Road Traffic Accident Fatalities In Tikrit General Hospital

Akram Mohammed Ali.
Dept. of surgery, College of medicine Tikrit university.

Abstract:

Trauma due to car accident or road traffic accident (RTA) in Salaheddin governorate has increased in direct proportion to the increasing number of cars. This study is a 6-year retrospective analysis of RTA fatalities at Tikrit general hospital (TGH), which covers most of the medical and all the medico-legal services of this governorate. During these 6-year (4774) victims attended TGH, total RTA victims seen at TGH increased gradually with increase also in the number of deaths, which is due to deterioration of medical hospital and during hospitalization. At TGH, RTA is the primary cause of death for all age groups and especially for productive young adults below the age of (40) years.

Introduction

Trauma due to R.T.A remains a major health problem, particularly as it affects mainly citizens (1,2,3). The major causes of hospital death in different age groups were also analyzed in relation to R.T.A fatality, and relationship of the growing number of cars to the increasing number of R.T.A, was also noted, together with persistent use of old fashioned and out–of–use cars (4,5,6). This study is a 6 years (1991-1996) retrospective analysis of R.T.A at TGH. The aim of this study was to evaluate care of R.T.A victims both before and during hospitalization over the last 6 years and to compare R.T.A as a cause of death with other major problems encountered at TGH.

Patients and methods

TGH is a 400-bed general hospital which receives all brought in dead R.T.A. victims of Salaheddin governorate and most R.T.A injuries needing medical treatment Salaheddin governorate has a population of approximately (882,050) persons.

Data concerning the total number of (R.T.A) patients seen at TGH were analyzed. All RTA victims admitted to the hospital or treated in the emergency room were recorded, as well as the total number of brought dead victims. Hospital death was defined as death occurring within (30 days) of R.T.A injury.

Results:

About (55963) patients were admitted to TGH in the 6 years study period, and (5.68%) of these were R.T.A victims (table 1) of the (4774) R.T.A victim seen at TGH. 1591 (33%) were discharged from the emergency room on an ambulatory basis after satisfactory medical treatment. The remaining (3/83) were admitted to TGH with various grades of trauma. The total number of R.T.A victims seen at TGH gradually increased during the 6 years study period, also the number of hospital deaths steadily increased from (9) in 1991 to (35) in 1996 (table 2) and the number of mortality and brought – in – dead figures have been compared for the 6 years period.

The average R.T.A hospital mortality for the 6 years study period (death after admission) was about (20) table 2 and the overall R.T.A mortality (both before arriving at hospital and during hospitalization) for the same period was (1326) or 23.58%.

Out of the (1326) total road traffic deaths in the 6 years period, 122 deaths (9.20%) were after admission and the remaining (1204) 90.7% deaths occurred prior to arriving at the hospital.

The major causes of death for all ages at TGH during the years 1996 are shown in (table 3). With heat disease heading the list at 34.05% followed by R.T.A at 23.58% C.V.A 9.18%, malignancy 7.02%, G.I.T diseases 4.86%. The result demonstrate that the R.T.A falls most heaving on younger persons, and it was...
the major causes of death for people under the age of (40) at TGH for 1996, with a rate of 31% followed by burns 10% and carcinoma 8%.

According to data from the traffic statistics department, the number of cars registered in Salaheddin governorate was 59,100 in 1996, the number recoded vehicular accidents in Salaheddin governorate also increased vehicular accidents in Salaheddin the increasing number from (139) in 1991 to (180) in 1996, the higher number of cars.

Discussion:

The number R.T.A deaths per (10000) vehicles per annum in developed countries (5) ranges from the lowest figures of 2.5 in Sweden and 3.1 in the USA to much higher figures of 144.5 deaths per (1000) vehicles in a developing community such as Nigeria. The current figure in Salaheddin governorate is in the range of developed countries, with a rate of about 14 deaths per 10000 vehicles , in 1995.

A large number of R.T.A victims, (5623) have been brought to TGH during the years study period . This large number way be to the increasing number of cars in addition this is the main general hospital, which received most of the R.T.A injuries of the governorate, total admissions to the hospital during the 6 years period were over (55960) and important percentage of this number was due to R.T.As . There is also increase in R.T.A admissions and the increase is parallel to the increase in number of accidents and cars in part due to use of out of use cars and spare parts. The number of bought in dead causalities also increased , this may be due to the:

1.Poor onsite resuscitation.
2.Dcayed transportation to the hospital which in part due to poor ambulance already present.
3.In addition the old traffic control system worsen road condition and unsafe driving systems and poor yearly check up of drivers may be a cause as well (4,6,7).

The average R.T.A hospital mortality (death after admission) of (2.55%) is more than previous years (1,5,8).

Analysis of the major causes of death in 1996 at TGH shows that R.T.A is at the top of the list for persons under (40) years of age .Similar observations have been made in other steadies (2,3,6).

This may be due to the fact that persons of this age group are less affected by other common causes of death such as malignancy C.V.A, and myocardial infarction.
This study also showed that R.T.A mortality also as the leading cause of death after heart disease at TGH for all age groups. This differ from other studies in USA, which occupies the 3rd most common causes of death in all age groups. This high R.T.A mortality at TGH could be explained by the fact that TGH alone receives all the prehospital R.T.A deaths and most of the R.T.A victims in Salaheddin, whereas other medical deaths are shared by hospitals in other districts of the governorate. The number of cars in Salaheddin increased in the 6 years study which is directly proportional to the R.T.A increase, which increase in mortality also.

Conclusions:

According to this evaluation, it showed that R.T.A is the 2nd principle cause of death for all age groups in TGH, and the incidence is higher for individuals under (40) years of age.

Fatality rate of R.T.A after hospital admission has raised significantly at TGH and the overall mortality due to R.T.A in Salaheddin governorate has raised together with the increasing number of R.T.A on the basis of this study and the preceding conclusions, we have formulated the following recommendation:

1. Teaching of traffic rules and safety measures in the schools and through television programs.
2. Encouragement of national research programs for analysis of deaths due to R.T.A and promotion of better emergency service.
3. Avoiding the use of out of use cars and non-genuine spare parts.
4. Enforcement of use of preventive measures like seat-belts, infants, and drivers car seats, prohibition of children to sit in the front seats, and crash helmets for ride of two-wheel vehicles.
5. Strict surveillance and enforcement of penalties for traffic infringement.
6. Release of embargo imposed on our country.

References