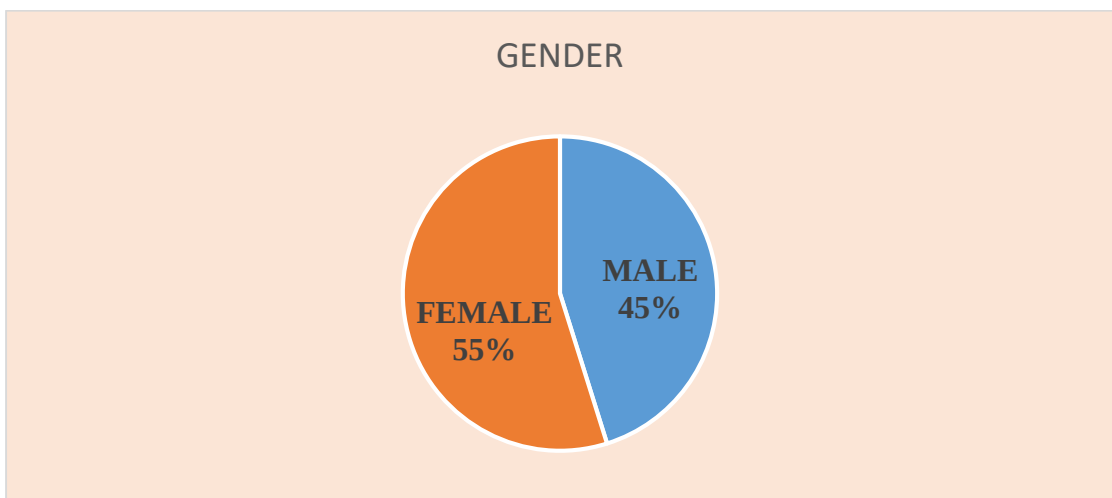


Figure 2- Bar Chart Showing Distribution of Participants Based Gender

Table 3- Distribution of Participants According to Gender

GENDER	2023		2024	
	Frequency	Percentage	Frequency	Percentage
MALE	52	67.53%	33	42.31%
FEMALE	25	32.47%	45	57.69%
Grand Total	77	100.00%	78	100.00%

The data presented in Table 3 reflects the gender-wise distribution of participants who returned to the Emergency Department (ED) within 72 hours during the years 2023 and 2024. In 2023, out of a total of 77 return visits, a significant majority were male patients, accounting for 52 cases (67.53%), while females constituted only 25 cases (32.47%). However, in 2024, the trend reversed. Out of 78 return visits, female patients represented the majority with 45 cases (57.69%), whereas male participants accounted for 33 cases (42.31%). This noticeable shift in gender distribution over the two years may indicate changing healthcare-seeking behaviors, evolving disease patterns, or differences in the management and discharge practices over time. The higher percentage of male return visits in 2023 could be linked to occupational risks, delayed presentation, or underreporting of symptoms leading to premature discharge.

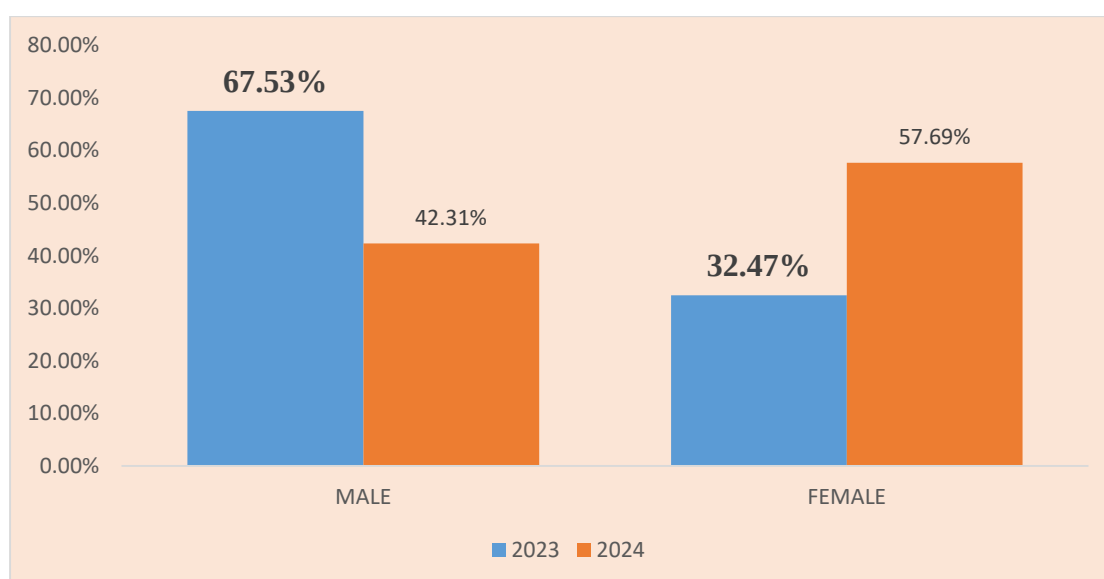


Figure 3- Bar Chart Showing Distribution of Participants Based Gender

Table 4- Distribution of Participants According to Age Group

Age Group	Frequency	Percentage
0-10 Years	6	3.87%
11-18 Years	9	5.81%
19-29 Years	37	23.87%
30-49 Years	67	43.23%
50-69 Years	24	15.48%
70+ Years	12	7.74%
Grand Total	155	100.00%

The data presented in Table 4 highlights the distribution of participants according to age groups who returned to the Emergency Department (ED) within 72 hours. Among the total of 155 return visits analyzed, the **30–49 years age group** recorded the highest frequency, with **67 participants (43.23%)**, indicating that middle-aged adults were most commonly affected. This may be attributed to a combination of factors, including a higher burden of work-related stress, chronic health conditions, and the tendency to delay seeking timely medical care, leading to early discharges or incomplete recovery.

The **19–29 years** age group accounted for the second highest proportion, with **37 participants (23.87%)**, suggesting that younger adults also represent a substantial segment of return visits, possibly due to lifestyle-related illnesses, anxiety-driven healthcare utilization, or non-compliance with discharge instructions. In contrast, the **50–69 years** group comprised **24 participants (15.48%)**, and the **70+ age group** had **12 cases (7.74%)**, indicating fewer return visits among older adults, which may reflect lower mobility, underreporting of symptoms, or more cautious discharge practices by clinicians in elderly patients.

Children and adolescents together (0–18 years) constituted a smaller proportion, with **6 participants (3.87%)** in the **0–10 years** group and **9 participants (5.81%)** in the **11–18 years** group. This lower representation could be due to more careful assessment and monitoring of pediatric cases or parental reluctance to revisit EDs unless absolutely necessary.

Overall, the data indicate that working-age adults, particularly those between 30 and 49 years, are the most frequent users of emergency services for short-term revisit needs, emphasizing the need for targeted discharge planning, health education, and outpatient support in this demographic group.

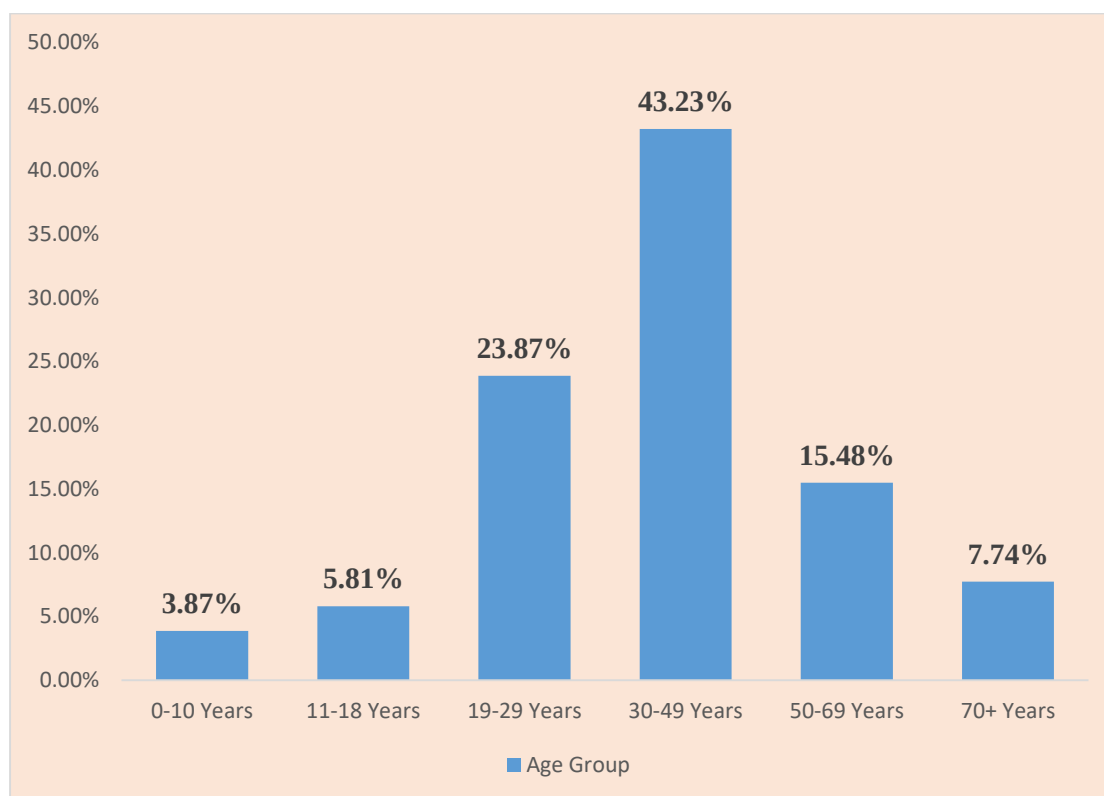


Figure 4- Bar Chart Showing Distribution of Participants Based Age Group

Table 5- Distribution of Participants According to Age Group Year wise

Age Group Year wise	Frequency	Frequency
	2023	2024
0-10 Years	2	4
11-18 Years	6	3
19-29 Years	20	17
30-49 Years	30	37
50-69 Years	15	9
70+ Years	4	8
Grand Total	77	78

The data in Table 5 presents the age-wise distribution of participants who returned to the Emergency Department within 72 hours during the years 2023 and 2024. In both years, the **30–49 years age group** had the highest frequency of return visits, with **30 cases in 2023** and **37 cases in 2024**, indicating that this working-age population is most prone to early ED revisits, possibly due to lifestyle-related health issues, stress, or premature discharges. The **19–29 years** group followed closely, contributing **20 cases in 2023** and **17 in 2024**, highlighting a consistent pattern of return visits among young adults. Interestingly, return visits among the **elderly (70+ years)** increased from **4 in 2023** to **8 in 2024**, suggesting a growing need for focused geriatric care and better discharge planning in this age group. The **0–10 years** age group also saw a rise from **2 cases in 2023** to **4 in 2024**, while adolescents (11–18 years) saw a slight decline. These trends underscore the need for age-specific interventions to reduce avoidable emergency department revisits.

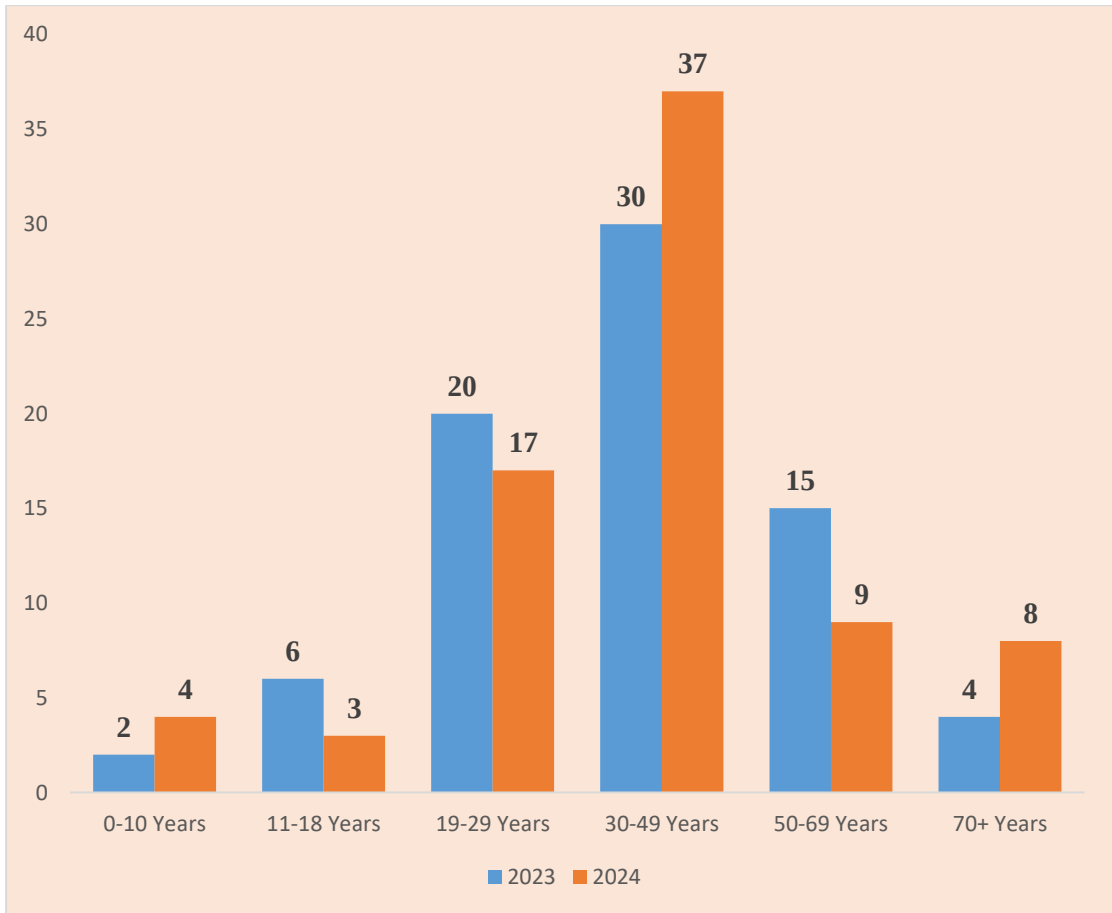


Figure 5- Bar Chart Showing Distribution of Participants Based Age Group Year wise

Table 6- Distribution of Participants According to Monthly PATIENT in Year 2023

Monthly PATIENT in Year 2023	Frequency	Percentage
January	7	9.09%
February	4	5.19%
March	4	5.19%
April	7	9.09%
May	11	14.29%
June	8	10.39%
July	2	2.60%
August	8	10.39%
September	5	6.49%
October	4	5.19%
November	7	9.09%
December	10	12.99%
Grand Total	77	100.00%

The data in Table 6 illustrates the monthly distribution of participants who returned to the Emergency Department within 72 hours during the year 2023. Among the total 77 cases, the highest frequency of return visits was observed in **May (14.29%)**, followed by **December (12.99%)**, suggesting possible seasonal influences or increased health-seeking behavior during these months. Other months with relatively high return visit frequencies include **June and August (10.39% each)** and **January, April, and November (9.09% each)**. The lowest return rate was recorded in **July (2.60%)**, indicating a possible dip in patient load during that period. Overall, the data reveals a fluctuating monthly pattern, with certain months experiencing a higher burden of return ED visits, possibly due to environmental, epidemiological, or operational factors influencing both illness patterns and healthcare utilization.

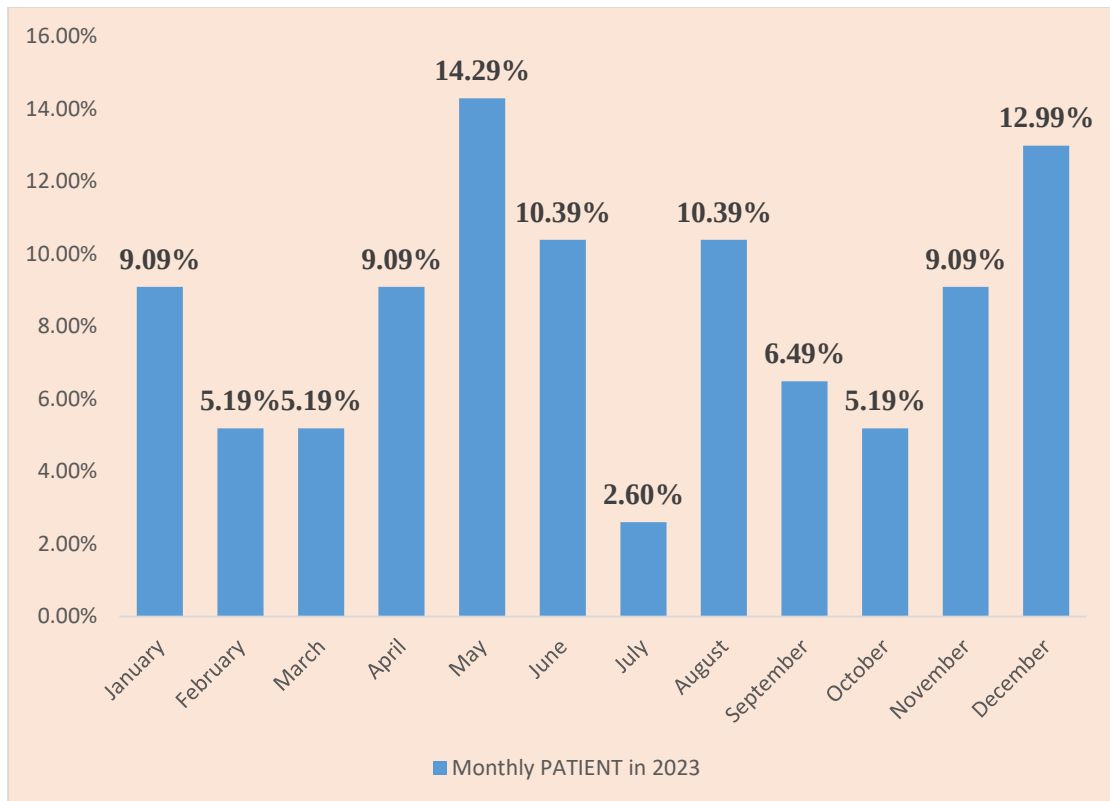


Figure 6- Bar Chart Showing Distribution of Participants Based Monthly PATIENT in Year 2023

Table 7- Distribution of Participants According to Monthly PATIENT in 2024

Monthly PATIENT in 2024	Frequency	Percentage
January	1	1.28%
February	4	5.13%
March	6	7.69%
April	5	6.41%
May	7	8.97%
June	5	6.41%
July	9	11.54%
August	7	8.97%
September	15	19.23%
October	5	6.41%
November	4	5.13%
December	10	12.82%
Grand Total	78	100.00%

The data in Table 7 presents the monthly distribution of participants who returned to the Emergency Department within 72 hours during the year 2024. Out of a total of 78 return visits, the highest frequency was recorded in **September (19.23%)**, followed by **December (12.82%)** and **July (11.54%)**, indicating peak periods of emergency care re-utilization. These months may coincide with seasonal illnesses, environmental changes, or healthcare access issues contributing to increased revisit rates. Moderate return frequencies were also noted in **May and August (8.97% each)** and **March (7.69%)**, while **January** recorded the **lowest return rate at just 1.28%**. Overall, the data suggests a variable monthly trend, with certain months—especially late monsoon and winter seasons—experiencing a higher burden of 72-hour return ED visits, emphasizing the need for enhanced preparedness and follow-up strategies during these peak periods.

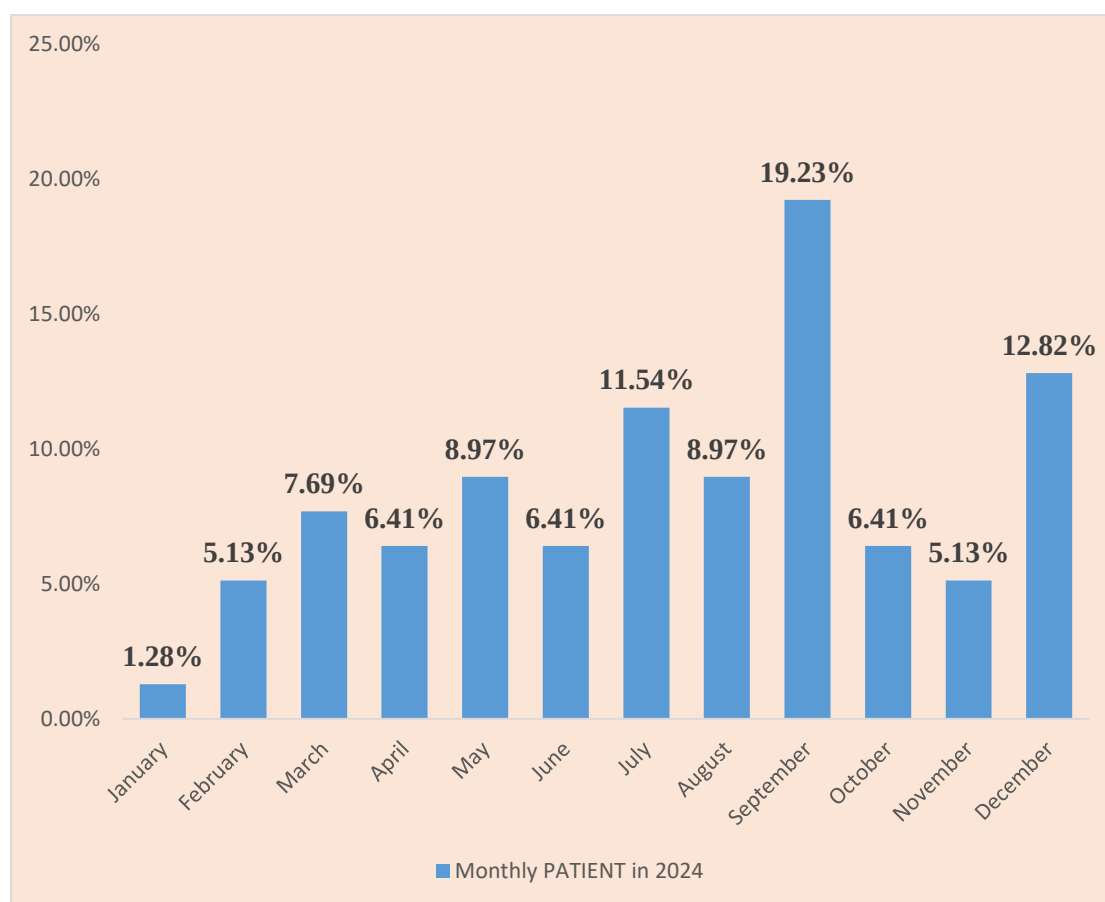


Figure 7- Bar Chart Showing Distribution of Participants Based Monthly PATIENT in Year 2024

Table 8- Distribution of Participants According to PATIENT 1ST VISIT Time

PATIENT 1ST VISIT Time	Frequency	Percentage
09:01:-12:00AM	12	7.74%
12.01-5:00PM	22	14.19%
12:00 - 5:00AM	34	21.94%
5.01-9:00PM	27	17.42%
5:01- 9:00AM	27	17.42%
9.01-12:00PM	33	21.29%
Grand Total	155	100.00%

The data in Table 8 displays the distribution of participants based on the time of their first visit to the Emergency Department (ED) within a 24-hour cycle. Among the total 155 return cases, the highest number of initial visits occurred between **12:00–5:00 AM (21.94%)**, followed closely by the **9:01–12:00 PM time slot (21.29%)**, indicating that a significant proportion of patients sought emergency care during late-night and late-morning hours. Other notable time periods include **5:01–9:00 AM and 5:01–9:00 PM**, both with an equal frequency of **27 cases (17.42%)**, suggesting consistent ED utilization during early morning and evening hours. Fewer visits were recorded between **12:01–5:00 PM (14.19%)** and the least during **9:01–12:00 AM (7.74%)**. This distribution pattern highlights that patient inflow is spread throughout the day and night, with peaks during early morning and midnight hours, underlining the need for continuous staffing and resource readiness in EDs around the clock.

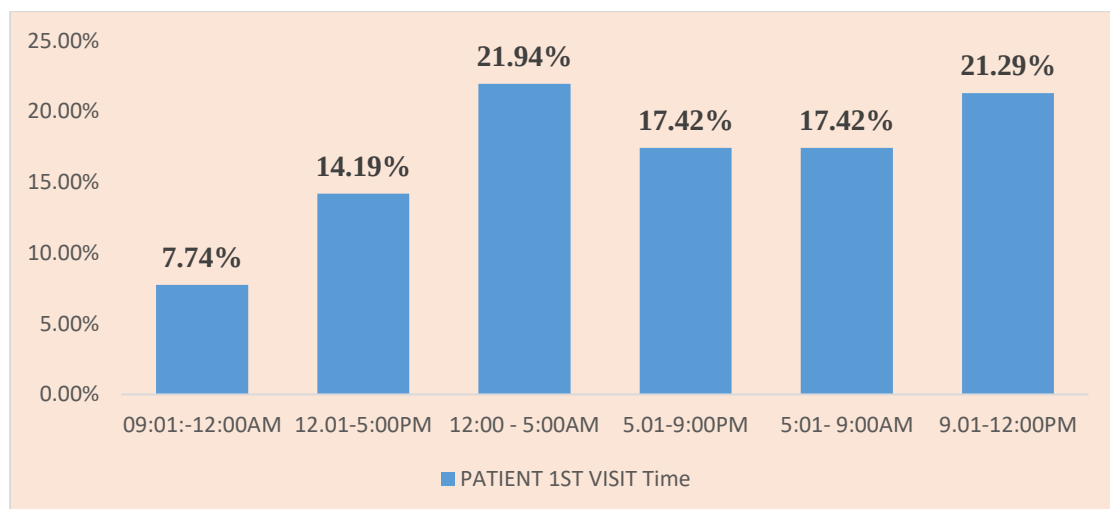


Figure 8- Bar Chart Showing Distribution of Participants Based PATIENT 1ST VISIT Time

Table 9-Distribution of Participants According to PATIENT 2nd VISIT Time

PATIENT 2ND VISIT TIME	Frequency	Percentage
12:01-5:00AM	48	30.97%
12:01-5:00PM	15	9.68%
5:01-9:00AM	33	21.29%
5:01-9:00PM	13	8.39%
9:01-12:00AM	23	14.84%
9:01-12:00PM	23	14.84%
Grand Total	155	100.00%

The data in Table 9 illustrates the distribution of participants based on the timing of their second visit to the Emergency Department (ED) within 72 hours. Among the 155 return visits, the highest proportion occurred between **12:01–5:00 AM**, with **48 cases (30.97%)**, indicating a significant concentration of revisits during the early morning hours, possibly due to symptom escalation overnight or lack of access to primary care services. The second most common return period was **5:01–9:00 AM**, accounting for **33 cases (21.29%)**, suggesting that a large number of patients revisited in the early hours of the day. Return visits were evenly distributed between **9:01–12:00 AM** and **9:01–12:00 PM**, each with **23 cases (14.84%)**, while the **12:01–5:00 PM** and **5:01–9:00 PM** slots had lower frequencies of **15 (9.68%)** and **13 (8.39%)** respectively. This pattern suggests a peak in second ED visits during night and early morning hours, highlighting the need for adequate staffing, resources, and monitoring during these critical periods to manage returning patients effectively.

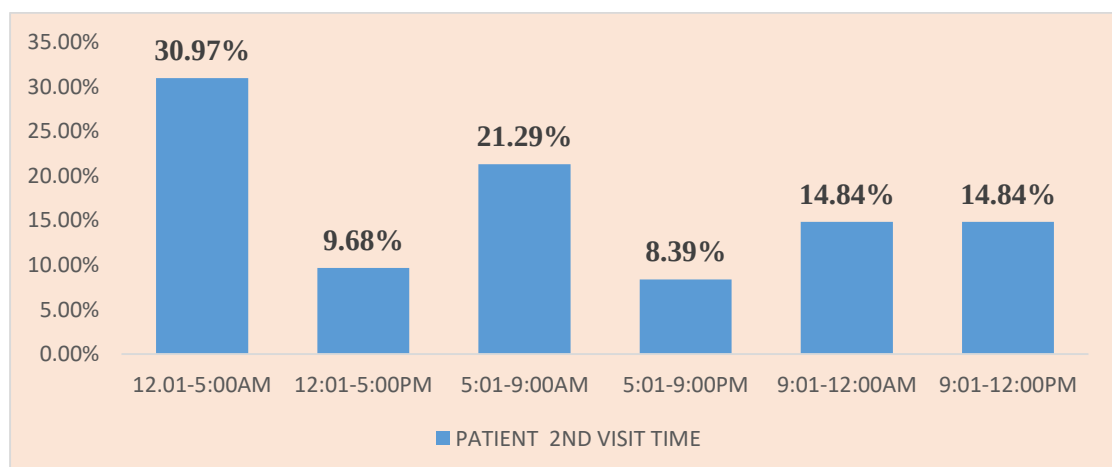


Figure 9- Bar Chart Showing Distribution of Participants Based PATIENT 2nd VISIT Time

Table 10-- Distribution of Participants According to PATIENT COMPLAINTS in Year 2023

PATIENT COMPLAINTS in 2023	Frequency	Percentage
35WKS WITH PV LEAKING	1	1.30%
38 WKS PREGNANCY WITH ABDOMINAL DISCOMFORT	1	1.30%
ABDOMINAL PAIN, LOOSE MOTION & VOMITING	25	32.47%
ALLERGIC REACTION	1	1.30%
BLOOD IN STOOL SOB	1	1.30%
BREATHING DIFFICULTY	1	1.30%
C/ O COUGH	1	1.30%
C/O CONVULSION	1	1.30%
C/O SEVERE NECK PAIN	1	1.30%
DIFFICULTY IN PASSING URINE	1	1.30%
DYSMENNORHIA	1	1.30%
FEVER	14	18.18%
FEVER WITH CHILLS	1	1.30%
GUIDDINESS	1	1.30%
HIGH GRADE FEVER	2	2.60%
HYPOGLYCEMIA	1	1.30%
INCREASED BP WITH HEADACHE	1	1.30%
ITCHING & REDNESS	1	1.30%
LABOUR PAIN	1	1.30%
LEFT FLANK PAIN	1	1.30%

LEFT LEG PAIN	1	1.30%
LOOSE MOTIONS	4	5.19%
LOWER BACK PAIN	1	1.30%
PALPITATIONS	1	1.30%
PV BLEEDINGWITH ABDOMINAL CRAMPS	1	1.30%
RT ANKLE PAIN	1	1.30%
SEVERE LT SIDE FACE PAIN	1	1.30%
SHOULDER PAIN	1	1.30%
SOB	1	1.30%
UNEASINESS	1	1.30%
VOMITING	6	7.79%
Grand Total	77	100.00%

The data in Table 10 outlines the distribution of patient complaints leading to 72-hour return visits to the Emergency Department (ED) in the year 2023. Among the 77 total cases, **abdominal pain, loose motion, and vomiting** emerged as the most prevalent complaint, reported in **25 cases (32.47%)**, indicating that gastrointestinal issues were a leading cause of early ED revisits. **Fever** was the second most frequent complaint, accounting for **14 cases (18.18%)**, followed by **vomiting alone**, reported in **6 cases (7.79%)**, and **loose motions**, in **4 cases (5.19%)**. These findings suggest that infectious and digestive disorders were prominent reasons for revisit, possibly due to incomplete symptom resolution, inadequate initial treatment, or disease progression. All other complaints—including respiratory issues, pain (e.g., neck, flank, ankle, and facial), obstetric concerns, convulsions, and allergic reactions—each constituted **1 to 2 cases (1.30%–2.60%)**, reflecting a diverse but individually infrequent set of causes. The data highlights the need for focused evaluation and discharge planning in patients presenting with gastrointestinal and febrile illnesses to reduce avoidable return visits.

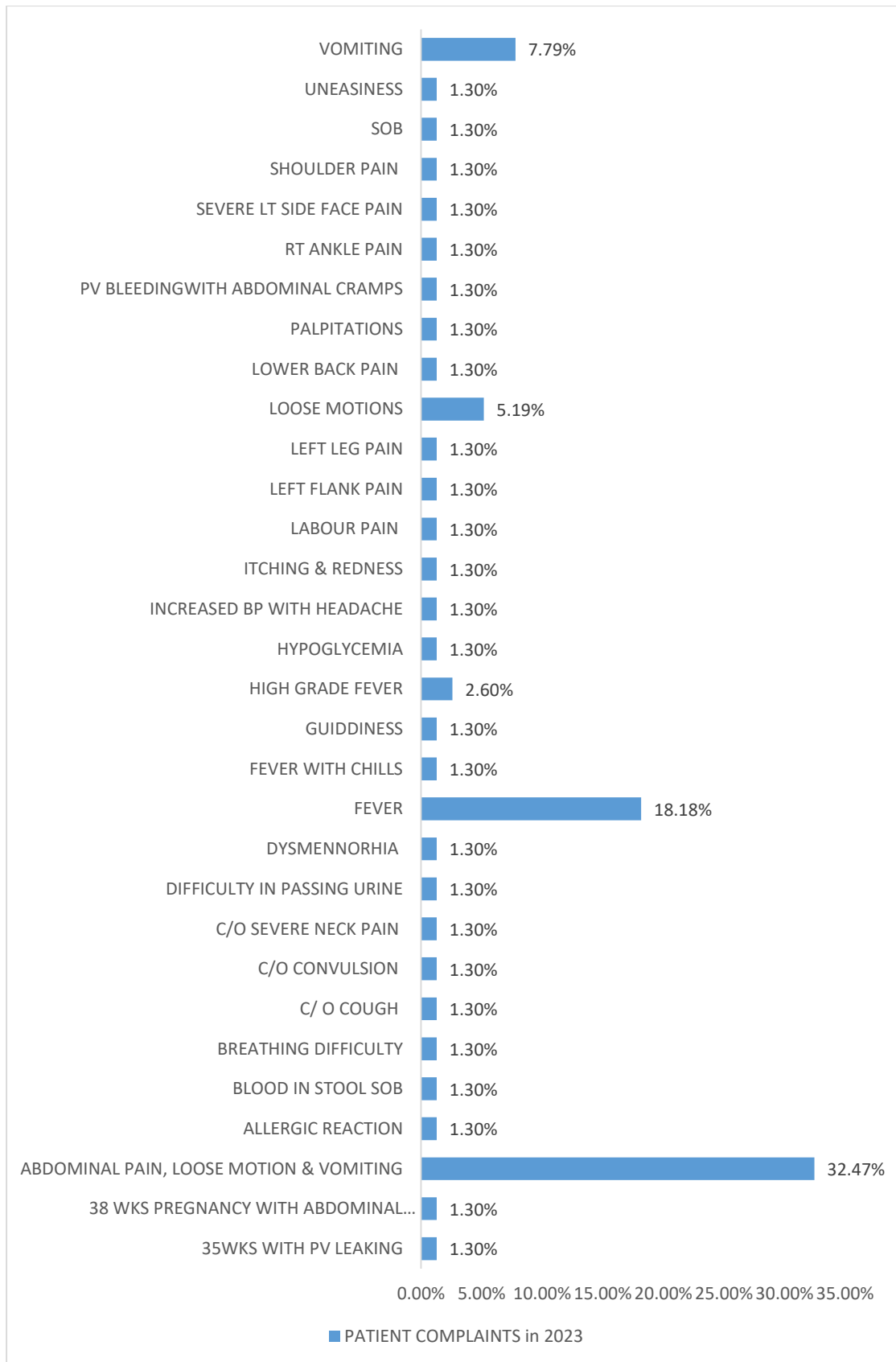


Figure 10- Bar Chart Showing Distribution of Participants Based PATIENT COMPLAINTS in 2023

Table 11-- Distribution of Participants According to PATIENT COMPLAINTS in Year 2024

PATIENT COMPLAINTS in 2024	Frequency	Percentage
FEVER & HEADACHE	1	1.28%
LEFT FLANK PAIN	1	1.28%
ABDOMEN PAIN	1	1.28%
ABDOMINAL PAIN	2	2.56%
ABDOMINAL PAIN	1	1.28%
ABDOMINAL PAIN, LOOSE MOTION & VOMITING	16	20.51%
ALLERGIC RASHES	1	1.28%
ALLERGIC REACTION	1	1.28%
ALTERED BEHAVIOUR	1	1.28%
ANXIETY	1	1.28%
BACK PAIN	1	1.28%
CHEST PAIN	1	1.28%
CHEST PAIN	1	1.28%
DYSMENORRHEA	1	1.28%
FEVER	8	10.26%
FEVER WITH SHIVERING	1	1.28%
GUIDDINESS	2	2.56%
HEADACHE	1	1.28%
HIGH GRADE FEVER	5	6.41%
HYPERSENSITIVITY REACTION	1	1.28%
HYPOGLYCEMIA	1	1.28%
IMBALANCE	1	1.28%
ITCHING & RASHES	1	1.28%
LEAKING PV C G2 P1 L1 25+5 WKS OF GESTATION	1	1.28%
LEFT FLANK PAIN	5	6.41%
LOOSE MOTION	1	1.28%
LOOSE MOTIONS	2	2.56%
NAUSEA	1	1.28%

NOSE BLEEDING	2	2.56%
PALPITATION	1	1.28%
PANIC ATTACK	1	1.28%
PRIMI WITH P.V LEAKING	1	1.28%
RASHES ON BODY	1	1.28%
RT FLANK PAIN	2	2.56%
RT FLANK PAIN & FEVER	1	1.28%
SHOULDER DISLOCATION	1	1.28%
SOB	1	1.28%
UPPER ABD PAIN	1	1.28%
VOMITING	4	5.13%
VOMITTING COUGH	1	1.28%
Grand Total	78	100.00%

The data in Table 11 presents the distribution of patient complaints that led to 72-hour return visits to the Emergency Department (ED) in the year 2024. The most common complaint was **abdominal pain, loose motion, and vomiting**, reported in **16 cases (20.51%)**, reaffirming the dominance of gastrointestinal issues as a leading cause of ED revisits. **Fever-related conditions**—including fever alone, high-grade fever, and fever with shivering—collectively accounted for a significant portion, with **13 cases (16.66%)**, indicating ongoing challenges in managing infectious illnesses effectively during the initial visit. **Left flank pain** was also notable, seen in **5 cases (6.41%)**, along with **vomiting** in **4 cases (5.13%)**, and various other complaints such as **nose bleeding, loose motions, guiddiness, right flank pain, and chest pain**, each reported in 2 or more cases (2.56%). A wide array of additional complaints—including anxiety, altered behavior, dysmenorrhea, itching, shoulder dislocation, hypersensitivity reactions, and panic attacks—were observed in isolated instances (1.28% each), reflecting the diverse clinical presentations prompting returns. The broad spectrum of complaints underscores the importance of comprehensive assessment, patient education, and proper discharge planning, particularly for gastrointestinal and febrile illnesses, to mitigate the risk of unplanned repeat ED visits.

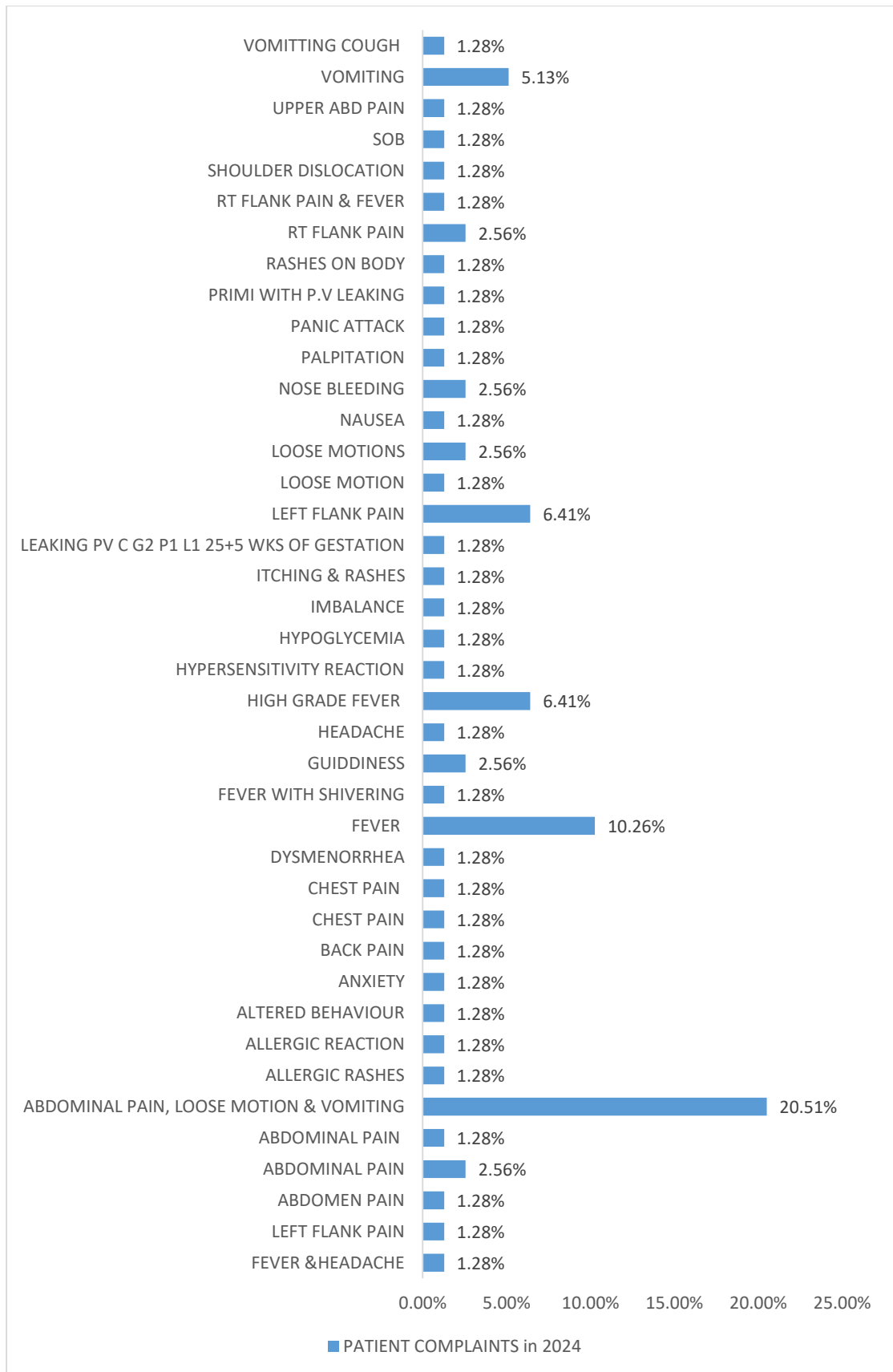


Figure 11- Bar Chart Showing Distribution of Participants Based PATIENT COMPLAINTS in 2024

Table 12-- Distribution of Participants According to PATIENT Reason for Revisit

Reason	Frequency	Percentage
DISEASE RELATED- PROGRESSION	52	33.55%
DISEASE RELATED- RECURRENCE	58	37.42%
PATIENT RELATED- FAILURE TO UNDERSTAND DISCHARGE PLAN	32	20.65%
PHYSICIAN RELATED- PREMATURE DISCHARGE	13	8.39%
Grand Total	155	100.00%

The data in Table 12 illustrates the distribution of participants based on the reasons for their 72-hour return visits to the Emergency Department. The most prominent reason was **disease-related recurrence**, accounting for **58 cases (37.42%)**, followed closely by **disease-related progression**, reported in **52 cases (33.55%)**. These findings indicate that the majority of revisits were due to the natural course or re-emergence of the illness, emphasizing the clinical challenges in predicting disease trajectories and ensuring symptom resolution at the time of discharge. **Patient-related factors**, specifically **failure to understand the discharge plan**, were responsible for **32 cases (20.65%)**, highlighting the need for improved patient communication, education, and follow-up mechanisms. Lastly, **physician-related premature discharges** contributed to **13 cases (8.39%)**, suggesting areas for improvement in clinical judgment and discharge criteria. Overall, the data underscores the multifactorial nature of ED revisits, with a significant proportion potentially preventable through enhanced care coordination, discharge planning, and patient engagement strategies.

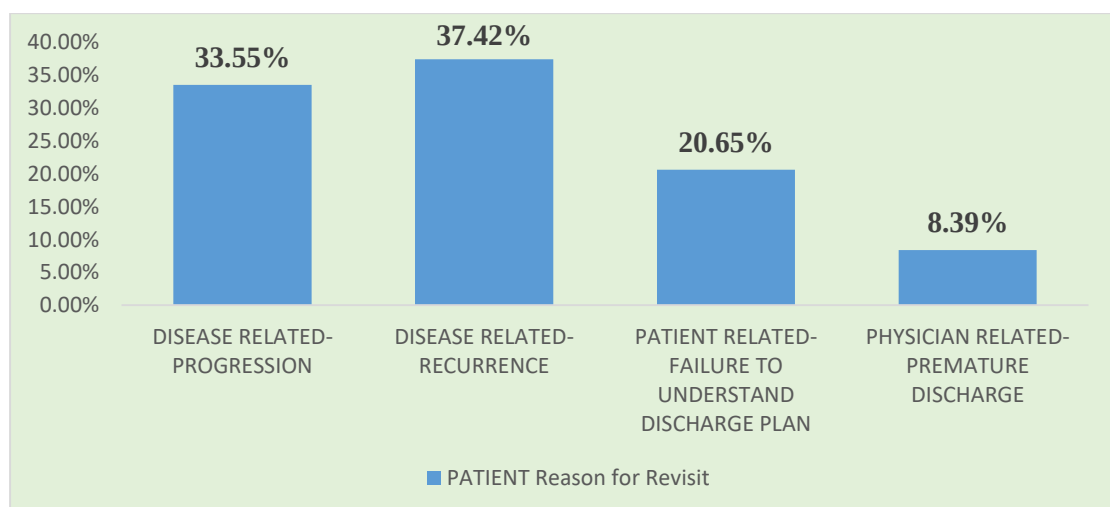


Figure 12- Bar Chart Showing Distribution of Participants Based on PATIENT Reason for Revisit

Table 13- Association Between Revisit Reason and Year

Association Between Reason and Year	2023	2024	P-Value	Chi-square	df	Level of Non significance
DISEASE RELATED- PROGRESSION	32	20	0.1772	6.310	3	p value < .05 = no significance
DISEASE RELATED- RECURRENCE	24	34				
PATIENT RELATED- FAILURE TO UNDERSTAND DISCHARGE PLAN	13	19				
PHYSICIAN RELATED- PREMATURE DISCHARGE	8	5				

The data presented in Table 13 examines the **association between the reason for 72-hour return visits and the year of occurrence (2023 vs. 2024)**. Among the revisit reasons, **disease-related progression** was reported in **32 cases in 2023** and **20 in 2024**, while **disease-related recurrence** increased from **24 cases in 2023 to 34 in 2024**, indicating a shift toward more recurrent conditions in the latter year. **Patient-related failure to understand the discharge plan** also rose from **13 cases in 2023 to 19 in 2024**, reflecting a growing concern around patient education and communication. Meanwhile, **physician-related premature discharges** showed a slight decrease from **8 to 5 cases**. Despite these numerical variations, the **Chi-square test yielded a value of 6.310 with 3 degrees of freedom and a P-value of 0.1772**, which is **greater than the significance level of 0.05**, indicating **no statistically significant association** between revisit reason and year. This suggests that although the distribution of revisit causes changed slightly between the two years, these variations are likely due to chance rather than a systemic or time-related effect.

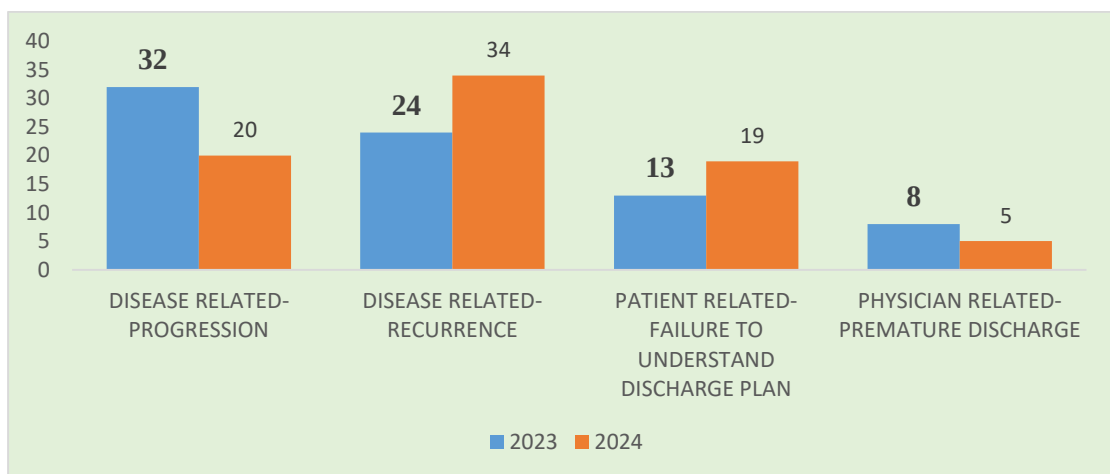


Figure 13- Bar Chart Showing Distribution of Participants Based on Association Between Reason and Year

Table 14- Association Between Age Group and Reason

Association Between Age Group and Reason	0-10 Years	11-18 Years	19-29 Years	30-49 Years	50-69 Years	70+ Years	P-Value	Chi-square	df	Level of Non significance
DISEASE RELATED-PROGRESSION	1	4	20	15	11	1	0.0021	35.48	15	p value < .05 = no significae
DISEASE RELATED-RECURRENCE	1	3	10	30	10	4				
PATIENT RELATED-FAILURE TO UNDERSTAND DISCHARGE PLAN	4	2	4	17	2	3				
PHYSICIAN RELATED-PREMATURE DISCHARGE	0	0	3	5	1	4				

The data in Table 14 explores the **association between age group and the reason for 72-hour return visits to the Emergency Department**. The analysis reveals notable variations across different age groups. The **30–49 years age group** consistently accounted for the highest number of return visits across all categories—**15 cases for disease progression, 30 for disease recurrence, 17 for patient-related failure to understand the discharge plan, and 5 for physician-related premature discharge**—indicating that this age group may be particularly vulnerable to revisit risks. The **19–29 years group** also showed significant revisit counts, especially for **disease progression (20 cases)** and **recurrence (10 cases)**. In contrast, the **0–10 years** and **11–18 years** age groups had relatively fewer revisits, suggesting either more effective initial care or fewer underlying chronic conditions. Interestingly, **physician-related premature discharge** was more prominent in the **elderly (70+ years)**, with 4 cases, pointing to the complexities in managing older patients. Statistically, the **Chi-square value was 35.48 with 15 degrees of freedom**, and the **P-value was 0.0021**, which is **less than the 0.05 threshold**, indicating a **statistically significant association between age group and revisit reason**. This suggests that age plays a critical role in influencing the underlying cause for ED return visits and should be considered in discharge planning and patient follow-up protocols.

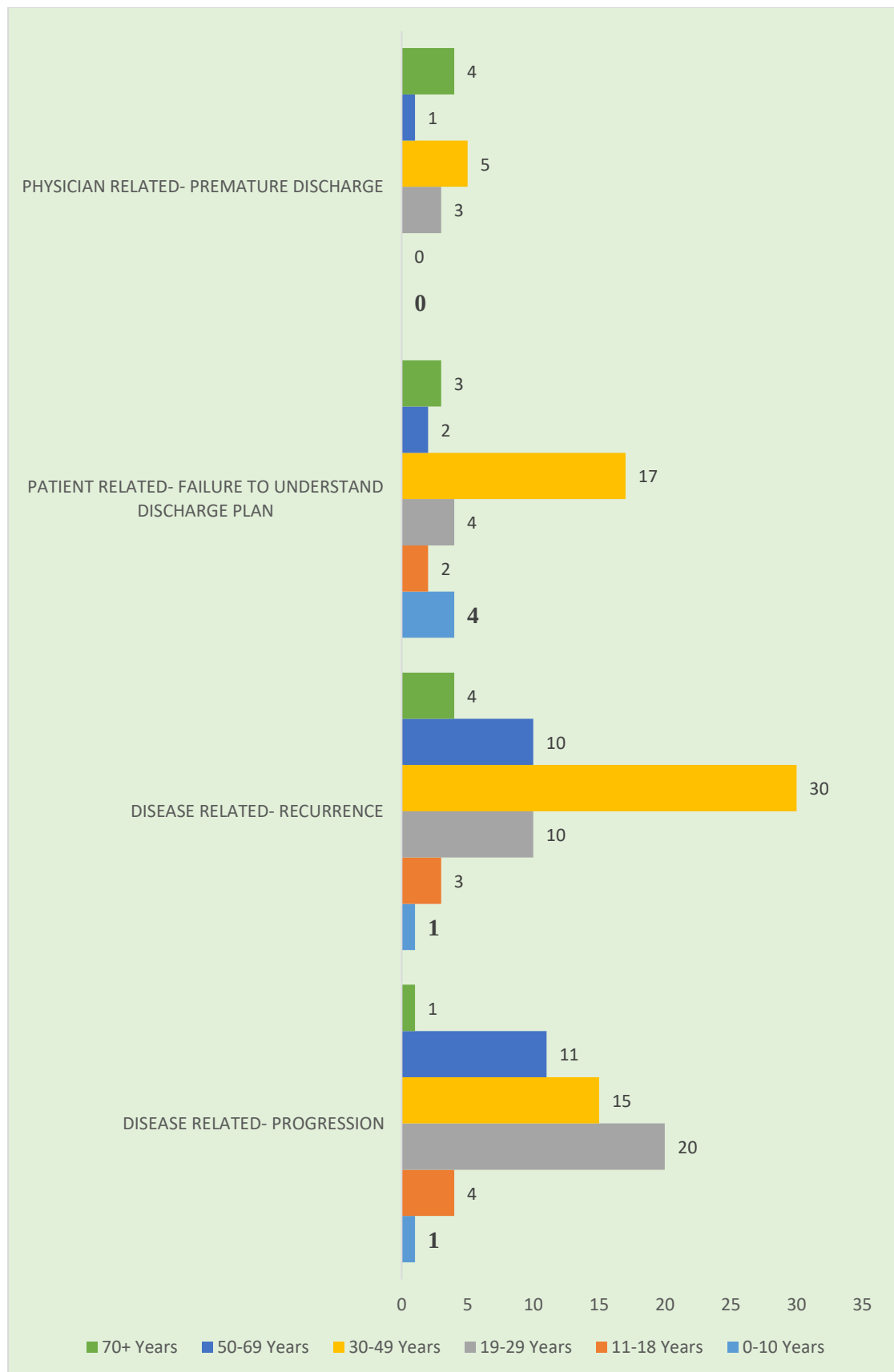


Figure 14- Bar Chart Showing Distribution of Participants Based on Association Between Age Group and Reason

Table 15- Association Between Reason and Year of admit

Association Between Reason and Year	FEMALE	MALE	P-Value	Chi-square	df	Level of Non significance
DISEASE RELATED- PROGRESSION	30	22	0.9230	0.4813	3	p value < .05 = no significae
DISEASE RELATED- RECURRENCE	32	26				
PATIENT RELATED- FAILURE TO UNDERSTAND DISCHARGE PLAN	16	16				
PHYSICIAN RELATED- PREMATURE DISCHARGE	7	6				

The data in Table 15 assesses the **association between the reason for 72-hour Emergency Department (ED) return visits and the gender of the patients**. The distribution shows that **disease-related progression** was slightly more common in **females (30 cases)** than in **males (22 cases)**, while **disease-related recurrence** was also marginally higher in **females (32 cases)** compared to **males (26 cases)**. Interestingly, **patient-related failure to understand the discharge plan** was reported equally in both genders, with **16 cases each**, indicating a universal challenge in discharge communication irrespective of gender. **Physician-related premature discharges** were noted in **7 females** and **6 males**, again showing a balanced distribution. The **Chi-square value was 0.4813 with 3 degrees of freedom**, and the **P-value was 0.9230**, which is **much greater than the significance threshold of 0.05**, suggesting that there is **no statistically significant association between gender and the reason for ED revisit**. This indicates that both male and female patients are similarly affected by the various causes leading to 72-hour return visits, and gender does not play a determining role in the revisit reason.

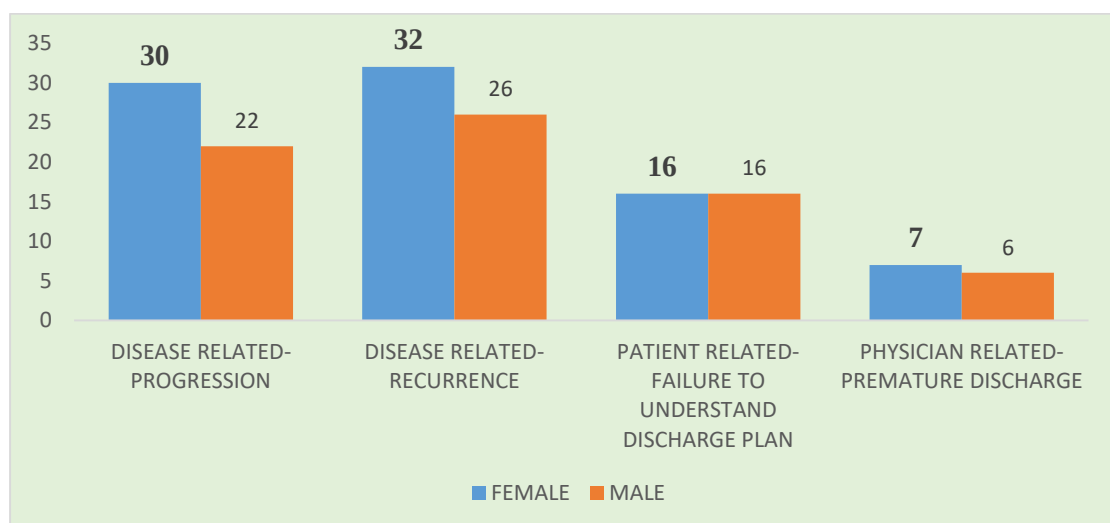


Figure 15- Bar Chart Showing Distribution of Participants Based on Association Between Reason and Year

CHAPTER -5

DISCUSSION

This retrospective analysis of 72-hour return visits to the Emergency Department (ED) provides critical insights into the patterns, reasons, and demographic associations linked with early unplanned revisits. Such returns are a globally acknowledged quality metric, often reflecting gaps in clinical care, discharge planning, follow-up mechanisms, and patient comprehension. In this study, 155 patients who revisited the ED within 72 hours during 2023 and 2024 were assessed, and several meaningful trends were identified.

Gender Distribution revealed a slightly higher proportion of females (54.84%) compared to males (45.16%), indicating marginally more frequent return visits among women. However, inferential analysis (Table 15) showed no statistically significant association between gender and the reason for return, as the p-value was 0.9230 (>0.05), suggesting that both sexes were equally likely to return for any of the documented causes. This aligns with findings from prior research by Pham et al. (2011), which also reported no significant gender-based discrepancy in ED revisit rates.

The **age distribution** analysis (Table 4) showed that the majority of return visits were from the **30–49 years** age group (43.23%), followed by the **19–29 years** group (23.87%). This trend reflects the working-age population's higher ED utilization and possibly their delayed care-seeking behavior or preference for EDs over primary care. Furthermore, the association between **age group and reason for revisit** (Table 14) was statistically significant ($p = 0.0021$), emphasizing that **age plays a pivotal role** in determining revisit reasons. For instance, patients aged 19–49 years were primarily linked to disease progression or recurrence, possibly due to unresolved infections or chronic conditions, while elderly patients (70+ years) experienced more **physician-related premature discharges**, highlighting the diagnostic and communication challenges in geriatric care.

Temporal trends (Table 6 and Table 7) indicated monthly variability in revisits. In 2023, the highest number of return visits occurred in **May (14.29%)**, followed by **December (12.99%)**, whereas in 2024, **September (19.23%)** and **December (12.82%)** saw peak revisit volumes. This fluctuation may correlate with seasonal illnesses, holidays, and healthcare access patterns.

A unique feature of this study is the **analysis of revisit time slots** (Tables 8 and 9). Most first visits occurred between **12:00–5:00 AM (21.94%)** and **9:01–12:00 PM (21.29%)**, suggesting late-night emergencies and morning rushes. Interestingly, most second visits also happened between **12:01–5:00 AM (30.97%)**, implying worsening symptoms at night or limited primary care access outside of regular hours. This supports the need for enhanced discharge instructions and safety-netting advice during nighttime discharges.

Regarding **presenting complaints**, the most common issues prompting return visits were “**abdominal pain, loose motion & vomiting**” (32.47% in 2023 and 20.51% in 2024), followed by **fever-related symptoms**. These are often associated with gastrointestinal infections, dengue, typhoid, or early sepsis, where the disease may evolve quickly or present ambiguously during the initial visit. Moreover, conditions like **left flank pain, palpitations**, and **convulsions** appeared multiple times, which may reflect intermittent or progressing pathologies.

Crucially, the analysis of **reasons for revisits** (Table 12) found that the majority were **disease-related**, with **recurrence (37.42%)** and **progression (33.55%)** forming over two-thirds of total cases. These findings are consistent with studies by Vashi et al. (2013), which emphasized the importance of accurate diagnosis, comprehensive workups, and better follow-up instructions to reduce disease-driven revisits. About **20.65%** of return visits were **patient-related**, primarily due to poor understanding of the discharge plan, emphasizing the need for patient-centered communication strategies and the use of teach-back methods during discharge.

Physician-related factors contributed to **8.39% of revisits**, including **premature discharges or lack of specialist referrals**. While the percentage is lower, it reflects opportunities for improvement in clinical judgment, decision-making support tools, and multidisciplinary care. Notably, the reasons for revisit were not significantly associated with the **year of revisit** (Table 13; $p = 0.1772$), indicating that patterns remained largely consistent across both years studied.

The revisit trends also provide insight into **systemic gaps**. The ED continues to serve as a fallback option due to **limited primary care access, inadequate post-discharge support**, and **absence of referral tracking mechanisms**. Additionally, the pattern of repeat DAMA (discharge against medical advice) cases converting into admissions later highlights the **criticality of initial patient engagement**, counseling, and managing expectations regarding care.

Implications for Practice and Policy

These findings highlight several actionable areas:

- **Strengthen discharge planning** with clear instructions, follow-up scheduling, and written summaries.
- **Use checklists and discharge protocols** to avoid premature discharges and ensure complete evaluations.
- **Implement targeted interventions** for high-risk groups such as patients aged 30–49, and elderly patients with multiple comorbidities.
- **Enhance after-hours support** including tele-triage, helplines, or extended outpatient services.
- **Educate patients and families** using culturally appropriate tools to reinforce comprehension of care plans.

Strengths and Limitations

This study's strengths lie in its detailed case-based analysis across two calendar years and its focus on specific revisit reasons. However, limitations include its single-center nature and retrospective design, which may restrict generalizability. Additionally, factors such as socioeconomic status, literacy levels, and availability of primary care follow-up were not included but are essential for future prospective studies.

SUMMARY

This retrospective study investigated the characteristics and underlying causes of 72-hour return visits to the Emergency Department (ED). Among 155 patients analyzed, the most common reasons for revisits were disease-related progression (33.55%) and recurrence (37.42%), followed by patient-related factors such as misunderstanding discharge instructions (20.65%), and physician-related factors like premature discharge (8.39%). Females accounted for a slightly higher proportion of revisits than males, and the 30–49 years age group was the most affected. While no significant associations were found between gender or year and revisit reasons, a statistically significant relationship existed between age group and revisit causes. These findings highlight the need for improved discharge communication, better follow-up protocols, and age-specific care strategies to reduce preventable ED returns and enhance healthcare delivery.

CONCLUSION

The study successfully characterizes 72-hour ED return visits and reveals that while many are disease-driven, a substantial number are influenced by modifiable physician and patient-related factors. By addressing these gaps through structured discharge planning, improved communication, and patient engagement, healthcare systems can reduce unnecessary ED revisits, enhance quality of care, and optimize resource utilization. The retrospective analysis of 72-hour return visits to the Emergency Department (ED) reveals that a significant proportion of revisits are driven by disease-related factors such as progression and recurrence. However, patient-related issues—particularly failure to understand discharge instructions—and physician-related concerns like premature discharge also contribute notably to early returns. The data underscores the need for enhanced discharge planning, improved patient education, and better access to follow-up care. Although no statistically significant associations were found between revisit reasons and gender or year, a strong correlation was observed between age group and revisit reasons, indicating that age-specific strategies may be beneficial. Overall, targeted interventions focusing on clinical accuracy, communication, and continuity of care can reduce preventable ED revisits and improve overall patient outcomes.

REFERENCES

References

1. Sabbatini AK, Kocher KE, Basu A, Hsia RY. In-Hospital Outcomes and Costs Among Patients Hospitalized During a Return Visit to the Emergency Department. *JAMA*. 2016;315(7):663–671.
2. Cheng JY, Shroff A, Khan N, Swedler D. Emergency Department Return Visits Within 72 Hours to a Tertiary Health Care Facility. *West J Emerg Med*. 2016;17(5):538–543.
3. Rising KL, Victor TW, Hollander JE, Carr BG. Patient Returns to the Emergency Department: The Time-to-Return Curve. *Acad Emerg Med*. 2014;21(8):863–871.
4. Carrier ER, Yee T, Holzwart RA. Coordination Between Emergency and Primary Care Physicians. *Ann Emerg Med*. 2011;57(5):496–502.
5. Pham JC, Kirsch TD, Hill PM, DeRuggerio K, Hoffmann B. Seventy-two-hour Returns May Not Be a Good Indicator of Safety in the Emergency Department: A National Study. *Acad Emerg Med*. 2011;18(4):390–397.
6. Wu CL, Wang FT, Chiang YC, et al. Unplanned Emergency Department Revisits Within 72 Hours to a Secondary Teaching Referral Hospital in Taiwan. *J Emerg Med*. 2010;38(4):512–517.
7. Kumar GS, Mahadevan S. Unscheduled Emergency Department Re-visits. *Indian J Pediatr*. 2012;79(7):911–917.
8. Tang N, Stein J, Hsia RY, Maselli JH, Gonzales R. Trends and Characteristics of US Emergency Department Visits, 1997–2007. *JAMA*. 2010;304(6):664–670.
9. Hsia RY, Asch SM, Weiss RE, et al. Hospital Determinants of Emergency Department Left Without Being Seen Rates. *Ann Emerg Med*. 2011;58(1):24–32.e3.
10. Han CY, Wang YC, Liu CY, et al. Predictors of Return Visits to the Emergency Department Within 72 Hours Among Febrile Children. *Am J Emerg Med*. 2020;38(3):538–543.
11. Pham JC et al. (2011). Seventy-two-hour Returns May Not Be a Good Indicator of Safety in the Emergency Department: A National Study. *Acad Emerg Med*.

12. Vashi A, Fox JP, Carr BG, D’Onofrio G, Pines JM. Return Visits to Emergency Departments: A Qualitative Study. *Acad Emerg Med*. 2013;20(6):572–578.
13. Palmer L, et al. (2010). Emergency Department Revisit within 72 Hours: Can It Be Prevented? *CJEM*.
14. Madsen TE, Simmons J, Choo EK. Racial and Ethnic Disparities in ED Care and Health Outcomes. *Clin Exp Emerg Med*. 2020;7(1):1–8.
15. Wang H, Robinson RD, Johnson C, et al. Factors Associated With Potentially Avoidable ED Visits Among Children With Asthma. *Am J Manag Care*. 2014;20(11):929–936.
16. Gaudet CM, Stenson BA, Antkowiak PS, Grossestreuer AV, Shaw DL, Chiu DT. Patients Evaluated and Discharged From the Waiting Room Do Not Have a Higher Rate of 72-Hour Returns—A Retrospective Observational Study. *JACEP Open*. 2025 Jun 1;6(3):100155.
17. Pishbin E, Deldar K, Farzaneh R, Soltanifar A. Elderly patients with emergency department return visit: descriptive analysis of adverse events. *Frontiers in Emergency Medicine*. 2025 Jan 14.
18. Grabinski Z, Woo KM, Akindutire O, Dahn C, Nash L, Leybell I, Wang Y, Bayer D, Swartz J, Jamin C, Smith SW. Evaluation of a Structured Review Process for Emergency Department Return Visits with Admission. *The Joint Commission Journal on Quality and Patient Safety*. 2024 Mar 15.
19. Rosychuk RJ, Khangura JK, Ortiz SS, Cheng I, Bielska IA, Yan J, Morrison LJ, Hayward J, Grant L, Hohl CM. Characteristics and outcomes of patients with COVID-19 who return to the emergency department: a multicentre observational study by the Canadian COVID-19 Emergency Department Rapid Response Network (CCEDRRN). *Emergency Medicine Journal*. 2024 Apr 1;41(4):210-7.
20. Rosychuk RJ, Khangura JK, Ortiz SS, Cheng I, Bielska IA, Yan J, Morrison LJ, Hayward J, Grant L, Hohl CM. Characteristics and outcomes of patients with COVID-19 who return to the emergency department: a multicentre observational study by the Canadian COVID-19 Emergency Department Rapid Response Network (CCEDRRN). *Emergency Medicine Journal*. 2024 Apr 1;41(4):210-7.
21. Alazzawi MA, Hamdan AO. Elements affecting emergency department rate of return within 72 hours:a retrospective cross-sectional study. *Int J*. 2023 May;9(5):124.

22. Iyeke LO, Razack B, Richman M, Berman AJ, Davis F, Willis H, Gizzi-Murphy M, Guilherme S, Johnson S, Njoku C, Ramjattan G. Novel discharge center for transition of care in vulnerable emergency department treat and release patients. *Cureus*. 2023 Feb 13;15(2):e34937.
23. Curtis M, Kanis J, Wagers B, Coffee Jr RL, Sarmiento E, Grout S, Johnson O, DiGregory S, Grout R. Immunization status and the management of febrile children in the pediatric emergency department: what are we doing?. *Pediatric Emergency Care*. 2023 Jan 1;39(1):1-5.
24. Chatterjee JH, Hartford EA, Law E, Barry D, Blume H. Sumatriptan as a first-line treatment for headache in the pediatric emergency department. *Pediatric Neurology*. 2023 May 1;142:68-75.
25. Ramgopal S, Varma S, Victor TW, McCarthy DM, Rising KL. Pediatric return visits to the emergency department: the time to return curve. *Pediatric emergency care*. 2022 Aug 1;38(8):e1454-61.
26. Ben-Assuli O, Vest JR. Return visits to the emergency department: An analysis using group based curve models. *Health informatics journal*. 2022 Jun 8;28(2):14604582221105444.
27. Weigert RM, McMichael BS, VanderVelden HA, Lee DB, Cutler GJ, Troy MF, Bergmann KR. Parental childhood adversity and pediatric emergency department utilization: a pilot study. *Pediatric emergency care*. 2022 Dec 1;38(12):665-71.
28. Eason M, Clingenpeel J, Vazifedan T, Guins T, Amond G. Transfers From a Pediatric Urgent Care to an Academic Pediatric Emergency Department. *Pediatric Emergency Care*. 2022 Feb 1;38(2):e507-10.
29. Rintaari KM, Kimani RW, Musembi HM, Gatimu SM. Characteristics and outcomes of patients with an unscheduled return visit within 72 hours to the Paediatric Emergency Centre at a Private Tertiary Referral Hospital in Kenya. *African Journal of Emergency Medicine*. 2021 Jun 1;11(2):242-7.
30. Margus C, Sondheim SE, Peck NM, Storch B, Ngai KM, Ho HE, She T. Discharge in pandemic: suspected COVID-19 patients returning to the emergency department within 72 hours for admission. *The American Journal of Emergency Medicine*. 2021 Jul 1;45:185-91.
31. Hsu CC, Chu CC, Lin CH, Huang CH, Ng CJ, Lin GY, Chiou MJ, Lo HY, Chen SY. A machine learning model for predicting unscheduled 72 h return visits to the

- emergency department by patients with abdominal pain. *Diagnostics*. 2021 Dec 30;12(1):82.
32. Beiser DG, Jarou ZJ, Kassir AA, Puskarich MA, Vrablik MC, Rosenman ED, McDonald SA, Meltzer AC, Courtney DM, Kabrhel C, Kline JA. Predicting 30-day return hospital admissions in patients with COVID-19 discharged from the emergency department: a national retrospective cohort study. *Journal of the American College of Emergency Physicians Open*. 2021 Dec;2(6):e12595.
 33. Alshahrani M, Katbi F, Bahamdan Y, Alsaihati A, Alsubaie A, Althawadi D, Perlas-Asonto L. Frequency, causes, and outcomes of return visits to the emergency department within 72 hours: a retrospective observational study. *Journal of Multidisciplinary Healthcare*. 2020 Dec 22:2003-10.
 34. Sheikh S, Booth-Norse A, Smotherman C, Kalynych C, Lukens-Bull K, Guerrido E, Henson M, Gautam S, Hendry P. Predicting pain-related 30-day emergency department return visits in middle-aged and older adults. *Pain Medicine*. 2020 Nov;21(11):2748-56.
 35. Qureshi RS, Qureshi I, Abbasy M, Malik WA, Ponnapan B, Gauhar A, Chaudhry S, Pathan S, Jenkins D, Thomas SH. Unexpected return visits to emergency department: A healthcare quality management challenge. *International Journal of Healthcare Management*. 2020 Dec 15.
 36. Morch K, Schonnop R, Gauri A, Ha D. P118: older adults in the emergency department: a retrospective cross-sectional study of the geriatric population in Edmonton emergency departments. *Canadian Journal of Emergency Medicine*. 2019 May;21(S1):S106-7.
 37. Beck LR, Ostermayer DG, Ponce JN, Srinivasan S, Wang HE. Effectiveness of prehospital dual sequential defibrillation for refractory ventricular fibrillation and ventricular tachycardia cardiac arrest. *Prehospital Emergency Care*. 2019 Sep 3;23(5):597-602.
 38. Hayward J, Hagtvedt R, Ma W, Gauri A, Vester M, Holroyd BR. Predictors of admission in adult unscheduled return visits to the emergency department. *Western Journal of Emergency Medicine*. 2018 Sep 10;19(6):912.
 39. Sills MR, Macy ML, Kocher KE, Sabbatini AK. Return visit admissions may not indicate quality of emergency department care for children. *Academic Emergency Medicine*. 2018 Mar;25(3):283-92.

40. Navanandan N, Schmidt SK, Cabrera N, DiStefano MC, Mistry RD. The caregiver perspective on unscheduled 72-hour return visits to pediatric acute care sites: a focus on discharge processes. *Academic Pediatrics*. 2017 Sep 1;17(7):755-61.
41. Truong M, Meckler G, Doan QH. Emergency department return visits within a large geographic area. *The Journal of Emergency Medicine*. 2017 Jun 1;52(6):801-8.
42. Chan AH, Ho SF, Fook-Chong SM, Lian SW, Liu N, Ong ME. Characteristics of patients who made a return visit within 72 hours to the emergency department of a Singapore tertiary hospital. *Singapore medical journal*. 2016 Jun;57(6):301.
43. Shy BD, Kim EY, Genes NG, Lowry T, Loo GT, Hwang U, Richardson LD, Shapiro JS. Increased identification of emergency department 72-hour returns using multihospital health information exchange. *Academic Emergency Medicine*. 2016 May;23(5):645-9.
44. Sabbatini AK, Kocher KE, Basu A, Hsia RY. In-hospital outcomes and costs among patients hospitalized during a return visit to the emergency department. *Jama*. 2016 Feb 16;315(7):663-71.
45. Rising KL, Padrez KA, O'Brien M, Hollander JE, Carr BG, Shea JA. Return visits to the emergency department: the patient perspective. *Annals of emergency medicine*. 2015 Apr 1;65(4):377-86.
46. Rising KL, Victor TW, Hollander JE, Carr BG. Patient returns to the emergency department: the time-to-return curve. *Academic Emergency Medicine*. 2014 Aug;21(8):864-71.
47. Verelst S, Pierloot S, Desruelles D, Gillet JB, Bergs J. Short-term unscheduled return visits of adult patients to the emergency department. *The Journal of emergency medicine*. 2014 Aug 1;47(2):131-9.
48. Cho CS, Shapiro DJ, Cabana MD, Maselli JH, Hersh AL. A national depiction of children with return visits to the emergency department within 72 hours, 2001–2007. *Pediatric emergency care*. 2012 Jul 1;28(7):606-10.
49. Martin-Gill C, Reiser RC. Risk factors for 72-hour admission to the ED. *The American journal of emergency medicine*. 2004 Oct 1;22(6):448-53.

SCIENTIFIC COMMITTEE APPROVAL

Dr L H Hiranandani Hospital
Your Family. Superspecialty Hospital

ISO 9001:2015 CERTIFIED Winner of IMC Ramkrishna Bajaj National Quality Award 2008 & 2015
NABH ACCREDITED HOSPITAL
APQO Global Performance Excellence Best In Class Award 2009 & 2016

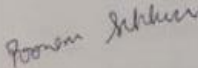
 Hiranandani Hospital

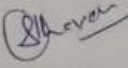
SCIENTIFIC COMMITTEE APPROVAL

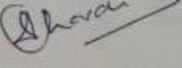
This is to state that the Scientific Committee at Dr. L.H. Hiranandani Hospital has approved the retrospective and analytical study of **DR. POONAM SEKHON** working as a CCT-EM Trainee in the Department of **ACCIDENT AND EMERGENCY** with Dr. L.H. Hiranandani Hospital.

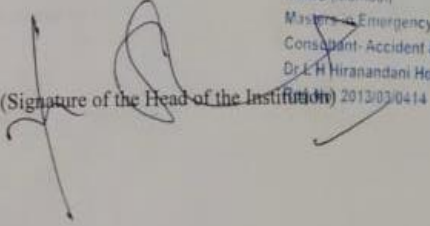
The panel consists of Member Secretary, Chairperson, Social Scientist, Basic Medical Scientist, Clinician, Layperson, Lawyer and Coordinator

The topic of study: CHARACTERIZING 72-HOUR RETURN VISITS TO EMERGENCY DEPARTMENT: A RETROSPECTIVE STUDY


Signature of candidate


Signature of Guide


Signature of Head of Department
DR. SAMRAT D. CHAVAN
MBBS (Mumbai)
Master's in Emergency Medicine (GWU-USA)
Consultant- Accident & Emergency
Dr. L.H. Hiranandani Hospital, Mumbai


(Signature of the Head of the Institution) 2013/03/04/14

Dr. POONAM SEKHON
Reg No: 2011/08/2785

Hillside Avenue, Hiranandani Gardens, Powai, Mumbai 400 076. Ph : 2576 3300/3333. Fax : 2576 3344 / 3311
website: www.hiranandanihospital.org
"To be the preferred choice for healing and good health"

Dr L H Hiranandani Hospital

"Your family Hospital"

ISO 9001:2015 CERTIFIED

A NABH Accredited Hospital

(National Accreditation Board for Hospitals & Healthcare Providers - An initiative of Quality Council of India)



Institutional Ethics Committee

DR L H HIRANANDANI HOSPITAL, POWAI, MUMBAI

(Reg No: - ECR/797/Inst/MH/2016)

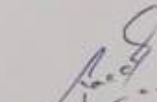
(DHR Reg.No:- EC/NEW/INST/2020/1235)

Date: 27/06/2025

Institutional Ethics Committee Approval

This is to state that the Institutional Ethics Committee at the Dr L H Hiranandani Hospital has **APPROVED** study "**CHARACTERIZING 72-HOUR RETURN VISITS TO THE EMERGENCY DEPARTMENT: A RETROSPECTIVE STUDY**" on 27th June 2025 by **DR. POONAM SEKHON** working as a **MEM CCT EM – SEMI RESIDENT** in the Department of **ACCIDENT & EMERGENCY** with Dr. L H Hiranandani hospital.

The members consist of Chairperson, Member Secretary, Basic Medical Scientist, Clinician, Layperson, Lawyer, Social Activist, Scientific and Non-scientific members and Coordinator.


Dr. Lincy Jacob
(Member secretary)
Institutional Ethics Committee



Hillside Avenue, Hiranandani Gardens, Powai, Mumbai - 400 076, India Ph: 2576 3333/3300, Fax: 2576 3311/2576 3344
Website: www.hiranandanihospital.org . Email: info@hiranandanihospital.org

"To be the preferred choice for healing and good health"

Dr L H Hiranandani Hospital

"Your family Hospital"

ISO 9001:2015 CERTIFIED

A NABH Accredited Hospital

(National Accreditation Board for Hospitals & Healthcare Providers. An initiative of Quality Council of India)



Institutional Ethics Committee DR L H HIRANANDANI HOSPITAL, POWAI, MUMBAI

(Reg No: - ECR/797/Inst/MH/2016)
(DHR Reg.No.: - EC/NEW/INST/2020/1235)

SR. NO	NAME	AFFILIATION	ROLE OF IEC AS PER PRESCRIBED BY ICMR GUIDELINES	CURRENT ORGANIZATION
1	Dr. Rita Rangnekar	No	Chairperson (Core Committee)	Dean - IBACO, IBS Mumbai
2	Dr. Lincy Jacob	Yes	Member Secretary (Core Committee)	Dr. L H Hiranandani Hospital
3	Dr. Manish Gupta	Yes	Scientific Member (Core Committee)	Dr. L H Hiranandani Hospital
4	Dr. Suvin Shetty	Yes	Basic Medical Scientist (Core Committee)	Dr. L H Hiranandani Hospital
5	Dr. Neeraj Tulara	Yes	Clinician (Core Committee)	Dr. L H Hiranandani Hospital
6	ADV Radhika Kalpatri	No	Legal Expert (Core Committee)	Dr. L H Hiranandani Hospital
7	Mrs. Mamta Asthana	No	Social Scientist (Core Committee)	Rotary Club, Mumbai Lakers
8	Dr. Mareena John	Yes	Clinical Pharmacologist (Core Committee)	Dr. L H Hiranandani Hospital
9	Ms. Divya Sequeira	No	Lay Person (Core Committee)	Singhi Advisors, Mumbai
10	Ms. Bhavana Shah	Yes	Scientific Member (IEC Coordinator)	Dr. L H Hiranandani Hospital

Date: 27/06/2025

Place: Powai, Mumbai


Signature of Administrative Head



Hillside Avenue, Hiranandani Gardens, Powai, Mumbai - 400 076, India Ph: 2576 3333/ 3300, Fax: 2576 3311/ 2576 3344
Website: www.hiranandanihospital.org , Email: info@hiranandanihospital.org

"To be the preferred choice for healing and good health"

MASTERCHART

Sl. No.	A		B		C		D		E		F		G		H		I		J		K		L		M		N		O		P		Q		R		S		T																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
SR	Month	Year	Age in Year	Sex	MR	1st Visit	1st Visit Tim	DOCTOR NAME	COMPLAINTS	REMARK	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
1	January	2023	30-49 Years	FEMALE	MR161181/23	AT 4:10PM	9:01-9:00AM	DR RISHAB	RT ANKLE PAIN	DISCHARGED 18/12/23 AT 2:45P	18/12/23 AT 11:5PM	9:01-12:00PM	DR RISHAB	RT ANKLE PAIN	ADMITTED 1103 19/12/23 AT 2PM	PHYSICIAN RELATED- PREMATURE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
2	SR	Month	Year	Age in Year	Sex	MR	1st Visit	2nd Visit	3rd Visit	4th Visit	5th Visit	6th Visit	7th Visit	8th Visit	9th Visit	10th Visit	11th Visit	12th Visit	13th Visit
88	86	March	2024	30-49 Years	MALE	DR201	16/3/2024 @ 6:00AM	DR201	16/3/2024 @ 9:30PM	DR201	16/3/2024 @ 11:55AM	DR201	16/3/2024 @ 1:00AM	DR201	16/3/2024 @ 3:00AM	DR201	16/3/2024 @ 5:00AM	DR201	16/3/2024 @ 7:00AM
89	87	March	2024	30-49 Years	FEMALE	MR240	18/3/2024 @ 9:30PM	MR240	18/3/2024 @ 11:55AM	MR240	18/3/2024 @ 1:00AM	MR240	18/3/2024 @ 3:00AM	MR240	18/3/2024 @ 5:00AM	MR240	18/3/2024 @ 7:00AM	MR240	18/3/2024 @ 9:00AM
90	88	March	2024	30-49 Years	MALE	MR190	19/3/2024 @ 10:50PM	MR190	19/3/2024 @ 12:00AM	MR190	19/3/2024 @ 2:00AM	MR190	19/3/2024 @ 4:00AM	MR190	19/3/2024 @ 6:00AM	MR190	19/3/2024 @ 8:00AM	MR190	19/3/2024 @ 10:00AM
91	89	April	2024	30-49 Years	MALE	MR230	4/4/2024 @ 11AM	MR230	4/4/2024 @ 1:00PM	MR230	4/4/2024 @ 3:00PM	MR230	4/4/2024 @ 5:00PM	MR230	4/4/2024 @ 7:00PM	MR230	4/4/2024 @ 9:00PM	MR230	4/4/2024 @ 11:00PM
92	90	April	2024	30-49 Years	FEMALE	MR220	6/4/24 @ 9:30AM	MR220	6/4/24 @ 11:55AM	MR220	6/4/24 @ 1:00PM	MR220	6/4/24 @ 3:00PM	MR220	6/4/24 @ 5:00PM	MR220	6/4/24 @ 7:00PM	MR220	6/4/24 @ 9:00PM
93	91	April	2024	30-49 Years	FEMALE	MR207	8/4/24 @ 7:45PM	MR207	8/4/24 @ 9:30PM	MR207	8/4/24 @ 11:55AM	MR207	8/4/24 @ 1:00PM	MR207	8/4/24 @ 3:00PM	MR207	8/4/24 @ 5:00PM	MR207	8/4/24 @ 7:00PM
94	92	April	2024	30-49 Years	FEMALE	MR240	9/4/24 @ 10:50AM	MR240	9/4/24 @ 12:00PM	MR240	9/4/24 @ 2:00PM	MR240	9/4/24 @ 4:00PM	MR240	9/4/24 @ 6:00PM	MR240	9/4/24 @ 8:00PM	MR240	9/4/24 @ 10:00PM
95	93	April	2024	30-49 Years	MALE	MR180	9/4/2024 @ 7:45AM	MR180	9/4/2024 @ 9:30AM	MR180	9/4/2024 @ 11:55AM	MR180	9/4/2024 @ 1:00PM	MR180	9/4/2024 @ 3:00PM	MR180	9/4/2024 @ 5:00PM	MR180	9/4/2024 @ 7:00PM
96	94	May	2024	30-49 Years	MALE	MR230	01-05-2024 @ 3:10PM	MR230	01-05-2024 @ 5:00PM	MR230	01-05-2024 @ 7:00PM	MR230	01-05-2024 @ 9:00PM	MR230	01-05-2024 @ 11:00PM	MR230	01-05-2024 @ 1:00AM	MR230	01-05-2024 @ 3:00AM
97	95	May	2024	30-49 Years	MALE	MR207	05/2024 @ 7PM	MR207	05/2024 @ 9:00PM	MR207	05/2024 @ 11:00PM	MR207	05/2024 @ 1:00AM	MR207	05/2024 @ 3:00AM	MR207	05/2024 @ 5:00AM	MR207	05/2024 @ 7:00AM
98	96	May	2024	30-49 Years	MALE	MR240	14/5/2024 @ 10:45PM	MR240	14/5/2024 @ 12:00AM	MR240	14/5/2024 @ 2:00AM	MR240	14/5/2024 @ 4:00AM	MR240	14/5/2024 @ 6:00AM	MR240	14/5/2024 @ 8:00AM	MR240	14/5/2024 @ 10:00AM
99	97	May	2024	30-49 Years	MALE	MR230	15/5/2024 @ 10:30AM	MR230	15/5/2024 @ 12:00PM	MR230	15/5/2024 @ 2:00PM	MR230	15/5/2024 @ 4:00PM	MR230	15/5/2024 @ 6:00PM	MR230	15/5/2024 @ 8:00PM	MR230	15/5/2024 @ 10:00PM
100	98	May	2024	30-49 Years	FEMALE	MR150	18/5/2024 @ 1:15PM	MR150	18/5/2024 @ 3:00PM	MR150	18/5/2024 @ 5:00PM	MR150	18/5/2024 @ 7:00PM	MR150	18/5/2024 @ 9:00PM	MR150	18/5/2024 @ 11:00PM	MR150	18/5/2024 @ 1:00AM
101	99	May	2024	30-49 Years	MALE	MR207	22/5/2024 @ 10:35AM	MR207	22/5/2024 @ 12:00PM	MR207	22/5/2024 @ 2:00PM	MR207	22/5/2024 @ 4:00PM	MR207	22/5/2024 @ 6:00PM	MR207	22/5/2024 @ 8:00PM	MR207	22/5/2024 @ 10:00PM
102	100	May	2024	30-49 Years	MALE	MR240	28/5/24 @ 1:40AM	MR240	28/5/24 @ 3:00AM	MR240	28/5/24 @ 5:00AM	MR240	28/5/24 @ 7:00AM	MR240	28/5/24 @ 9:00AM	MR240	28/5/24 @ 11:00AM	MR240	28/5/24 @ 1:00PM
103	101	June	2024	30-49 Years	MALE	MR240	8/6/24 @ 2:15 AM	MR240	8/6/24 @ 4:00 PM	MR240	8/6/24 @ 6:00 PM	MR240	8/6/24 @ 8:00 PM	MR240	8/6/24 @ 10:00 AM	MR240	8/6/24 @ 12:00 AM	MR240	8/6/24 @ 2:00 AM
104	102	June	2024	30-49 Years	FEMALE	MR104	8/6/24 @ 8:40 PM	MR104	8/6/24 @ 10:30AM	MR104	8/6/24 @ 12:20PM	MR104	8/6/24 @ 2:10AM	MR104	8/6/24 @ 4:00AM	MR104	8/6/24 @ 6:00AM	MR104	8/6/24 @ 8:00AM
105	103	June	2024	30-49 Years	MALE	MR230	10/6/24 @ 10:30AM	MR230	10/6/24 @ 12:00PM	MR230	10/6/24 @ 2:00PM	MR230	10/6/24 @ 4:00PM	MR230	10/6/24 @ 6:00PM	MR230	10/6/24 @ 8:00PM	MR230	10/6/24 @ 10:00PM
106	104	June	2024	30-49 Years	FEMALE	MR130	14/6/24 @ 12AM	MR130	14/6/24 @ 2:00AM	MR130	14/6/24 @ 4:00AM	MR130	14/6/24 @ 6:00AM	MR130	14/6/24 @ 8:00AM	MR130	14/6/24 @ 10:00AM	MR130	14/6/24 @ 12:00PM
107	105	June	2024	30-49 Years	MALE	MR160	25/6/24 @ 8:25AM	MR160	25/6/24 @ 10:00AM	MR160	25/6/24 @ 11:40AM	MR160	25/6/24 @ 1:20PM	MR160	25/6/24 @ 3:00PM	MR160	25/6/24 @ 4:45AM	MR160	25/6/24 @ 6:30AM
108	106	July	2024	30-49 Years	FEMALE	MR500	29/6/24 @ 12:15PM	MR500	29/6/24 @ 2:00PM	MR500	29/6/24 @ 3:45PM	MR500	29/6/24 @ 5:30PM	MR500	29/6/24 @ 7:15PM	MR500	29/6/24 @ 9:00PM	MR500	29/6/24 @ 10:45PM
109	107	July	2024	30-49 Years	MALE	MR240	30/6/24 @ 7:30PM	MR240	30/6/24 @ 9:00PM	MR240	30/6/24 @ 10:45PM	MR240	30/6/24 @ 12:30PM	MR240	30/6/24 @ 2:15AM	MR240	30/6/24 @ 4:00AM	MR240	30/6/24 @ 5:45AM
110	108	July	2024	30-49 Years	MALE	MR558	9/7/24 @ 8PM	MR558	9/7/24 @ 9:30PM	MR558	9/7/24 @ 11:00PM	MR558	9/7/24 @ 12:45AM	MR558	9/7/24 @ 2:30AM	MR558	9/7/24 @ 4:15AM	MR558	9/7/24 @ 6:00AM
111	109	July	2024	30-49 Years	MALE	MR240	15/7/24 @ 2:30AM	MR240	15/7/24 @ 4:00AM	MR240	15/7/24 @ 5:30AM	MR240	15/7/24 @ 7:00AM	MR240	15/7/24 @ 8:30AM	MR240	15/7/24 @ 10:00AM	MR240	15/7/24 @ 11:30AM
112	110	July	2024	30-49 Years	MALE	MR240	17/7/24 @ 4:25AMAM	MR240	17/7/24 @ 6:00AM	MR240	17/7/24 @ 7:45AM	MR240	17/7/24 @ 9:30AM	MR240	17/7/24 @ 11:15AM	MR240	17/7/24 @ 1:00PM	MR240	17/7/24 @ 2:45PM
113	111	July	2024	30-49 Years	MALE	MR105	23/7/24 @ 8:15PM	MR105	23/7/24 @ 9:45PM	MR105	23/7/24 @ 11:15PM	MR105	23/7/24 @ 12:45PM	MR105	23/7/24 @ 2:15AM	MR105	23/7/24 @ 4:00AM	MR105	23/7/24 @ 5:45AM
114	112	July	2024	30-49 Years	MALE	MR160	25/7/24 @ 6:40AM	MR160	25/7/24 @ 8:15AM	MR160	25/7/24 @ 9:45AM	MR160	25/7/24 @ 11:15AM	MR160	25/7/24 @ 12:45PM	MR160	25/7/24 @ 2:15AM	MR160	25/7/24 @ 4:00AM
115	113	July	2024	30-49 Years	MALE	MR230	28/7/24 @ 7:25PM	MR230	28/7/24 @ 9:00PM	MR230	28/7/24 @ 10:45PM	MR230	28/7/24 @ 12:30PM	MR230	28/7/24 @ 2:15AM	MR230	28/7/24 @ 4:00AM	MR230	28/7/24 @ 5:45AM
116	114	July	2024	30-49 Years	MALE	MR230	28/7/24 @ 7:25PM	MR230	28/7/24 @ 9:00PM	MR230	28/7/24 @ 10:45PM	MR230	28/7/24 @ 12:30PM	MR230	28/7/24 @ 2:15AM	MR230	28/7/24 @ 4:00AM	MR230	28/7/24 @ 5:45AM
117	115	August	2024	30-49 Years	FEMALE	MR107	4/8/2024 @ 3:20AM	MR107	4/8/2024 @ 5:00AM	MR107	4/8/2024 @ 6:40AM	MR107	4/8/2024 @ 8:20AM	MR107	4/8/2024 @ 10:00AM	MR107	4/8/2024 @ 11:40AM	MR107	4/8/2024 @ 1:20PM
118	116	August	2024	30-49 Years	FEMALE	MR240	04-08-2024 @ 5:15PM	MR240	04-08-2024 @ 6:45PM	MR240	04-08-2024 @ 8:15PM	MR240	04-08-2024 @ 9:45PM	MR240	04-08-2024 @ 11:15PM	MR240	04-08-2024 @ 12:45PM	MR240	04-08-2024 @ 2:15AM
119	117	August	2024	30-49 Years	FEMALE	MR109	11/08/2024 @ 7AM	MR109	11/08/2024 @ 8:45AM	MR109	11/08/2024 @ 10:00AM	MR109	11/08/2024 @ 11:15AM	MR109	11/08/2024 @ 12:30PM	MR109	11/08/2024 @ 2:00AM	MR109	11/08/2024 @ 3:15AM
120	118	August	2024	30-49 Years	MALE	MR101	11/8/2024 @ 12:45AM	MR101	11/8/2024 @ 2:00PM	MR101	11/8/2024 @ 3:15PM	MR101	11/8/2024 @ 4:30PM	MR101	11/8/2024 @ 5:45PM	MR101	11/8/2024 @ 7:00AM	MR101	11/8/2024 @ 8:15AM
121	119	August	2024	30-49 Years	FEMALE	MR105	13/8/2024 @ 11:05AM	MR105	13/8/2024 @ 12:20PM	MR105	13/8/2024 @ 1:35PM	MR105	13/8/2024 @ 2:50PM	MR105	13/8/2024 @ 4:05PM	MR105	13/8/2024 @ 5:20PM	MR105	13/8/2024 @ 6:35PM
122	120	August	2024	30-49 Years	FEMALE	MR240	16/08/2024 @ 11:30PM	MR240	16/08/2024 @ 1:00AM	MR240	16/08/2024 @ 2:15AM	MR240	16/08/2024 @ 3:30AM	MR240	16/08/2024 @ 4:45AM	MR240	16/08/2024 @ 6:00AM	MR240	16/08/2024 @ 7:15AM
123	121	August	2024	30-49 Years	MALE	MR210	29/8/2024 @ 3:50AM	MR210	29/8/2024 @ 5:00PM	MR210	29/8/2024 @ 6:15PM	MR210	29/8/2024 @ 7:30PM	MR210	29/8/2024 @ 8:45PM	MR210	29/8/2024 @ 10:00AM	MR210	29/8/2024 @ 11:15AM
124	122	September	2024	30-49 Years	MALE	MR114	30/8/2024 @ 12:20PM	MR114	30/8/2024 @ 2:00PM	MR114	30/8/2024 @ 3:40PM	MR114	30/8/2024 @ 5:20PM	MR114	30/8/2024 @ 7:00PM	MR114	30/8/2024 @ 8:40PM	MR114	30/8/2024 @ 10:20PM
125	123	September	2024	30-49 Years	MALE	MR240	2/9/2024 @ 12:10AM	MR240	2/9/2024 @ 2:00PM	MR240	2/9/2024 @ 3:50PM	MR240	2/9/2024 @ 5:40PM	MR240	2/9/2024 @ 7:30PM	MR240	2/9/2024 @ 9:20PM	MR240	2/9/2024 @ 11:10PM
126	124	September	2024	30-49 Years	MALE	MR240	3/9/2024 @ 3:15PM	MR240	3/9/2024 @ 5:00PM	MR240	3/9/2024 @ 6:45PM	MR240	3/9/2024 @ 8:30PM	MR240	3/9/2024 @ 10:15PM	MR240	3/9/2024 @ 12:00PM	MR240	3/9/2024 @ 1:45PM
127	125	September	2024	30-49 Years	MALE	MR240	3/9/2024 @ 10:15PM	MR240	3/9/2024 @ 12:00PM	MR240	3/9/2024 @ 1:45PM	MR240	3/9/2024 @ 3:30PM	MR240	3/9/2024 @ 5:15PM	MR240	3/9/2024 @ 7:00PM	MR240	3/9/2024 @ 8:45PM
128	126	September	2024	30-49 Years	MALE	MR160	7/9/2024 @ 6AM	MR160	7/9/2024 @ 7:45AM	MR160	7/9/2024 @ 9:30AM	MR160	7/9/2024 @ 11:15AM	MR160	7/9/2024 @ 1:00PM	MR160	7/9/2024 @ 2:45PM	MR160	7/9/2024 @ 4:30PM
129	127	September	2024	30-49 Years	FEMALE	MR105	6/9/2024 @ 9:00PM	MR105	6/9/2024 @ 10:45PM	MR105	6/9/2024 @ 12:30PM	MR105	6/9/2024 @ 2:15AM	MR105	6/9/2024 @ 4:00AM	MR105	6/9/2024 @ 5:45AM	MR105	6/9/2024 @ 7:30AM
130	128	September	2024	30-49 Years	MALE	MR240	8/9/2024 @ 11PM	MR240	8/9/2024 @ 12:45PM	MR240	8/9/2024 @ 1:40PM	MR240	8/9/2024 @ 2:35PM	MR240	8/9/2024 @ 3:30PM	MR240	8/9/2024 @ 4:25PM	MR240	8/9/2024 @ 5:20PM
131	129	September	2024	30-49 Years	MALE	MR207	11/9/2024 @ 9:15AM	MR207	11/9/2024 @ 10:45AM	MR207	11/9/2024 @ 12:00PM	MR207	11/9/2024 @ 1:15PM	MR207	11/9/2024 @ 2:30PM	MR207	11/9/2024 @ 3:45PM	MR207	11/9/2024 @ 5:00PM

PLAG REPORT

Poonam Sekhon

by Poonam Sekhon

Submission date: 16-Jul-2025 01:06AM (UTC+0530)

Submission ID: 2715520842

File name: INTRODUCTION.docx (1M)

Word count: 14619

Character count: 85273

Poonam Sekhon

ORIGINALITY REPORT

4%

SIMILARITY INDEX

0%

INTERNET SOURCES

4%

PUBLICATIONS

0%

STUDENT PAPERS

PRIMARY SOURCES

1

Rhonda J Rosychuk, Jaspreet K Khangura, Sylvia S Ortiz, Ivy Cheng et al. "Characteristics and outcomes of patients with COVID-19 who return to the emergency department: a multicentre observational study by the Canadian COVID-19 Emergency Department Rapid Response Network (CCEDRRN)", Emergency Medicine Journal, 2024

Publication

4%

Exclude quotes On

Exclude matches Off

Exclude bibliography On