Speeding:
Regulating speeding for safer roads

A Policy Brief

CEPA CENTRE FOR POLICY ANALYSIS

Introduction

Speed is a key risk factor in road traffic injuries influencing both the risk of road traffic crashes and the severity of the injuries that result from them.[1] Higher speeds heighten the risk of a crash and a greater likelihood of serious injury if it occurs. This is because as speed increases, the distance travelled during the driver's reaction time also increases and consequently the distance needed to stop. With the increase in speed, the effects of drivers' errors are magnified. During a crash, the higher the speed the greater the amount of mechanical (kinetic) energy that must be absorbed by the impact hence increasing the likelihood of serious injury.[2]

Excessive speeding simply means to travel faster than the prescribed speed limit and this is responsible for many road crashes in developing countries. This is worsened by the poor road infrastructure. Inappropriate speeding means to travel too fast for the prevailing conditions, which could be within the prescribed speed limit. Speeding can, therefore, be considered as travelling at both excessive and inappropriate speeds.[3]

According to the World Health Organisation, the faster a vehicle is moving on the road, the more likely it is to be involved in a crash. Every 1km/h increase in speed results in a 3% increase in crashes resulting in an injury and a 4-5% increase in fatal crashes.[4] A study by Agaba et al (2018) revealed that speeding was one of the largest contributors to road crashes in Uganda as the drivers and riders were high-speeding even in some risky areas and those that have signs that require them to slow down.[5] More so the 2020 Police Crime Report indicates that the majority of crashes were resulting from speeding, reckless driving and careless driving. It is therefore important that the legal and regulatory framework address the issue of speeding by setting speed limits that will minimise the crashes especially in highly built-up areas and those with crowds.

Methodology

This policy brief was informed by the desk review research by the Centre for Policy Analysis: *Assessment of the Legal and Regulatory Framework for Road Safety in Uganda.* The study predominantly adopted a desk review approach to identify the gaps in the legal and regulatory framework for road safety. A systematic review of the documents concerning the road safety policies, laws and regulations was conducted. The analysis was also informed by consultations with the key stakeholders in road safety in Uganda.

1 Speed management: a road safety manual for decision-makers and practitioners. Geneva, Global Road Safety Partnership, 2008. https://www.who.int/roadsafety/projects/manuals/speed_manual/1-Why.pdf

2 https://www.who.int/roadsafety/projects/manuals/speed_manual/1-Why.pdf

3 GRSP

4 World Health Organisation. Speed Management: https://www.who.int/violence_injury_prevention/publications/road_traffic/2pager-Speed-final.pdf?ua=1

5 Agaba et al (2018). Driving Tutor: An android mobile application to sensitize about road rules, signs and regulations

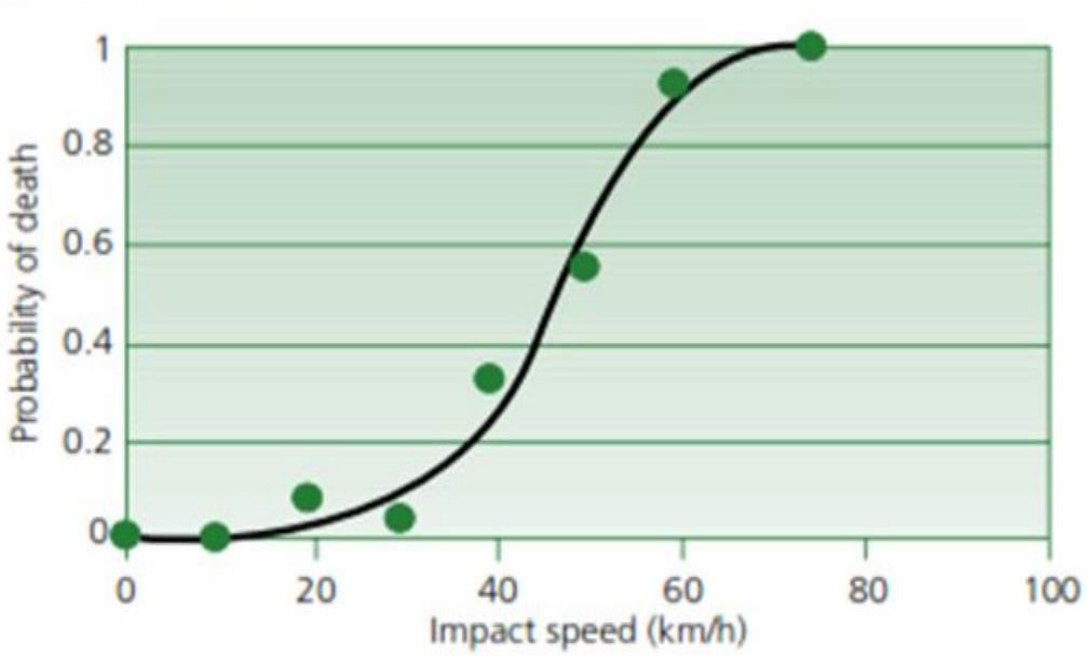
Assessing the relationship between speeding and road traffic injuries

Speed is at the core of the road traffic injury problem because of the road safety risk it presents. It is associated with behavioural and non-behavioural factors, including road infrastructure and design, and vehicle safety elements. High speeding increases the likelihood of getting involved in a crash involvement; severity of the crash; and injury severity because of a transfer of kinetic energy when things collide.[6] Key facts about speeding crash involvement, the severity of crash and injury severity:

- The distance travelled during the driver's reaction time increases as speed increases.
- The distance needed to stop increases as speed increases. For example, when travelling at 80 km/h on a dry road, it takes around 22 meters to react to an event (the distance travelled during a reaction time of approximately 1 second) and a total of 57 meters to come to a standstill. At 50 km/h, it takes around 14 meters to react to an event, and a total of 27 meters to come to a standstill.[7]
- The risk of a serious or fatal collision is greater if a vulnerable road user—pedestrian, motorcyclist, or cyclist—is involved, even at lower speeds.
- An increase of 1 km/h in mean vehicle speed results in an increase of 4–5% of fatal crashes.
- Speed also contributes to the severity of the impact when a collision does occur. For car occupants in a crash with an impact speed of 80 km/h, the likelihood of death is 20 times what it would have been at an impact speed of 30 km/h.
- The relationship between speed and injury severity is particularly critical for vulnerable road users such as pedestrians and cyclists. For example, pedestrians have been shown to have a 90% chance of survival when struck by a car travelling at 30 km/h or below, but less than 50% chance of surviving an impact at 45 km/h. Pedestrians have almost no chance of surviving an impact at 80 km/hr.

6 Global Road Safety Partnership
7 Ibid

Figure 1: Pedestrian fatality risk as a function of the impact speed of a car



Source: WHO 2004

As indicated in the figure above, the road fatality risk increases with an increase in speed. As shown in the figure, the risk starts to increase exponentially beyond the speed of 30 Km/H. It is therefore important to ensure that the laws and regulations set a speed limit not exceeding 30 Km/ H for roads in urban centres and high-built areas.

Gaps in the regulations

The Traffic and Road Safety (Speed limit) Regulation 2004 only makes a general provision for speed limits and does not provide for specific areas, particularly those with high pedestrian activity. Uganda's speed limit is currently 50Km/h for urban and developed areas.

The speed limit in Uganda for motorcars constructed to carry passengers, and motorcycles in rural areas is 100 Km/hr on paved roads and 80 Km/hr on gravel roads. For the public service vehicles (PSV) and private omnibuses with seating accommodation for more than seven passengers, the exclusive of the driver is 80 Km/hr on the paved roads and 60 Km/hr on gravel roads in the rural areas.[8]

Recommendations

- The Ministry of Works and Transport should amend the Regulations/ 2004- Statutory Instrument No. 33 of 2004 to reduce the speed limit for school zones, busy markets and other urban centres,

8 The Traffic and Road Safety (Speed Limits) Regulations, 2004

trading centres and other built-up areas from 50Km/H to 30Km/H.

- The speed limit of 30km/h should be considered for roads in school zones and high built-up areas. This is because such roads have high pedestrian movements along and across the road, and no adequate pedestrian segregation.
- Develop strict penalties for the drivers and riders who exceed the speed limits, and make sure that all road users get sensitization about the speed limits.
- The government has to increase funding for the road safety sector to ensure adequate implementation of the regulations. Increase funding to the Traffic Police for human resource and equipment.

REFERENCES

1. Agaba et al (2018). Driving Tutor: An android mobile application to sensitize about road rules, signs and regulations
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This document has been produced with the help of a grant from the Global Road Safety Partnership a hosted project of the International Federation of Red Cross and Red Crescent Societies (IFRC). The contents of this document are the sole responsibility of the authors and can under no circumstances be regarded as reflecting the positions of the IFRC nor those of Bloomberg Philanthropies.

About the publication:
This policy brief is a publication by the Centre for Policy Analysis with the support from Global Road Safety Partnership. Website: www.cepa.or.ug Email: info@cepa.or.ug

Citation:

Mwesigye Godfrey, Wamajji Reagan and Asimwe John (2021). Speeding: Regulating speeding for safer roads. Policy Brief. Centre for Policy Analysis, Kampala Uganda.

Published by CEPA
P. O. Box 23276, Kampala
Email: info@cepa.or.ug
Website: http://www.cepa.or.ug