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Implications of Road Accidents in Saudi Arabia

ABSTRACT

Road traffic accidents continue to cause immense social, economic and medical implications for the victims, their families, society and the nation. 81% of the deaths in Ministry of health hospital are due to road accidents and 1/5 of the beds are occupied by traffic accident victims. 1,2 The economic cost due to road traffic accidents is SR 21 billion per year (US \$ 5.6 billion) which is equivalent to 4.6 % of the national revenue.(3)

INTRODUCTION

Road traffic accidents continue to have major implication on medical, social and financial status of the victims. There is a major change in family dynamics following an accident or disability. Huge amounts of medical resources are involved in caring for accident victims. 80% of the victims are below 40 years and 30% of the victims are children with head and facial injuries are a major cause of admission amongst accident victims. Medical care resources are being directed to look after accident victims at the expense of caring for patients with natural illnesses. Total number of injuries and deaths in the past 25 years have been over 1/2 million (564762 person) which is equivalent to 3.5% of the total population of Saudi Arabia. (4,5)

METHOD

We looked at the WHO Health statistics (5), the traffic statistics from the Ministry of Interior, General Traffic Department, (4,5) Ministry of Health annual health and deaths reportl (1,2) and a number of studies being undertaken in Saudi Arabia to assess the social, financial and medical implications of accidents. We also interviewed some of the victims and met traffic police officers and apprehended drivers. We studied the Saudi Arabia Monetary Agency annual report highlighting the financial implications of the road accidents.(3)

RESULTS AND DISCUSSION

Main effects of the vehicle accidents on an individual are social, medical and economic. The loss of a family member leads to a change in the family dynamics and the society they belong. It brings about grief and emotional problems. If the person lost is the breadwinner the whole family will be affected more severely. The total number of beds in 175 Ministry of Health hospitals is 26,737. At any time 2/3 of these bed are occupied by road traffic accident victims. This explains the huge medical resources employed for the road traffic accident victims. This is at the expense of caring for patients with other illnesses. Statistics from the Ministry of Health during the past 2 years has shown traffic accidents as the leading cause of death followed by tumours and cardiac diseases.(1,2)

About 46% of the injuries received in the Eastern Province hospital were due to road traffic accidents. 80% of these victims were below 40 years of age with children below the age of 12 constituting 30% of the victims. Male to female ratio was 9:1. None of the victims wore seat belts. 49% had head and face injuries. 50% stayed less than 10 days, 25% more than 30 days. 33% of the long staying patients were discharged with disabilities resulting in major neurological deficits, i.e. hemiplegia, paraplegia or tetraplegia.(7)

Head and facial injuries were the main effects of road traffic accidents in Riyadh resulting in 30% of injuries and 26% of deaths. 73.6% of

hemiplegic, paraplegic or tetraplegic in Saudi Arabia are due to road traffic accidents. 70.2% of the deaths in 1982 in Riyadh area registered in accidents and emergency department in Riyadh Medical Centre were due to road accidents.(8)

Head and facial injuries were the main effects of road traffic accidents in Riyadh resulting in 30% of injuries and 26% of deaths. 73.6% of hemiplegic, paraplegic or tetraplegic in Saudi Arabia are due to road traffic accidents. 70.2% of the deaths in 1982 in Riyadh area registered in accidents and emergency department in Riyadh Medical Centre were due to road accidents.(8)

Minor accidents in Saudi Arabia are less than those in USA but the major accidents causing injuries and deaths in Saudi Arabia is 17.4% which is more than double of that in the USA (i.e., 8.31%). Serious accidents causing serious injuries are twice as common in Saudi Arabia. Injuries resulting in death are 8 times more in Saudi Arabia than in the USA. The ratio of accidents to the injuries in Saudi Arabia is 8:6 which is much higher in comparison to the international estimate of 8:1. In USA the ratio of accidents to deaths was 283:1 in 1983 compared to 32:1 recorded in Saudi Arabia in 1995.(9)

The economic effect of the accidents in Saudi Arabia is huge. Every year SR. 21 billion are spent on road accident victims. This has a significant impact on the national economy.³ In industrial countries 1-2% of the national revenue is spent on the care for accident victims. In Saudi Arabia, even the most conservative estimate suggests a loss of 2.2% of the national income whereas more liberal and realistic assessment suggest a loss of 9.5% of the national income. The national income of Saudi Arabia being more than SR. 450 billion. This financial loss in Saudi Arabia is almost 3-4 times that of in USA, UK and Australia.

Implications of road accidents in Saudi Arabia remain enormous. Prevention remains the key to dealing with these losses. Education of the general public and more stringent legislation for traffic regulation needs to be implemented.

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