Prevalence of Road Traffic Accidents Mortality in Mosul City: (2017-2021) Epidemiologic Study

* Mohammed Ibrahim Ramadan   **Mohammad Salih Alkaisy  ***Salim Shehab Ahmed

*Iraqi board for neurosurgery / Ibn-seena teaching hospital, Mosul, Iraq

**Psychiatrist, Head of psychiatric department in Ibn-seena teaching hospital, Mosul, Iraq

***MSc nursing in Ibn-seena teaching hospital, Mosul, Iraq

E-Mail: alkaisypsch@yahoo.com

Abstract:

Introduction: The high or low-income nations, injury are regarded as a major health issue. Mosul is regarded as one of Nineveh's most accident-prone locations.

Objective: The goal of this research is to look into the epidemiology of traffic accidents in Mosul.

Methodology: The epidemiology of road traffic accidents in Mosul province is investigated using a retrospective analysis. (3455), (2970) males, and (485) females make up the sample. The research was conducted over a five-year period, beginning in the year 2000 and ending in the year 2005. The sample ranged in age from 1 to 65 years old. For the period of October 1st through the end of the month, Data was gathered from Emergency Department (ED) employees who, on a 24-hour basis, register and document the cause of injury in medical records for all cases admitted and treated for injury. The descriptive and inferential statistical approaches are used to analyze the data (Frequency, %).

Results: According to the findings of the study, the epidemiology of road traffic accidents in Mosul province is expected to be high in 2021. (72.897 percent).

Conclusion: The results of a one-year study of traffic accidents in Mosul revealed that although the number of incidents was generally high, the number of fatalities was relatively low.

Keyword: Epidemiology, Road Traffic Accidents, Mosul.
Introduction:

Injuries are a primary cause of unnecessary death in many parts of the world. In the year 2000, almost 6 million persons died as a result of accidents and deliberate injuries, including 3.8 million unintentional and 2.2 million deliberate injuries (1). The spectrum of death and diseases has evolved in several countries in recent decades (2,3), with injury-related deaths becoming a prominent concern. The majority of injuries are preventable, and accident prevention has been made a national priority in many prosperous countries, with accident-related death steadily dropping for many years. The collection of more data on damage and ill-health caused by accidental injuries is a top goal. Around 12% of the world's illness burden is due to injuries (4,5). RTIs are a severe public health issue that affects people all around the world. Every year, more than 1.2 million people are murdered and 50 million are wounded due to road traffic accidents around the world. Low and middle-income nations account for over 90% of RTI deaths (6,7). The Eastern Mediterranean Region has a fatal RTI incidence rate of 26.4 per 100 000, compared to 17.4 per 100 000 in Europe and 19 per 100 000 globally (8). Because of increased car use, lifestyle changes, and increased risky conduct, there has been an increase in road accidents among the general population (9). As a result, road collisions are the leading cause of mortality (10). In underdeveloped countries, between 1% to 3% of total national revenue is spent on repairing the damage caused by traffic accidents. According to the WHO, the number of people killed in traffic accidents increased by 10% from 1990 to 2002, reaching 1.2 million (11). Iraq's road traffic fatality is far greater than that of many other low- and middle-income countries, and traffic injuries should be emphasized as one of the top public health issues in Iraq. In this context, it is vital to understand epidemic patterns of Road Traffic Accidents Mortality Fatalities in order to have a more comprehensive picture in order to make more informed decisions on how to reduce this type of RTA. The current study looks on some of the epidemiological aspects of road traffic accident mortality in Iraq from 2017 to 2021.

Methods:

Through fulfill the goals of the current investigation, a retrospective study design was used from October 1st to the end of the month. All cases that are admitted and treated for injuries
on a 24-hour basis are routinely logged and documented in the hospital's computer system in medical records by Emergency Department (ED) employees. The study's sample includes (3455), (2970) males, and (485) females. All people who were involved in traffic accidents in Mosul between October 1st and the end of the month were included in the population. Those who had been injured in that year and were taken to Mosul Hospital's emergency room were included in the sample. Were utilized to collect data in two parts, the first of which included socio demographic variables such as gender and age. The second section focuses on the types of injuries that result in mortality. Clinical Modification is based on the WHO International Classification of Diseases, Ninth Revision (ICD-9-CM). Using frequency and percentage, the acquired data was organized, evaluated, and presented in tables. We also lacked essential information about demographic features and Road Traffic Accidents, which would have allowed for a more thorough and accurate account of these incidents.

Results:

Table 1: Number of fatal and nonfatal accidents according department of Nineveh

<table>
<thead>
<tr>
<th>Years</th>
<th>Fatal accidents</th>
<th>Nonfatal accidents</th>
<th>Total accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>11.086</td>
<td>55.817</td>
<td>66.903</td>
</tr>
<tr>
<td>2018</td>
<td>10.761</td>
<td>49.321</td>
<td>60.082</td>
</tr>
<tr>
<td>2019</td>
<td>11.312</td>
<td>47.611</td>
<td>58.923</td>
</tr>
<tr>
<td>2020</td>
<td>13.724</td>
<td>54.078</td>
<td>68.802</td>
</tr>
<tr>
<td>2021 *</td>
<td>18.142</td>
<td>54.755</td>
<td>72.897</td>
</tr>
</tbody>
</table>

Table 2: Accidents on the road are caused by a variety of factors.

<table>
<thead>
<tr>
<th>Causes of Road- accidents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fault of the driver</td>
<td>73.9%</td>
</tr>
<tr>
<td>2. Fault of the pedestrian</td>
<td>3.1%</td>
</tr>
<tr>
<td>3. Fault of the cyclist</td>
<td>2.4%</td>
</tr>
<tr>
<td>4. Defect of motor cycle</td>
<td>2.2%</td>
</tr>
<tr>
<td>5. Defect of the road</td>
<td>0.8%</td>
</tr>
<tr>
<td>6. Weather condition</td>
<td>1.3%</td>
</tr>
<tr>
<td>7. All other causes</td>
<td>16.3%</td>
</tr>
</tbody>
</table>
Figure 1: Demonstrated the age group that exposure to Road Traffic Accidents

Figure 2 shows the gender distribution of the study participants. This graph indicates that men are more than female to be involved in traffic accidents (73.243 percent).
Discussion:

This analysis demonstrates that the Prevalence of Road Traffic Accidents Mortality in Mosul City is expected to be high (18.142) in 2021, compared to the previous five years. Table of contents (1) another study in Iraq indicated that increased mortality is mostly attributable to an increase in the number of road traffic accidents, but that the fatality rate from non-road traffic accidents has also increased over the period (2017–2021). The cause of death for these people has also changed over time. According to another poll conducted in Iraq, excessive speed is the leading cause of mortality in the country, accounting for over half of the people fatal road traffic accidents. Males were more likely than females in fatal motorcycle traffic injuries, according to earlier studies(12,13). According to estimates, the male-to-female ratio is (20. 1). It's possible that this is due to men being more active outside the home than women. Due to the cultural and theological underpinnings of eastern Mediterranean countries, men were also more likely than women to ride motorcycles in their social activities (14). Deaths from road traffic accidents are on the rise in Nineveh Governorate, particularly among young males (18-24). (30 percent). Figure out (2). Young people between the ages of 18 and 24 are the most economically productive members of society_account for about half of all road traffic accident-related deaths worldwide. Through the result of the study, it was found that the year 2021 is the highest rate among the last 5 years for which the epidemiological study was conducted. The reason is due to the frequent use of motorcycles, as well as the congestion of cars and the problem of unpaved roads. These are all reasons that lead to an increase in deaths. Finally, the most common cause of road accidents is a driver’s error. The first and last reason is due to either the driver being inattentive or staying awake or because of the roads that are prone to sabotage in Mosul.

Conclusion:

In conclusion, the findings of a one-year study of traffic accidents in Mosul revealed that the incidence of accidents was primarily high, but the rate of fatality was luckily low, and the study also found that the youth age (18-24 years) were more exposed to traffic accidents.

References:


