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EDITORIAL

MORE THAN EIGHT DEATHS PER DAY ON OUR ROADS ..... AND RISING

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Road Traffic Accidents (RTA) are a significant cause of global morbidity and mortality. According to the World Health Organization (WHO), road traffic injuries (RTI) was the 10th leading cause of death worldwide in 2002, 9th in 2012 and is expected to become the 8th by the year 2030, and is estimated to cost between 1% and 1.5 % of gross national product in low-income and middle-income countries[1,2]

While high income countries like USA, France and Italy have undergone a reduction of RTA fatalities over time, low income countries like Sri Lanka and India are facing higher numbers of RTA fatalities over the years. In 2017, RTA resulted in 8.5 deaths per day.[3] A World Bank report speculates that RTA fatalities in Sri Lanka will increase by almost 150% from 2000 to 2020.[4]

A WHO fact sheet on RTI published in December 2018, gives the following startling facts.[5]

- Of the 1.35 million people who die each year as a result of road traffic crashes, more than half are among vulnerable road users: pedestrians, cyclists, and motorcyclists.
- Road traffic injuries are the leading cause of death for children and young adults aged 5-29 years.
- About three quarters (73%) of all road traffic deaths occur among young males under the age of 25 years.
- 93% of the world's fatalities on the roads occur in low- and middle-income countries, even though these countries have only 60% of the world's vehicles.
- Between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability as a result of their injury.

In a five year study done on non-fatal injuries in the central province of Sri Lanka, the highest number of casualties were on motor cycles (36.6%) followed by 28.2% in motorized three wheeled vehicles while, 11.1% were in buses and 12.9% in dual purpose vehicles (vans, pick-up trucks, jeeps).[6]

The highest percentage of casualties on motorcycles may be due to the high number of motor cycles on the roads. However, vehicle and rider related factors, such as the small size of the vehicle, the fact that the riders are relatively more exposed and tend to weave in and out of traffic, are more prone to toppling, would be contributory factors. Motorcyclists are a vulnerable due to the relatively small size compared to other vehicles and therefore, they are often missed, not noticed, or fall in the blind spot of other drivers.[7]

More than half the vehicles registered in Sri Lanka are motor cycles, and is about four times the number of three-wheelers. Given this fact, and that the motor-cycle offers even lesser protection to its occupants than a three-wheeler, one would expect there to be a considerably higher percentage of casualties travelling in motor-cycles than in three-wheelers. However, surprisingly, the percentage of casualties in three-wheelers was approximately 75% of those travelling on motor cycles. The fact that a motor-cycle could accommodate only two people while a three-wheeler can accommodate a maximum of four, may have contributed to this figure. The high percentage of casualties travelling in a particular type of vehicle could be contributed to by three factors. Firstly, it could be because there is a high number of that particular type of vehicle on the roads. Secondly, the particular type of vehicle may carry a higher number of passengers (buses *vs* three-wheelers or motorcycles). Thirdly, factors related to the particular type of vehicle may contribute to a higher number of casualties.

Three-wheelers are often used to travel short distances, especially in city roads congested with traffic. Three-wheeler accidents contributes significantly to RTA morbidity. The absence of safety features in three-wheelers such as seat belts, air bags, collapsible steering wheels plays an important role. Some other reasons are carrying more than three passengers, older three-wheelers and drivers' flouting traffic laws.[8]

Three-wheelers are light, relatively unstable vehicles, and are especially prone to toppling during sudden deceleration and application of brakes. Toppling due to sudden turning is commonly caused by the drivers tampering with the vehicle's handle bar (steering) lock in order to decrease the vehicle's turning circle.[9]

Several legislative measures have been taken by law-enforcement authorities in Sri Lanka to make three-wheelers safer. A law was introduced by the Sri Lanka police in 2012 limiting the number of passengers travelling in a three-wheeler to three. Furthermore, drivers are now encouraged to use three-wheelers that have the right side boarded up, so that the vehicle can be accessed only from the left side and would therefore help prevent passengers being thrown out of the vehicle. However, I recommend three-wheelers to have doors adjacent to the front and back seats on both sides. In 2018, the age limit to obtain a licence to drive a three wheeled vehicle was raised to 35 years. In addition, the introduction of seat belts in three-wheelers and laws requiring the driver and passengers to use them should be implemented. Educating the drivers on the danger of tampering with the handle bar lock, the instability of a three wheeled vehicle compared with four wheeled vehicles also needs to be done. There are 1.2 million three wheelers for hire today. The number of three wheelers being registered should be limited or completely halted and only electric powered three wheelers should be imported.

Road traffic injuries can be prevented. Governments need to take action to address road safety in a holistic manner. This requires involvement from multiple sectors such as transport, police, health, education, and actions that address the safety of roads, vehicles, and road users. The WHO Save LIVES road safety technical package includes evidence-based measures that can significantly reduce road traffic fatalities and injuries. It focuses on Speed management, Leadership, Infrastructure design and improvement, Vehicle safety standards, Enforcement of traffic laws and post-crash Survival.

Effective interventions include designing safer infrastructure and incorporating road safety features into land-use and transport planning, improving the safety features of vehicles, improving post-crash care for victims of road crashes, setting and enforcing laws relating to key risks, and raising public awareness.

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