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IT IS STILL AN AMBER LIGHT FOR ROAD SAFETY

Relevant for: Indian Economy | Topic: Infrastructure: Roads

The Motor Vehicles (Amendment) Bill, 2019 passed by the Lok Sabha on July 23 and by the Rajya Sabha on July 31 has 63 clauses with the aim of reducing road traffic fatalities and injuries in India. The amended MVA has several new provisions: increased compensation for road accident victims, a Motor Vehicle Accident fund to provide compulsory insurance cover to all road users, defining a good Samaritan, recall of a defective motor vehicle, development of a National Transportation Policy, a National Road Safety Board, recognising taxi aggregators and increased penalties for several offences. All these are intended to reduce traffic crashes by at least 50% by 2030 (a target set by the United Nations). Out of the many amendments proposed in the Act, the increased penalties have been implemented in many States from September 1, 2019; at the same time, many States have decided to “dilute” the suggested increase in penalties.

New penalties have been introduced for ‘faulty registration details, the concessionaire or the contractor who is responsible for a faulty road design or has not followed standards, and for guardians of juvenile offenders to be penalised. While there have to be penalties for offenders, there does not seem to be any correlation between stricter and higher penalties and a reduction in road traffic crashes in countries where road traffic deaths have reduced over the years’, examples being West Europe, the United States, Japan and Australia.

The idea of higher fines as a deterrent to traffic crashes is based on the assumption that a driver is careless and that the fear of a higher penalty will encourage “careful” behaviour while on the road. This goes against current scientific understanding in reducing traffic crashes that promotes the design of a system which can forgive mistakes made by road users. Road safety experts suggest that road designs such as lane width, shoulder presence, number of lanes and median design influence driving behaviour such as operating speeds, lane changing, etc.

Therefore, one could expect that ‘roads themselves play an important role in road safety, and improved geometry design and infrastructure could in turn help to improve road safety. Drivers can modify their behaviour based on what they see on the road ahead of them. Drivers are more likely to fall asleep or experience boredom on straight, monotonous, dual carriageway roads with little traffic’. Stricter penalties and intensive driver training cannot reduce the risk of driver fatigue. However, road engineers can change the road design to reduce boredom and monotony.

Given the understanding from traffic safety theories of the last 50 years, safety interventions have to be based on three important principles: recognition of human frailty, acceptance of human error, and creation of a forgiving environment and appropriate crash energy management. Experience from the U.S. and European countries shows that road standards alone cannot ensure safe roads for all unless safety performance is evaluated.

There is another factor in India. The density of small towns and villages along highways and the presence of tractors, three-wheelers, cars, buses, trucks and truck trailers on these highways present a very different traffic mix as compared to North America and western Europe where most highway standards have been developed. Pedestrian and motorcyclist involvement in fatal crashes on highways is greater than those involving other road users. In the past two decades, there have been major investments in expanding the national highway system in India. Yet, fatalities have continued to grow. Can the amended MVA address these concerns?

Despite the efforts of the last few decades, the number of road traffic fatalities has continued to increase in India.

A Ministry of Road Transport and Highways (MoRTH) report of 2018 has listed 1,51,430 fatalities. However, for the same year, the World Health Organisation estimates nearly 300,000 deaths. In fact a government of India study by the Registrar General and Census Commissioner, India (‘The Million Death’ study) also reports at least a 50% under-reporting of traffic fatalities and a higher share of pedestrian and motorised two wheelers as Road Traffic Collision victims when compared to the MoRTH report. The MVA amendments do not address the reliability of crash estimates, which form the basis of designing preventive strategies.

It has been a tradition in ‘road safety to analyse road safety data in order to understand why crashes occur, which factors influence risks, and what determines crash severity, and then, based on this understanding, to arrive at reliable conclusions on how to prevent them most effectively and efficiently. This is called a data-driven approach. In this approach, priorities are derived by using crash data, background data, exposure data and data on safety performance indicators’. This is what researchers call as a scientific method and evidence-based interventions. India has still not created a culture of producing scientific evidence for designing preventive strategies. A report from New South Wales, Australia in 2007 evaluated the effectiveness of stricter penalties which said: “It is suggested that substantial increases in fines and licence disqualifications would have limited potential in deterring recidivist offenders. The present analysis failed to find any evidence for a significant relationship between [the] fine amount and the likelihood that an offender will return to court for a new driving offence. Nor was there any evidence from our analyses to suggest that longer license disqualification periods reduced the likelihood of an offender reappearing before the courts.” Increased fines alone, as suggested in the amended MVA, will not have the intended effect of reducing traffic crashes. Current traffic safety science suggests that if road users do not have their share of responsibility, for example due to a lack of knowledge or competence, or if personal injuries occur, or for other reasons that lead to risks, the system designers (road designers) must take further measures to prevent people from being killed or seriously injured.

Therefore, if there is to be a reduction in India in the growing health burden due to traffic crashes, it requires establishing a system or institutional structure which enables the generation of new knowledge-new road standards thereby ensuring safe highways and urban roads. Thus, we have a long way to go in ensuring “safe road behaviour”.

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