

ROAD SAFETY AND ITS MANAGEMENT

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Abstract: *The scientific evidence on the magnitude, risk factors and effective interventions for the prevention of road traffic injury is reasonably well documented and readily available. As with other policy areas, such knowledge alone cannot bring about a change in the road safety situation; the real challenge is how to translate that knowledge into sustainable solutions in different contexts. The evidence and the inclusion of road safety and sustainable transport targets in the Sustainable Development Goals are both essential, but the real issue is the leveraging of opportunities and challenges in different policy contexts. Need, therefore, to reflect on how to act and to take practical steps towards the improvement of the road safety and transport situation at local, national, regional and international levels.*

Change in road safety policy, as in other areas of policy, is generally a progressive and iterative process that requires continued improvements and innovations in the solutions summarized. It need to realize that improving road safety policy is not a one-off event, but rather the pursuit of a long-term collective action. To do so is to see the road safety targets of the Sustainable Development Goals as the beginning of a journey to change in road safety policy – a journey that needs to run its full course at both national and local levels.

Keywords: *interventions, law, order, risk factors, strategy*

Introduction

Currently estimated to be the ninth leading cause of death across all age groups globally, road traffic crashes lead to the loss of over 1.2 million lives and cause nonfatal injuries to as many as 50 million people around the world each year. Nearly half (49%) of the people who die on the world's roads are pedestrians, cyclists and motorcyclists. Road traffic crashes are the main cause of death among people aged between 15 and 29 years.

In addition to the grief and suffering they cause, road traffic crashes constitute an important public health and development problem with significant health and socioeconomic costs [9]. Considerable economic losses are not only incurred by victims and their families, but also by nations as a whole: road crashes cost most countries 1–3% of their gross national product. Over 90% of road traffic deaths and injuries occur in low- and middle-income countries, yet those countries only account for 54% of the world's registered vehicles.

Road traffic crashes may be an everyday occurrence but they are both predictable and preventable, as illustrated by the large body of evidence on key risk factors and effective road safety measures that work in practice [4].

The Safe System Approach (Figure 1) provides a viable framework to examine road traffic injury risk factors and interventions from a holistic perspective.

Leadership is the ability to influence or inspire people to achieve a certain goal [3]. One of the responsibilities of leaders is to provide a vision of how the future may look and to mobilize action to achieve it. A good example of this is Sweden, which adopted Vision Zero in 1997 and has mobilized action and implemented effective measures over the years [6], a process that has led to a significant reduction in road traffic fatalities. A number of other countries have also adopted Vision Zero or Towards Zero fatality targets that reflect the fact that the only acceptable goal is no road traffic deaths or serious injuries [13].



Figure 1. Safe System Approach [10]

Mobilizing action around a vision is particularly challenging in the case of road safety, given the multisectoral aspect of the issue and the diversity of actors involved (including from health, transport, finance, education, the interior and/or police) [1]. In addition to the coordination challenges linked to the involvement of different stakeholders, the divergence of views concerning appropriate road safety strategies can delay or, in the worst case, hinder action. Other leadership issues include inconsistency in the implementation of road safety strategies, poor coordination and a lack of policy change champions [5]. As such, the quality of leadership is one of the factors facilitating or hindering the implementation of road safety measures [7].

Leadership on road safety is not only needed at the highest national political level but also at other levels of society and road safety policy, and is important in creating a sense of urgency for change, raising awareness and creating demand among stakeholders [13].

Solutions

Existing experience shows that the key leadership roles lie in influencing and/or managing the functions and activities outlined below.

Create an agency to spearhead road safety

Coordination of road safety efforts across multiple sectors and stakeholders is critical for success [9]. In many countries this role is fulfilled by a lead agency that should ideally have the authority and resources needed to coordinate the implementation of a national strategy. In some countries coordination is done by a designated stand-alone agency while in others the lead agency is hosted within a government ministry. (eg: The Norwegian Public Roads Administration (NPR) is a stand-alone entity that coordinates road safety across different sectors and levels of government in Norway, and is involved in reviewing legislation and in data collection and dissemination. The National Traffic Safety Committee in Viet Nam is located in the Ministry of Transport and coordinates road safety policy across different government agencies under the overall leadership of the Deputy Prime Minister, who is also the chairman of the Committee. - Based on reference [9]).

Although lead agencies or coordinating mechanisms are necessary, their mere existence will not lead to the improvement of the road safety situation in a country. They need to deliver on their responsibilities and to be funded at a level commensurate with the scale of the road safety problem and their ability to reduce that burden. Whether at national or local level, road safety and its management need to explore ways of building the basis for action for road safety, for example, by signing the major road safety-related agreements and conventions [8,12]. Local leadership, in partnership with communities, can also be an effective way of achieving results. Essentially, effective road safety leadership needs to utilize and trigger numerous opportunities at local, national and international levels if it is to move action on road safety policy.

A road safety strategy

A strategy provides a blueprint of where a country wishes to go. Like institutions, a strategy does not deliver solutions by itself; it needs to be implemented and backed up by the allocation of financial and human resources to the implementation of the planned activities.

Monitor road safety by strengthening data systems

The importance of data on road traffic fatalities and injuries for monitoring country-level trends, tailoring prevention efforts, assessing progress and comparing the scale of road traffic deaths relative to deaths from other causes cannot be overstated [9]. However, data on road traffic fatalities are not robust in Moldova. There is a need to undertake greater harmonization and improvement in road traffic data with respect to:

- adopting a standard definition of a road traffic death for use in police databases;
- linking data sources (i.e. vital registration records, ambulance data, police data, hospital data, insurance data, etc.) to improve official road traffic fatality estimates;
- offering training to the police for accurate assessment of injury severity and cause of crash, covering all aspects of the road, road user and vehicle type;
- addressing the problem of underreporting of road traffic crashes;
- disseminating data to stakeholders;
- using available data in planning interventions;
- adopting new technology to support data collection and analysis, where feasible.

Raise awareness and public support through education and campaigns

There are two specific activities that need to be conducted for this strategy:

- the first is educating and informing policymakers, practitioners and the public about the importance of addressing the problem of road traffic injuries.
- the second is increasing awareness of road safety risk factors and prevention measures, and implementing social marketing campaigns aimed at changing behaviour and attitude.

Safe road user behaviour and a reduction in road traffic fatalities depend not only on knowledge and skills but also on community support, perception of vulnerability and risk, social norms and models, engineering measures and law enforcement. It is therefore important to remember that increasing awareness of road safety risk factors and prevention measures through education and social marketing campaigns is an adjunct to other measures, rather than a stand-alone solution. (eg: Social marketing campaign in the Russian Federation Four major campaigns were developed and aired in 2010–2014 as part of a road safety project in the Lipetskaya and Ivanovskaya regions of the Russian Federation. Focusing on seat-belt use, speeding and child restraint use, the campaigns were accompanied by enforcement. An evaluation showed a consistent reduction in the proportion of vehicles exceeding the speed limit: from 54.7% (2012) to 40.1% (2013) in Ivanovskaya Oblast and from 47.0% (2011) to 26.1% (2013) in Lipetskaya Oblast. The overall prevalence of seatbelt use increased from 52.4% (2010) to 73.5% (2013) among all occupants in the Lipetskaya region and from 47.5% (2011) to 88.8% (2013) in the Ivanovskaya region. Source: Based on reference [2,11].

Conclusion - Benefits of leadership solutions

The following can be achieved by improving road safety leadership:

- developing a governance foundation for undertaking specific interventions;
- addressing broader societal and governance issues, such as law and order, that affect road safety policy;
- triggering action and mobilizing stakeholders;
- improving coordination of road safety policy, ensuring work is efficiently conducted among different agencies;
- providing frameworks and accountability to ensure the implementation of specific interventions and the achievement of road safety policy outcomes;
- allocating financial and human resources to road safety policy;
- increasing awareness of road safety risk factors and prevention measures, leading to greater support of enforcement and other road safety interventions.

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