Mortality Trends of Libyan Road Traffic Accidents during the Revolution Event (2011)

Samir Elmrghni*, and Adel Abdulmalik

Department of Forensic Medicine and Toxicology- Faculty of Medicine- University of Benghazi-Libya
Libyan International Medical University

Received Date: July 13, 2018, Accepted Date: July 19, 2018, Published Date: July 27, 2018.
*Corresponding author: Samir Elmrghni, Department of Forensic Medicine and Toxicology- Faculty of Medicine- University of Benghazi-Libya; E-mail: samir3272@yahoo.ie

Abstract

This work aims to observe and to study the figures of road traffic accidents (RTAs) as a cause of death during the Libyan revolution (2011) in Benghazi City. A retrospective analysis was done using the patient records of Al-Jalaa hospital (the main trauma center in Benghazi) from over 200 RTA cases received at that time, to observe if RTA still considered as a major unnatural cause of death among young Libyans regarding previous statistics or it is affected by other traumatic causes of death through 2011. The data (age, gender, place of trauma and the position of the victim to the car) were compared to each other and changes of trends were observed. We conclude that RTA deaths at this year was still high when compared with other causes of death.

Keywords: Libyan revolution; RTA; Mortality

Introduction

The road traffic injuries take a greater task on human life every day on our roads. A large number of people from all walks of life and of all age groups become victims of this catastrophe and never return home, leaving behind their families shattered communities. Over 1.27 million people lose their lives and 20-50 million are injured each year on the roads of whole world [1,2]. The road traffic mortality rates in low and middle income countries (21.5 and 19.5 per 100 000 population, respectively) are twice than that in high-income countries (10.3 per 100 000) [2]. No age group is immune from the road traffic injuries, but the most vulnerable victims are the younger people between 5 and 44 years of age, in whom they are consistently one of the top three causes of mortality [1]. Although many developed countries have shown static or decreased road traffic mortality rates in recent decades, the absolute fatality and casualty figures are rising rapidly in the majority of developing countries. It has been estimated that without immediate effective intervention, RTA will become the fifth leading cause of death by 2030 resulting in an estimated 2.4 million fatalities annually [3]. In Libya, accidents cost the country about $160 million in 1978.

In the UK External causes of death [4], which tends to be less disease and medical focused, accounted for 3.8% of all fatalities in 2009. Road traffic accidents make up 13% of all external causes of death. For the 10-14 age group road accidents make up over 50% of all external causes of death, 15-19 years olds experience almost double the risk of death from road traffic accidents (82.5 deaths per million populations) in comparison to the general population (42.2 deaths per million populations). For males in this age group the risk is higher still at 127.3 deaths per million populations.

There is also a significant and notable disparity between the deaths caused by road traffic accidents between men and women, with men being over three times as likely to die from a road accident. Deaths from road traffic accidents are much more prevalent amongst the under 25s than other causes of death often reported by the media such as hangings, shootings, stabbings, alcohol or drug abuse. Between the ages of 15-24 a young person is twice as likely to die from a road traffic accident as be fatally assaulted by firearms, a sharp/blunt object or intentional self-harm via hanging combined. Those in the 15-24 age categories are also four times more likely to die from a road traffic accident than from drug, alcohol or other substance poisoning.

Material and Methods

This retrospective study was conducted on 200 RTA cases brought to AL-Jalaa Hospital during the Libyan revolution event (2011). The data sources were from statistical files of those victims. Data thus collected was figured and statistically analyzed on SPSS.

Results

Data Analysis

Road traffic injuries account for 2.1% of global mortality. The developing countries bear a large share of burden and account for about 85% of the deaths as result of road traffic crashes [5]. So, the problem of road traffic accidents is becoming recognized concern. The World Health Organization has predicted that traffic fatalities will be the sixth leading cause of death worldwide and the second leading cause of disability-adjusted life-years lost in developing countries by the year 2020 [6,7].

There is a clear and visible increase in the number of motor vehicle collisions in Benghazi [8,9] and proportionately more people are taken to AL-Jalaa as a result of car accidents. In 2011 there were just over 200 deaths in Benghazi city. The largest proportion of deaths is attributable to external causes, of which transport accidents plays a part. When all causes of death are analysed further by age and gender it is possible to see that there are some marked differences between the causes of death particularly at different life stages (Figure 4). Road traffic accidents account for 32.9% of all deaths (Figure 2), they amount to 85% of the deaths in the 26-35 age group (Figures 4 and 6). Overall men are over three times as likely to die from a road accident in comparison to women.

From figures 2 and 6 it is clear to see that although other underlying causes such as falls and other accidental injury make up a less part of all external injuries before this point road accident
**Figure 1:** Common causes of deaths among victims of RTAs.

**Figure 2:** Traumatic causes of deaths during 2011.
Figure 3: Common causes of RTA deaths.

Figure 4: Total traumatic deaths related to different age groups.
Figure 5: Total gunshot deaths related to different age groups.

Figure 6: Common causes of unnatural deaths through 2011.
injury make up a less part of all external injuries before this point road accident deaths are the highest cause of death amongst the young, particularly the under 35s figure 4.

From figures 3 and 7 we can observe that the most common cause of death among RTA victims was multiple trauma then head trauma and the largest death number was among occupants (front and rear seats) 42% then drivers 37%. The most common second traumatic cause of death was gunshot deaths amongst 26-35 age groups represented in figure 5.

Conclusion

This study has shown the data recorded for road traffic accidents in 2011 for the largest hospital in Benghazi. We conclude that even with the event of war at that year and distribution of different types of weapons still deaths from RTA has increased by 33% when compared with other traumatic deaths as in deaths due to gunshot 29%.

Acknowledgments

The authors would like to thank Randa Faraj El mgbhry from the Biostatistics Department at Al-Jalaa Hospital (Benghazi - Libya) for her support.

References


*Corresponding author: Samir Elmrghni, Department of Forensic Medicine and Toxicology- Faculty of Medicine- University of Benghazi- Libya; E-mail: samir3272@yahoo.ie

Received Date: July 13, 2018, Accepted Date: July 19, 2018, Published Date: July 27, 2018

Copyright: © 2018 Elmrghni S, et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.


![Figure 7: Deaths as related to the positions of RTAs victims.](image)