

Retrospective Study of Most Common Causes of Morbidity and Mortality in the Emergency Department in 2021 & 2022 Al-Rusafa Hospitals

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Abstract: **Introduction:** Morbidity and mortality in the emergency department (ED) are two of the most important entities needed to be evaluated and discussed to have a good understanding and improve the medical care provided to the patients. **Objectives:** To determine the tenth most common causes of morbidity and mortality in the ED in different hospitals. **Methods:** A retrospective descriptive study in the emergency room of two hospitals of Baghdad Al Rusafa health directory includes all the morbid patients admitted to ED or died in it in the selected 35 days of the years 2021 and 2022. Medical records were used in the study, and data collected were the cause of admission or death, age, and gender. **Results:** A 6651 morbid patients' data were collected, included 3595 (54%) males and 3056 (46%) females, showed that the most common causes for morbidity in descending order were gastrointestinal disorders (17%), cardiovascular diseases (10.6%), accident and trauma (9.3%), road traffic accidents (9.3%), the nervous system (8.5%) respiratory (7.8%) and COVID 19 (6.2%). Regarding mortality, 1192 deaths were reported (661 males and 531 females). The most common leading causes of mortality in ED were cardiovascular diseases (39.4%), COVID-19 (23.4%), respiratory diseases (8.7%) and urinary tract diseases (6.5%). **Conclusions:** Morbidity and mortality In the ED require more attention from the policymakers to provide more training funding to the ED staff to improve the medical care given. More research for post-COVID-19 for re-evaluation of morbidity and mortality in ED. **Objective of the study:** To determine the top ten most common causes of morbidity and mortality in emergency departments AL Rusafa general hospitals in years 2021 and 2022.

Keywords: Emergency department. Morbidity. Mortality

INTRODUCTION

Over the past two decades, extensive studies have examined deaths in the emergency department (ED) to understand precipitating factors. Epidemiological indicators help manage processes and resource use and reduce global issues like overcrowding. Early deaths in ED care are 5-30 per 100,000 visits. Further research is needed to identify complications and reduce ED visit deaths [Stefanovski, P.H. *et al.*, 2017; Richardson, D.B. *et al.*, 2006].

A significant proportion of deaths, particularly those within a 2-hour timeframe from ED arrival to admission, can be attributed to cardiovascular disease. Patients often do not undergo the appropriate diagnosis, leading to cardiovascular events without autopsy confirmation. The first 6-hour ED stay is critical, with risks increasing progressively when patient permanence exceeds 24 hours. [Sklar, D.P. *et al.*, 2007; Singer, A.J. *et al.*, 2011; Sprivilis, P.C. *et al.*, 2006] Overcrowding in EDs increases the risk of medical errors, particularly for patients with critical care needs. This study aims to analyze the characteristics and causes of death in patients waiting for hospitalization [Miro, O. *et al.*, 1999].

Adolescent injuries are a major health issue, leading to death and potentially productive years. Road accidents, drug use, and sports injuries are common, with head and spinal cord injuries resulting in permanent disabilities. Boys are more likely to be victims, and injuries often occur during summer months. Factors such as gender, time of year, and road traffic accidents contribute to the prevalence of injuries. Effective preventative measures are needed [Di Somma, S; . *et al.*, 2015 Gianoli, G.J. *et al.*, 2016].

A study at Al-Ain Hospital found that 301 children aged 0-14 died after accidents, with 28.6% occurring in the 1-4-year age group. Head and neck injuries were the most common cause of death, followed by road traffic accidents. Boys were more likely to suffer from injuries, with falls, blunt trauma, burns, and scalds being the most common causes. Road traffic accidents were more common in children over ten years old. [Chalfin, D.B. *et al.*, 2007; Chang, Y.H. *et al.*, 2019; Rose, L. *et al.*, 2012]

The study conducted by Osifo *et al.* examined the epidemiology and pattern of trauma-related deaths in children and adolescents in Nigeria. Between 1999 and 2010, nearly all deaths linked to trauma

(98%) were among children and adolescents. Among these cases, the ratio of males to females was 1.7 to 1. Road traffic accidents were the primary cause, followed by burns, gunshot wounds, and injuries from stabbings and sports. Head trauma was the primary cause of mortality[Zhang, Z. *et al.*, 2019; Valli, G. *et al.*, 2020].

The study conducted by Theodorou CM *et al.* focused on early mortality in pediatric trauma patients. It found that trauma is the primary cause of death in children, with the majority of deaths happening within 24 hours. The study revealed that 134 (2%) fatalities transpired within 24 hours of the patient's arrival at the trauma center, with the majority of individuals succumbing within the initial 24-hour period. The primary cause of death was traumatic brain injury, with anoxia and hemorrhage being the subsequent leading causes[Subbe, C.P. *et al.*, 2001; Asplin, B.R. *et al.*, 2003]. The study determined that children who experience abusive traumatic brain injury are more likely to die, highlighting the importance of preventing and identifying such cases early[Collet, J.P. *et al.*, 2021].

Ugare GU *et al.* conducted a study on the epidemiology of death in emergency departments occurring within 72 hours of admission, identifying a total of 355 fatalities. The mortality rate was 41.3%, with deaths caused by E.D. accounting for the same percentage. Trauma was the primary factor responsible for 41.4% of fatalities. The predominant factors leading to mortality were road traffic accidents and cardiovascular illnesses, which collectively contributed to 58.6% of the total number of deaths[Seymour, C.W. *et al.*, 2016].

The study conducted by Adegoke O and Ajuluchukwu examined 253 cases of brought-in dead (BID) individuals in a tertiary health facility. The majority of individuals were aged over 60, with non-communicable disorders being responsible for 216 of the underlying causes. The primary fields responsible for causing death were

medicine (46.2%), oncology (17.0%), and surgery/trauma (16.6%). The primary underlying causes were cardiovascular disorders, breast cancer, and road traffic accidents. The immediate causes were heart failure, nonspecific circulatory collapse, central nervous system disorders, and haemorrhagic shock. [Hammond, N.E. *et al.*, 2013]

MATERIAL AND METHOD

A retrospective descriptive study was conducted in the emergency departments of two hospitals under the Al-Rusafa Health Directory, namely Al-Zaafraania General Hospital and Al-Shaheed Dhari Al-Fiath General Hospital. The population comprises all individuals who were admitted to the emergency room, including those who were deceased upon arrival or who passed away in the emergency room as a result of trauma from road traffic accidents or other injuries or medical conditions. A simple random sampling method was employed to pick 35 days each year (2021 and 2022) for the inclusion of patients admitted for surgical, medical, or other reasons such as traumas and road traffic accidents. All morbid patients admitted on the sampled days were included in the study. The data for the study consists of the records from the emergency rooms of the two specified hospitals on the selected days from each year. The collected data included the factors that led to admission to the emergency room, the gender and age of patients with morbidity, and the cause of death, gender, and age of deceased individuals. Any records with inadequate information were excluded from the study's dataset. The results are presented in tables and graphs for the purpose of examination and debate.

RESULTS:

Gender distribution:

Table 1 demonstrates the gender distribution of morbidity in the years 2021 and 2022. It shows that 3595 out of 6651 cases (54 %) recorded morbidity were males gender while the rest 3056 of cases (46 %) were females, with male to female ratio of 1.17:1 as shown in figure 1.

Table 1: The gender distribution of morbidity in the years 2021 & 2022

| Year | 2021 | 2022 | Total | % |
|--------|------|------|-------|------|
| Male | 1556 | 2039 | 3595 | 54% |
| Female | 1475 | 1581 | 3056 | 46% |
| Total | 3031 | 3620 | 6651 | 100% |

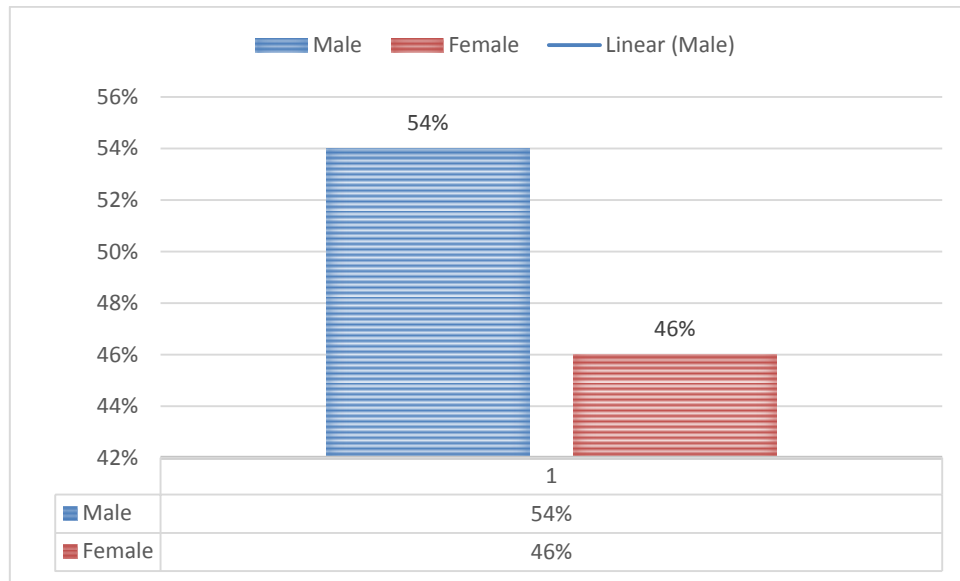


Figure 1: Gender distribution of morbidity in years 2021 & 2022

In 2021 and 2022, gastrointestinal disorders (GIT) were the most common cause of emergency room admissions, followed by cardiovascular diseases (68%) and accidents and traumas (9.8%). Other leading causes included nervous system disorders, respiratory system diseases (7.8%), and COVID-

19 (6.3%). Fever was a significant visitor, followed by wounds (5.5%) and fractures (2.6%).

The causes mentioned represent the tenth most common leading causes for admission to the emergency room and collectively constitute about (83.3 %) of whole admitted cases, as displayed in Table 3 and Figure 2.

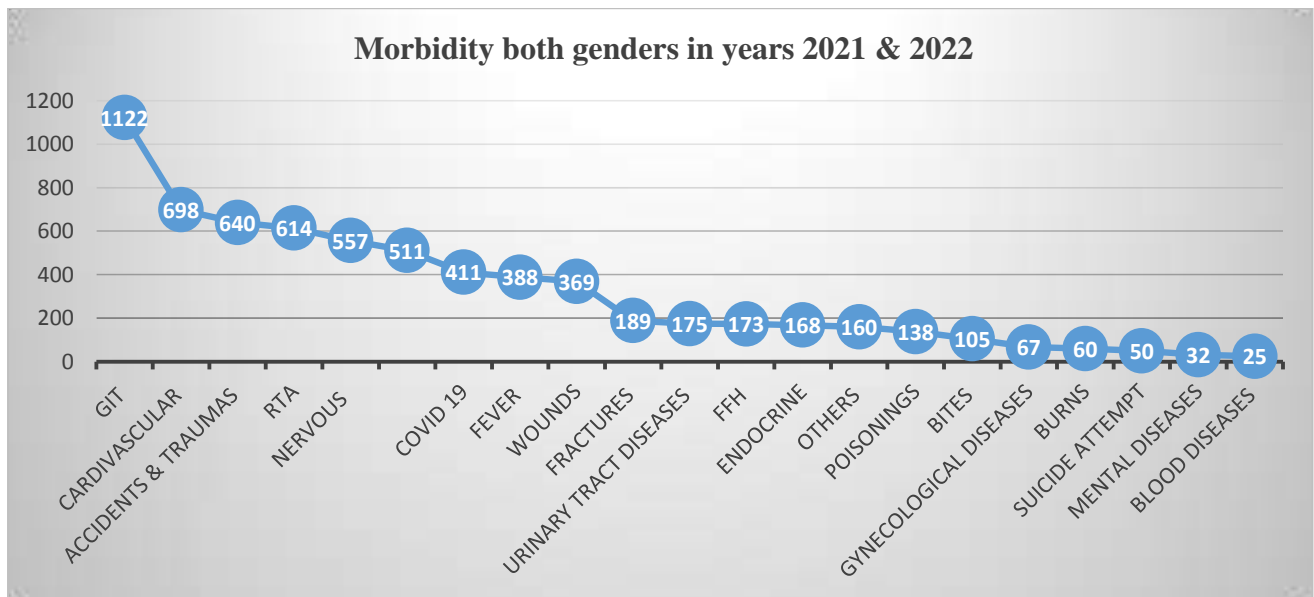


Figure 2: Morbidity of both genders in years 2021 & 2022

Table 2: The Gender distribution of morbidity in the years 2021 & 2022

| Morbidity (DISEASE) | Males | Females | Total | Percentage (%) |
|-----------------------------------|-------|---------|-------|----------------|
| Disease of the respiratory system | 236 | 275 | 511 | 7.8 % |
| Cardiovascular diseases | 417 | 281 | 698 | 10.6 % |
| Accidents & traumas | 464 | 176 | 640 | 9.8 % |
| RTA | 469 | 145 | 614 | 9.3 % |

| | | | | |
|------------------------|------|------|------|-------|
| WOUNDS | 225 | 144 | 369 | 5.5 % |
| FRACTURES | 81 | 108 | 189 | 2.6 % |
| Burns | 38 | 22 | 60 | 0.9 % |
| Poisonings | 90 | 48 | 138 | 2% |
| GIT | 476 | 646 | 1122 | 17% |
| Endocrine | 49 | 119 | 168 | 2.3 % |
| nervous | 256 | 301 | 557 | 8.5 % |
| Fall from height (FFH) | 113 | 60 | 173 | 2.4 % |
| Gynecological diseases | 0 | 67 | 67 | 1.1 % |
| Urinary tract diseases | 79 | 96 | 175 | 2.5 % |
| Suicide attempt | 25 | 25 | 50 | 0.8 % |
| COVID 19 | 181 | 229 | 410 | 6.2 % |
| Mental diseases | 10 | 22 | 32 | 0.5 % |
| Blood diseases | 14 | 11 | 25 | 0.4 % |
| Bites | 62 | 43 | 105 | 1.6 % |
| Fever | 211 | 177 | 388 | 6% |
| Others | 99 | 61 | 160 | 2.2 % |
| Total | 3595 | 3056 | 6651 | 100% |

Females were more influenced with gastrointestinal disorders, nervous system disorders, COVID-19, fractures, urinary tract diseases, and endocrine disorders; however, males were predominantly affected by cardiovascular disorders, accidents, road traffic accidents, wounds, and falls from height, as shown in table 2 and figure 3.

Causes of Mortality

In results shown represent the numbers of causes of death in the years 2021 and 2022; a total of 1192 reported deaths, 661 (55.5 %) were males while 531 (44.5 %) were females, male to female ratio was 1.2:1 as shown in figure 4.

Table 3: The tenth most common morbidity in the emergency room in the years 2021 & 2022

| Morbidity | Males | Females | Total | Percentage (%) |
|-----------------------------------|-------|---------|-------|----------------|
| (Diseases) | | | | |
| GIT | 476 | 646 | 1122 | 17% |
| Cardiovascular diseases | 417 | 281 | 698 | 10.6 % |
| Accidents & traumas | 464 | 176 | 640 | 9.8 % |
| RTA road traffic accidents are | 469 | 145 | 614 | 9.3 % |
| Nervous system | 256 | 301 | 557 | 8.5 % |
| Disease of the respiratory system | 236 | 275 | 511 | 7.8 % |
| COVID 19 | 181 | 229 | 410 | 6.2 % |
| Fever | 211 | 177 | 388 | 6% |
| Wounds | 225 | 144 | 369 | 5.5 % |
| Fractures | 81 | 108 | 189 | 2.6 % |
| Total | 3016 | 2482 | 5498 | 83.3 % |
| Total sample | 3595 | 3056 | 6551 | 100% |

Table 7 shows that cardiovascular disease is the most common leading cause of death in emergency rooms, accounting for 39.4% of deaths in both years. COVID-19 and respiratory disorders were the second and third most common causes, respectively. Other leading causes include urinary tract diseases, GIT disorders, CNS diseases, endocrine disorders, road traffic accidents, blood disorders, and other causes.

The study found that less common emergency room deaths were gynecological diseases, traumas, poisoning, bullet injuries, burns, and suicide. Male mortality was primarily caused by cardiovascular disorders, COVID-19, respiratory diseases, GIT disorders, accidents, and RTA, while female deaths were mainly due to urinary tract diseases, endocrine diseases, and blood diseases. No documented death for bites was reported.

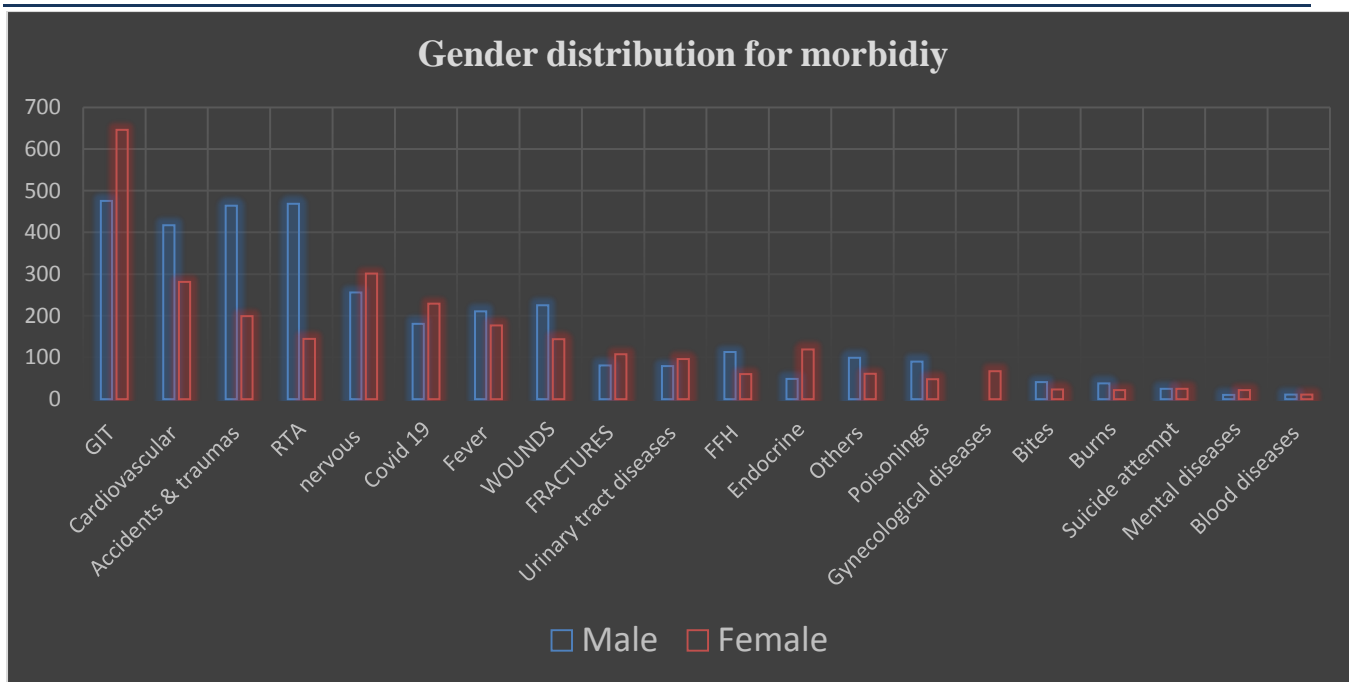


Figure 3: Gender distribution of morbidity in years 2021 & 2022

Table 4: Age distribution of morbidity for male gender in years 2021 & 2022

| Morbidity (Diseases) | <1 YEAR | 01-apr | 05-sep | okt-14 | 15-19 | 20-44 | 45-64 | >65 | Total |
|----------------------|---------|--------|--------|--------|-------|-------|-------|-----|-------|
| Disease of | 21 | 57 | 18 | 14 | 14 | 37 | 48 | 27 | 236 |
| Cardiovas | 0 | 1 | 0 | 0 | 6 | 87 | 220 | 103 | 417 |
| Accidents | 1 | 15 | 35 | 42 | 81 | 232 | 47 | 11 | 464 |
| RTA | 2 | 18 | 47 | 46 | 100 | 210 | 41 | 5 | 469 |
| Wounds | 1 | 10 | 29 | 17 | 42 | 102 | 19 | 5 | 225 |
| Fractures | 1 | 4 | 7 | 13 | 13 | 27 | 9 | 7 | 81 |
| Bites | 1 | 3 | 13 | 17 | 10 | 10 | 6 | 2 | 62 |
| Burns | 2 | 7 | 3 | 4 | 4 | 7 | 10 | 1 | 38 |
| Poisoning | 2 | 22 | 4 | 2 | 34 | 18 | 7 | 1 | 90 |
| GIT | 33 | 63 | 58 | 41 | 41 | 118 | 89 | 33 | 476 |
| Endocrine | 0 | 0 | 6 | 6 | 6 | 15 | 10 | 6 | 49 |
| Nervous s | 14 | 38 | 20 | 23 | 25 | 50 | 53 | 33 | 256 |
| FFH | 4 | 21 | 17 | 20 | 11 | 28 | 11 | 1 | 113 |
| Urinary tra | 2 | 4 | 3 | 6 | 4 | 37 | 16 | 7 | 79 |
| Suicide at | 0 | 0 | 0 | 17 | 4 | 3 | 1 | 0 | 25 |
| COVID 19 | 2 | 2 | 2 | 5 | 44 | 55 | 45 | 26 | 181 |
| Mental dis | 0 | 0 | 0 | 1 | 5 | 3 | 1 | 0 | 10 |
| Blood dise | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 14 |
| Fever | 22 | 60 | 27 | 25 | 17 | 23 | 34 | 3 | 211 |
| Others | 10 | 21 | 13 | 5 | 17 | 7 | 21 | 5 | 99 |
| Total | 120 | 348 | 303 | 305 | 479 | 1071 | 690 | 279 | 3595 |

Table 5: Age distribution of morbidity for female gender in years 2021 & 202

| Morbidity >1 (Diseases) | 01-apr | 05-sep | okt-14 | 15-19 | 20-44 | 45-64 | >65 | Total | |
|-------------------------|--------|--------|--------|-------|-------|-------|-----|-------|------|
| Respirato | 29 | 24 | 20 | 19 | 25 | 55 | 64 | 39 | 275 |
| Cardiovas | 1 | 1 | 0 | 0 | 3 | 49 | 137 | 90 | 281 |
| Accidents | 1 | 7 | 4 | 9 | 18 | 101 | 26 | 10 | 176 |
| RTA | 3 | 9 | 17 | 14 | 26 | 38 | 28 | 10 | 145 |
| Wounds | 6 | 17 | 25 | 15 | 17 | 44 | 12 | 8 | 144 |
| Fractures | 4 | 11 | 13 | 17 | 17 | 21 | 12 | 13 | 108 |
| Bites | 2 | 5 | 8 | 8 | 9 | 5 | 3 | 3 | 43 |
| Burns | 1 | 4 | 1 | 4 | 2 | 7 | 2 | 1 | 22 |
| Poisoning | 1 | 9 | 2 | 2 | 10 | 17 | 6 | 1 | 48 |
| GIT | 25 | 44 | 43 | 36 | 86 | 243 | 109 | 60 | 646 |
| Endocrine | 0 | 1 | 3 | 7 | 13 | 38 | 50 | 7 | 119 |
| Nervous s | 9 | 42 | 18 | 22 | 35 | 70 | 74 | 31 | 301 |
| FFH | 1 | 20 | 13 | 3 | 5 | 8 | 8 | 2 | 60 |
| Gynecolog | 0 | 0 | 0 | 5 | 11 | 42 | 6 | 3 | 67 |
| Urinary tra | 0 | 2 | 0 | 1 | 12 | 51 | 15 | 15 | 96 |
| Suicide at | 0 | 0 | 0 | 1 | 12 | 11 | 1 | 0 | 25 |
| COVID 19 | 1 | 2 | 6 | 6 | 24 | 89 | 76 | 25 | 229 |
| Mental dis | 0 | 0 | 0 | 0 | 3 | 17 | 2 | 0 | 22 |
| Blood dise | 0 | 1 | 0 | 1 | 0 | 6 | 2 | 1 | 11 |
| Fever | 9 | 30 | 25 | 10 | 20 | 54 | 23 | 6 | 177 |
| Others | 1 | 2 | 4 | 5 | 6 | 23 | 16 | 4 | 61 |
| Total | 94 | 231 | 202 | 185 | 354 | 989 | 672 | 329 | 3056 |

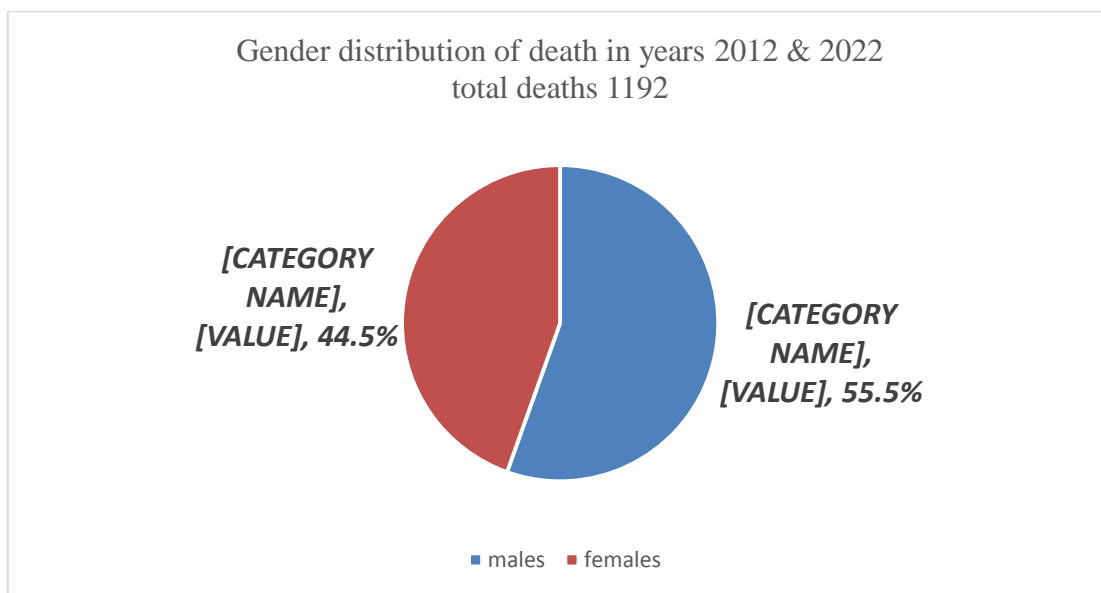


Figure 4: Gender distribution of death in years 2021 & 2022

Table 6- Age distribution mortality in years 2021-2022 for males and females

| Cause of death | Males | | | | Females | | | | total |
|---------------------|-------|-------|-----|-------|---------|-------|-----|-------|-------|
| | <15 | 15-45 | >45 | Total | <15 | 15-45 | >45 | Total | |
| Respiratory | 7 | 4 | 43 | 54 | 12 | 3 | 35 | 50 | 104 |
| Cardiovascular | 11 | 12 | 257 | 280 | 5 | 6 | 178 | 189 | 469 |
| Accidents & traumas | 2 | 3 | 5 | 10 | 1 | 1 | 1 | 3 | 13 |
| RTA | 2 | 8 | 6 | 16 | 1 | 2 | 4 | 7 | 23 |

| | | | | | | | | | |
|------------------------|----|----|-----|-----|----|----|-----|-----|------|
| Wounds | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 3 |
| Burns | 0 | 1 | 0 | 1 | 1 | 3 | 1 | 5 | 6 |
| Bullet injury | 0 | 3 | 4 | 7 | 0 | 0 | 0 | 0 | 7 |
| Poisonings | 0 | 3 | 1 | 4 | 1 | 3 | 1 | 5 | 9 |
| Endocrine diseases | 0 | 0 | 16 | 16 | 0 | 5 | 19 | 24 | 40 |
| Suicide | 0 | 3 | 0 | 3 | 0 | 2 | 1 | 3 | 6 |
| Electric shock | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 3 |
| FFH | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| Drowning | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| COVID 19 | 0 | 12 | 138 | 150 | 0 | 16 | 115 | 131 | 281 |
| Neurological disease | 3 | 3 | 16 | 22 | 0 | 2 | 16 | 18 | 40 |
| Blood diseases | 0 | 3 | 4 | 7 | 0 | 3 | 8 | 11 | 18 |
| Urinary tract | 0 | 1 | 37 | 38 | 0 | 3 | 36 | 39 | 77 |
| Gynecological diseases | 0 | 0 | 0 | 0 | 0 | 1 | 15 | 16 | 16 |
| GIT | 2 | 4 | 27 | 33 | 0 | 4 | 16 | 20 | 53 |
| Bites | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Others | 3 | 1 | 5 | 9 | 2 | 3 | 5 | 10 | 19 |
| Total | 32 | 67 | 562 | 661 | 23 | 57 | 451 | 531 | 1192 |

Table 7: Percentage of mortality for both genders in the years 2021 & 2022

| Cause of death | Total | Percentage % |
|------------------------|-------|--------------|
| Respiratory | 104 | 8.7 |
| Cardiovascular | 469 | 39.4 |
| Accidents & traumas | 13 | 1.1 |
| RTA | 23 | 1.9 |
| Wounds | 3 | 0.24 |
| Burns | 6 | 0.5 |
| Bullet injury | 7 | 0.58 |
| Poisonings | 9 | 0.75 |
| Endocrine Diseases | 40 | 3.35 |
| Suicide | 6 | 0.5 |
| Electric shock | 3 | 0.25 |
| FFH | 4 | 0.33 |
| Drowning | 1 | 0.08 |
| COVID 19 | 281 | 23.4 |
| Neurological disease | 40 | 3.35 |
| Blood diseases | 18 | 1.5 |
| Urinary tract | 77 | 6.5 |
| Gynecological diseases | 16 | 1.4 |
| GIT | 53 | 4.5 |
| Bites | 0 | 0 |
| Others | 19 | 1.6 |
| Total | 1192 | 100.04 |

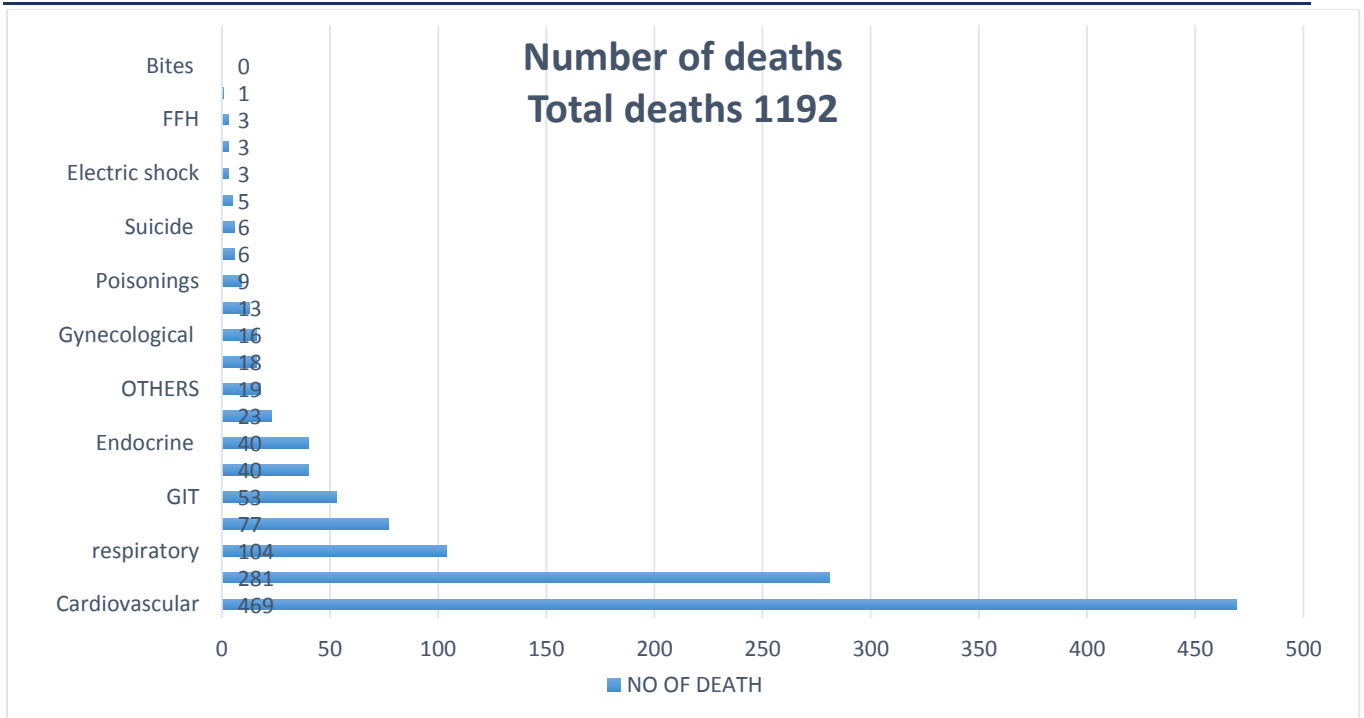


Figure 5: Mortality in both genders in years 2021 & 2022

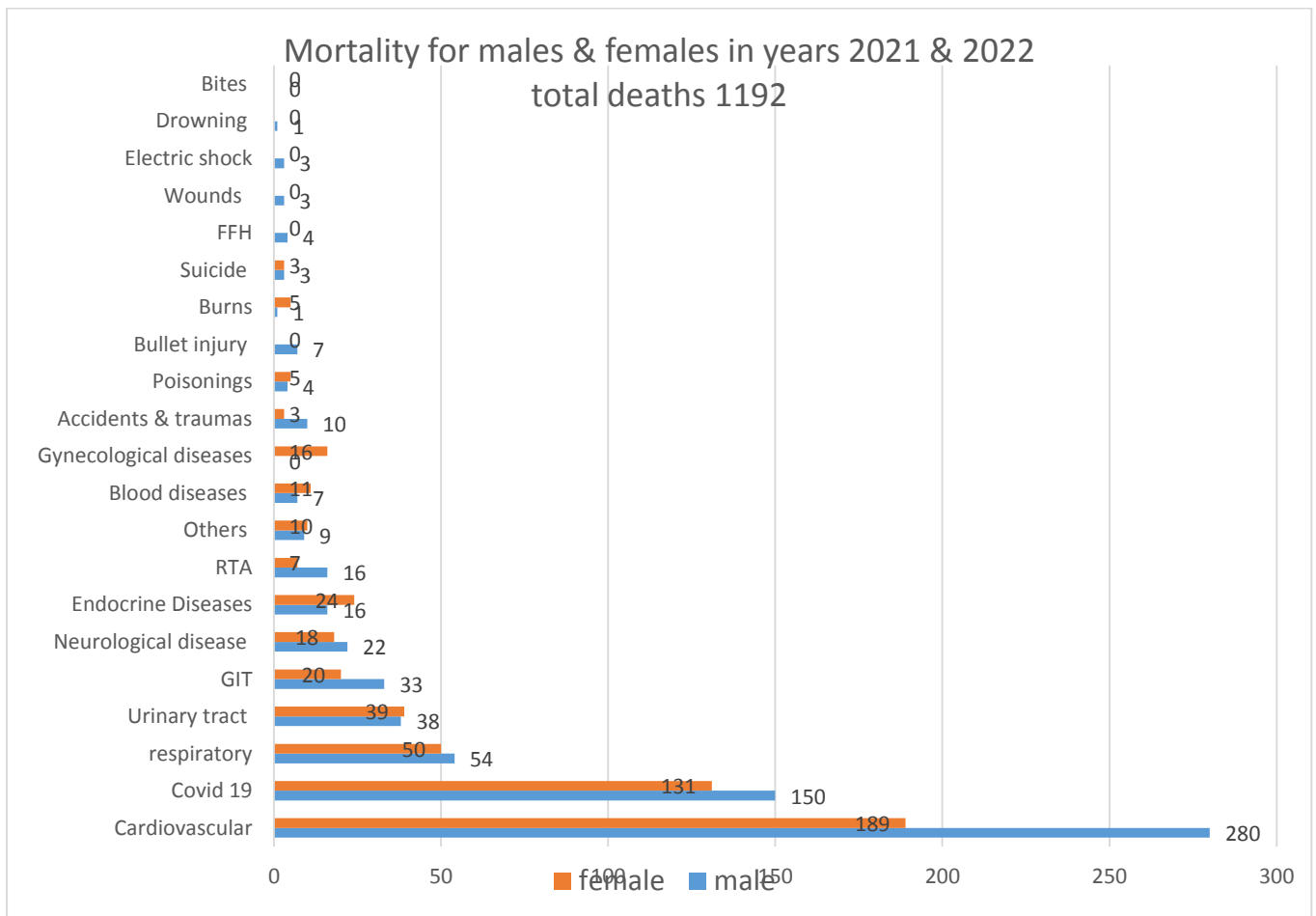


Figure 6: Mortality for males & females in years 2021 & 2022

DISCUSSION:

Healthcare administrators and policymakers must have access to precise data on emergency room

patients in order to effectively plan for the allocation of human resources and medical equipment. This information will enable them to address any shortages or deficiencies and provide appropriate training for emergency room staff. By implementing strategies based on this data, they can work towards preventing complications and reducing mortality rates.

The study aims to identify the primary factors contributing to morbidity and death in the emergency room, as these parameters play a crucial role in health planning.

Our survey found that 54% of emergency room attendees were male, while 46% were female, resulting in a male-to-female ratio of 1.7:1. Ekere AU *et al.* discovered that the ratio of male to female attendance in the emergency room was 1.5:1.

The most prevalent morbidities identified in this study were gastrointestinal disorders, accounting for 17% of cases. This was followed by cardiovascular diseases at 10.5% and accidents & traumas at 9.8%. Road traffic accidents represented 9.3% of cases, while nervous system disorders accounted for 8.5%. Diseases of the respiratory system were found in 7.8% of cases, COVID-19 in 6.2%, and fever as an isolated symptom in 6%. Wounds were reported in 5.5% of cases, and fractures in 2.6%. These ten causes represent 83.3% of the overall selected sample. According to a study by Chan SS *et al.*, more than 25% of individuals who visit the emergency department are affected with hypertension. Lee *et al.*, in their study, revealed that a higher number of patients with respiratory and digestive issues who visited the accident and emergency service were classified as non-urgent rather than relevant situations. On the other hand, a greater number of cases that had circulatory and neurological issues were suitable for management in the accident and emergency department.

Adolescents are more frequently affected by poisoning, accounting for 34% of cases. This finding aligns with a retrospective study conducted by Lin YR *et al.*, which reported that the highest prevalence of poison exposure was observed among adolescents and pre-school-age children. Briskman and colleagues examine cases of poisoning in emergency departments. Our investigation revealed that younger patients who died by drug poisoning through suicide were three times more likely to utilize over-the-counter drugs

compared to older patients. This finding aligns with our own research[Valli, G. *et al.*, 2019; Hsieh, C.C. *et al.*, 2017].

The present study reveals deaths in the years 2021 and 2022, a total of 1192 reported deaths, 661 (55.5 %) were males while 531 (44.5 %) were females, male to female ratio was 1.2:1. However, Ugare GU *et al.* study the epidemiology of death in the emergency department. The male: female ratio was 2.1:1. Also, Adegoke O & Ajuluchukwu JN in their study is designed to characterize the demography as well as document the autopsy-determined underlying and immediate causes of death in brought in dead (BID) cases presenting to the emergency department (ED) found that the male-to-female ratio was 1.04:1. Olusegun-Joseph AD *et al.* their study a retrospective study that looked at medical mortality in the ED demonstrated that male to female ratio was 1.58:1.

The study reveals that cardiovascular disorders were the most common cause of death in emergency rooms between 2021 and 2022, accounting for 39.4% of deaths. COVID-19 was the second most common cause, accounting for 23.4% of deaths. Respiratory disorders were the third most common cause, accounting for 8.7%. Other leading causes of death included urinary tract diseases, GIT disorders, CNS diseases, endocrine disorders, road traffic accidents, blood disorders, and other causes. These ten causes represent the top ten leading causes of mortality in emergency rooms, accounting for 94% of all deaths.

Less commonly reported deaths in the emergency room were gynecological diseases (16 deaths) 1.4 %, traumas (13) 1.1 %, poisoning (9) 0.75 %, bullet injuries (7) 0.58 %, burns and suicides (6) 0.5 % for everyone, and equally distributed for electrical shock, wounds and fall from height (3) deaths for each. One death was reported of drowning, and no documented death for bites.

CONCLUSIONS

The emergency department (E.D) of any hospital is an important entry point of critically ill patients. The initial management of these patients is often challenging. Improvement in management techniques might unravel the mysteries of death in the emergency room. Management of medical emergencies and acute and chronic diseases should be emphasized in the training of accident and emergency workers.

COVID-19 will play a significant role in morbidity and mortality in the years 2021 and 2022, affecting the data presented in emergency rooms. For that reason, the COVID 19 period should be investigated to detect the actual data and causes of morbidity and mortality so that more research needed to do so.

Emergency departments are strategically excellent places to fulfill the important public health goal of screening for injuries, accidents, and other medical disorders, so it is important to emphasize for a good recording of any patients who attended the emergency room.

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