

# An Analytical Study on Non-Traumatic Surgical Emergencies in Rural Medical Colleges

Rajendraprasad Kathula<sup>1</sup>, Ramesh Babu Reddy<sup>2</sup>, Harshitha Kathula<sup>3</sup>

<sup>1</sup>Professor, Department of Surgery, Govt. Medical College, Nizamabad, Telangana. <sup>2</sup>Assistant Professor, Department of Surgery, Krishna Mohan Medical College, Madhura, U.P. <sup>3</sup>MBBS Final year shadhan Medical College, Hyderabad.

## Abstract

**Background:** Surgical emergencies are very common in surgical practise. Non-traumatic surgical emergencies include peritonitis, perforated appendix, strangulated hernias, urological conditions and some malignant conditions. These conditions are slowly increasing world-wide and especially in developing countries. And it is associated with high mortality and mobility because of non-availability of emergency surgical care. World-wide the mortality rate is ranges from 21.75% to 36.50%. **Aim:** To analyse the non-traumatic surgical emergencies and their outcome in rural India. **Subjects and Methods:** We have conducted this study in 1 year and we have examined 270 emergency case which were admitted in our hospital. The emergency care which were admitted in our hospital. The emergency cases which were due to traumatic haemorrhage and stab injuries were excluded from this study. **Results:** Out of total emergency cases 430, non-traumatic emergencies are 270. Age ranged between 20 year and 80 year. Out of 270 males were 155 and females were 115. The most common age group is 40-50 year. **Conclusion:** Facilities are inadequate in most of the part of the world and especially in developing countries like Africa, South Asian countries and in rural part of India. So there is need to improve rural and suburban health centres to reduce the morbidity and mortality in emergency surgical conditions.

**Keywords:** Emergencies, peritonitis, vascular occlusion, perforated appendix.

**Corresponding Author:** Dr. Ramesh Babu Reddy, Assistant Professor, Department of Surgery, Krishna Mohan Medical College, Madhura, U.P.

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## Introduction

Surgical emergencies represents the more than 55% of surgical admissions. More than requires the surgical interventions. Non trauma surgical emergencies proportion is between 32.5% and 54.75%.<sup>[1]</sup>

It is higher than 31%. To 55.5% of trauma patients who will require emergency surgery.<sup>[2]</sup>

Acute emergencies include peritonitis, perforated appendix, bleeding peptic ulcer, vascular conditions, strangulated hernias, and malignancies, septic wounds, cardio thoracic and urological emergencies. However this pattern varies depending on geographical location and continues to change as a result of socio economic, socio demographic and environmental factors, for example, acute appendicitis which was thought to be infrequent among Africans is now the most common cause of Acute abdomen in the west African countries. Economic advancement has led to increasing intake of refined. Fibre depleted diet which forms tenacious, firm and slow moving faces. This causes formation of facecloths which obstruct the appendix.

Global health policies have not accorded provision of emergency medical services the desired attention especially in low and medium income nations. In these nations, prevention of communicable diseases and reduction of

maternal mortality are given greater priority.<sup>[3,4]</sup>

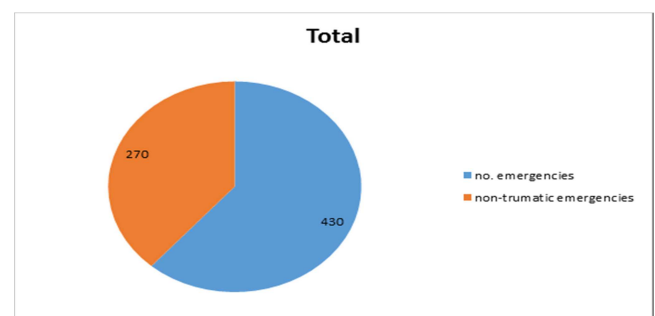


Figure 1: Emergencies

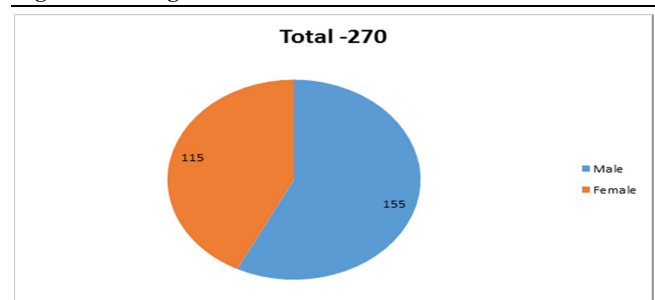


Figure 2: Total no. of non-traumatic emergencies in Male and Female.

Lagos state university teaching hospital was transformed from General hospital to a university teaching hospital in the 1999. The surgical emergency unit has a 30 beds and provides surgical emergency care to both trauma and non-trauma cases.

Acute peritonitis is very common emergency in surgical practise. The major symptoms are pain abdomen distention of abdomen, fever, vomitings, and spontaneous bacterial peritonitis is due to cirrhosis of liver with Ascetic. It is one of the major complications of cirrhosis of liver. The presenting symptoms are ascites, Pain abdomen, fever.<sup>[5]</sup> The Bleeding petit ulcer is also very common emergency in surgical practise. The predisposing factors are smoking, alcoholism and NSAIDS. It presents with pain abdomen and hematemesis. The urological emergencies are due to abstraction of ureter or urinary bladder due to stone are tumours. Gangrenous appendicitis is also a mJOR problem in surgical practise. Gangrenous bowel is comparatively rare. Cardio thoracic emergencies like tension pneumothorax, emphyma, ruptured hydatid cyst of lung are also common.<sup>[6]</sup> The common symptoms and signs in tension pneumothorax are unilateral chest pain, shortness of breath, tachycardia cyanosis and absent breath sounds.<sup>[7]</sup>

**Table 1: Demographic data.**

S.no	Male	Female	Non-trumatic	Total no. of
1	155	115	270	430

### Subjects and Methods

We have examined 430 surgical emergency patients out of these 430, non-traumatic emergencies are 270. Males are 155(%) Females are 115(%) Other 160 cases are due to trauma which are due to road traffic accidents stab injuries and fall from height.

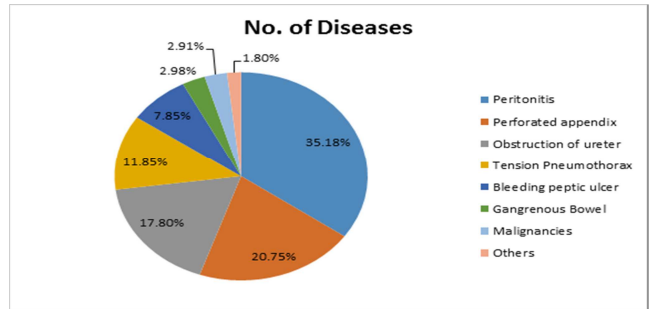
### Results

The total no of surgical emergencies are 430 out of these 430, non-traumatic surgical emergencies are 270 Males are 155(%) Females are 115(%). The most common age group is 40yrs to 50yrs.

**Table 2: Distribution of disease.**

S.no	Disease	No. patients	Percentage (%)
1	Peritonitis	95	35.18%
2	Perforated appendix	56	20.75%
3	Obstruction of ureter	48	17.80%
4	Tension Pneumothorax	32	11.85%
5	Bleeding peptic ulcer	21	7.85%
6	Gangrenous Bowel	8	2.98%
7	Malignancies	7	2.91%
8	Others	3	1.8%

Among 270 patients 35 patients died. Most of these cases were reached the hospital in late stages and with other complications like shock and sepsis. 4 cases patients were expired because of late stages of malignancy. Acute abdomen and urological emergencies are leading causes of emergencies.



### Discussion

Among the 270 cases, surgical intervention was done in 165 patients nearly 67.5% out of these 165 patients, 95 patients are reached hospital with in 24hrs, 4 patients are reached after 36-48hrs.

Acute abdomens most common condition in this study. It is most common non trauma surgical emergency world-wide.<sup>[8]</sup> A recent study conducted in Africa shows similar reports. Urological emergency from acute urinary retention is another common condition which needs emergency admission. Global increase in urological emergencies has been observed. This is attributed to ageing population and increase in benign prostatic hyperplasia. This is a common cause of acute urinary retention.<sup>[9]</sup> Malignancies are also becoming a more frequent cause of non-trauma surgical emergencies; incidence of breast cancer is increasing in many developing countries.<sup>[10]</sup> In rural areas of India sepsis, because of non-treated wounds is another common condition In rural areas proper medical facilities like antibiotics, nursing care is not available.

The spectrum of surgical diseases continues to change especially in low as medium in some countries due to increasing ageing of population and urbanisation. More than half of the patients in this study were treated as discharged. Surgery for acute abdomen constituted 2/3 of non-trauma operation with acute appendicitis/ ruptured appendix and intestinal obstruction are most common causes. Complicated hernia is another common cause for intestinal obstruction.<sup>[11]</sup> The major causes of death in our study are acute abdomen, malignancies and other co morbid conditions like diabetes, coronary artery disease and renal failure. Infection is also another important cause for mortality.

### Conclusion

There is need for establish of an effective referral system in rural and suburban areas of India. The WHO has recognised the gaps in the provision of emergency and essential surgical anaesthetic services in developing countries.

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