

**An audit of chest pain and the factors affecting it in a private  
Emergency Department**

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by

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## **ABSTRACT**

### **Background**

Chest pain is an important and complex presenting complaint to the ED. McGraw-Hill<sup>4</sup>, defines chest pain as a general term for any dull, aching pain in the thorax, usually referring to that of acute onset. This wide definition and the broad range of potential diagnoses make these patients a diagnostic challenge. The primary aim of the ED doctor is in diagnosing and excluding life-threatening causes, as failure to do so may result in serious consequences for the patient and doctor. Understanding various aspects specific to this chest pain population would assist in this evaluation.

### **Methods**

Patients presenting with chest pain to an urban private ED in South Africa were identified from patient registers from 01 January to 31 December 2013. Patient data sheets were completed for each patients by evaluating gender, age, race, triage diagnosis, time of arrival, mode of transportation and disposition amongst other variables before analysis was completed.

### **Results**

A total of 939 chest pain presentations were identified. 862 patient presentations were analysed. The largest age group represented was 30-39 years. Race distribution was 55.7% white, 30.1% black, 10.8% indian, 2.3% coloured and 0.23% asian. 55.1% of patient were male and 44% female .An average of 2 patient presentations was seen daily with 60.2% presenting during the day period and 39.8% at night. 81.7% of patients were triaged as orange, 7.3% red, 7.1% yellow and 2.6% green. 92.6% of patients arrived via non-medical transportation and 7.31% arrived via ambulance. Diagnostic groupings were as follows: No diagnosis (15.78%), cardiac (22.74%), respiratory (18.45%), gastro-intestinal (15.89%),

musculoskeletal (14.73%) and psychiatric/psychological (7.77%). 13% has life-threatening conditions. 70.53% of patients were discharged, while 22.97% were admitted.

## **Conclusion**

Chest pain remains a complicated entity for ED evaluation. Understanding aspects of the patient population assist the ED doctor in guiding investigation and appropriate resource allocation. ED doctors actively work to exclude life-threatening causes. While there is no doubt that this is important, the low incidence in this population, raises the question of whether current systems may overemphasise this with a resultant high resource cost in terms of staffing, time and investigation.

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## TABLE OF CONTENTS

	<b>Page</b>
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
LIST OF TABLES	viii
LIST OF FIGURES	viii
LIST OF ABBREVIATIONS	ix
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: LITERATURE REVIEW	4
2.1 Incidence of chest pain	4
2.2 Demographics	5
2.3 When do chest pain patients present?	8
2.4 Triage	10
2.5 Mode of transportation	11
2.6 Aetiology of chest pain and the diagnostic challenge	12
2.7 Patient disposition	18
Study aim	19
Objectives	19
CHAPTER 3: METHODOLOGY	20
3.1 Study Design	20
3.2 Study Location	20
3.3 Authorisation for study	21
3.4 Ethics clearance	21

3.5 Patient sample	21
3.6 Inclusion Criteria	23
3.7 Exclusion criteria	23
3.8 Data collection	23
3.9 Data analysis	28
CHAPTER 4: RESULTS	29
CHAPTER 5: DISCUSSION	40
5.1 First objective	40
5.2 Second objective	42
5.3 Third objective	47
5.4 Fourth objective	49
5.5 Fifth objective	51
5.6 Sixth objective	52
5.7 Seventh objective	55
Conclusions	58
Limitations	59
REFERENCES	60

APPENDICES	61
<b>Appendix 1:</b> South African Adult Triage Scale	61
<b>Appendix 2:</b> Hospital Research committee letter of approval	62
<b>Appendix 3:</b> Ethics Clearance certificate	64

## **LIST OF TABLES**

TABLE 1: Patient data sheet

## **LIST OF GRAPHS**

- Figure 1: Chest pain presentations per age category.
- Figure 2: Day/ night chest pain presentations related to age group
- Figure 3: Race based distribution of new and resuscitation patients presenting with chest pain.
- Figure 4: Chest pain presentations per time period.
- Figure 5: Chest pain presentations according to day of the week.
- Figure 6: Distribution of allocated triage colours of patients presenting with chest pain.
- Figure 7: Percentage of chest pain patients in the various diagnostic groups.
- Figure 8: Chest pain diagnoses correlated to new versus resuscitation patient allocation.
- Figure 9: Chest pain diagnoses correlated to day and night chest pain presentations.
- Figure 10: Diagnostic groupings related to patient age.
- Figure 11: Diagnostic groupings related to gender.
- Figure 12: Patient disposition.
- Figure 13: Specialist referrals.

## **LIST OF ABBREVIATIONS**

ED:	Emergency Department
ECG:	Electrocardiogram
SATS:	South African Triage Scale
TEWS:	Trauma Early Warning Score
RHT:	Refusal of Hospital Treatment