

Road Traffic Accidents in Nigeria: A Public Health Problem

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ABSTRACT

Background: *There is generally increasing incidence, morbidity and mortality rates of road traffic accidents. Majority of mortalities and morbidities occur in developing countries*

Methodology: *A review of literature on road traffic accident and its impact was done. The articles were accessed from public libraries, as well as online through internet search engines and relevant information extracted.*

Result: *Worldwide, road traffic accidents lead to death and disability as well as financial cost to both society and the individual involved. The causes of road traffic accidents are not just human error or driver negligence. Unfortunately, Nigerian highways are arguably one of the worst and most dangerous in the world.*

Conclusion: *Road traffic accident in Nigeria has not received the attention warranted. There is need to view road traffic accident as an issue that needs urgent attention aimed at reducing the health, social and economic impacts.*

Key words: *Road traffic accident, Nigeria.*

INTRODUCTION

Road traffic accidents occur when a vehicle collides with another vehicle, pedestrian, animal, road debris, or other stationary obstruction, such as a tree or utility pole¹. Worldwide, road traffic accidents lead to death and disability as well as financial cost to both society and the individual involved.

There is generally increasing incidence, morbidity and mortality rates of road traffic accidents^{2,3,4,5}. People are injured in road accidents everyday more so in developing countries like Nigeria. The problem is that the enormity of the problem is not appreciated and enough preventive measures are not taken.

EPIDEMIOLOGY

Road traffic accidents occur worldwide but the incidence is more in developing countries^{4,6}. Annually, it causes about 1.2 million deaths globally⁷. Road traffic accident is a leading cause of death in adolescents and

young adults worldwide. Majority of mortalities and morbidities occur in developing countries^{6,8,9}.

In Nigeria, trauma is the main reason for emergency room visits and road traffic accidents are responsible for the majority of deaths¹⁰. The overall road traffic injury rate is about 41 per 1000 population and mortality from road traffic injuries is about 1.6 per 1000 population⁷. This is significant when the fact that majority of these injuries and deaths can be prevented. It becomes worrisome with the fact that the incidence is increasing^{2,3,4}.

CAUSES

The causes of road traffic accidents are multi-factorial. These factors can be divided broadly into driver factors, vehicle factors and roadway factors. Accidents can be caused by a combination of these factors. Driver factors solely contributes to about 57 per cent of road traffic accidents and 93 per cent either alone or in combination with other factors¹¹.

Driver factors in road traffic accidents are all factors related to drivers and other road users. This may include driver behaviour, visual and auditory acuity, decision making ability and reaction speed. Drug and alcohol use while driving is an obvious predictor of road traffic accident, road traffic injury and death¹². Speeding, travelling too fast for prevailing conditions or above the speed limit, is also a driver factor that contributes to road traffic accidents. The risk of being injured increases exponentially with speed much faster than the average speed. The severity of injury depends on the vehicle speed change at impact and transfer of kinetic energy. Though vehicles travelling slower than average speed are also at increased risk of road traffic accidents, most involve speed too fast for the conditions.

Vehicle factors can be divided into vehicle design and vehicle maintenance. Some safety features of vehicles like seatbelts and airbags are likely to reduce the risk of death and serious injuries. A well-designed and maintained vehicle is less likely to be involved in accidents. If the brakes and tires are good and the suspension well-adjusted, the vehicle is more controllable in an emergency and thus, better equipped to avoid accidents.

Road design and maintenance is also a factor that contributes to road traffic accidents. The causes of road traffic accidents are not just human error or driver negligence. Unfortunately, Nigerian highways are arguably one of the worst and most dangerous in the world¹³.

IMPLICATIONS/COST

Road traffic accidents have physical, social, emotional and economic implications. The global economic cost of road traffic accidents was estimated at \$518 billion per year in 2003 with \$100 billion of that occurring in poor developing countries¹⁴.

Nigeria loses about 80 billion Naira annually to road accidents. Of all subjects that are involved in road traffic accidents in Nigeria, 29.1 per cent suffer disability and 13.5 per cent are unable to return to work¹⁵.

Hence, the cost of road traffic accidents includes the cost of both private property and public amenities damaged, the cost of medical treatment and the cost of productivity lost due to the accident.

PREVENTION

Injury prevention is a public health priority with a potentially high return on the investment¹⁶. The issue of prevention of road traffic accidents is important because of the prediction that in 2020, road traffic deaths and injuries will exceed HIV/AIDS as a burden of death and disability¹⁷.

We can reduce deaths and injuries due to road traffic accidents in Nigeria by control of driver factors-speeding, not drinking and driving, wearing seatbelt and helmets, not using phones or eating while driving and obeying traffic rules. Vehicle factor can be improved through better vehicle design and maintenance; roadway factors through better road design and maintenance¹⁸.

CONCLUSION

Road traffic accident in Nigeria has not received the attention warranted considering the magnitude of the problem¹⁹. There is need to view road traffic accident as an issue that needs urgent attention aimed at reducing the health, social and economic impacts.

'Safe road' in Nigeria is more of changing our driving behaviour than just blaming the government alone and advocating for good road infrastructure.

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