

**EDITORIAL****ROAD TRAFFIC INJURIES: THE NEGLECTED EPIDEMIC IN ETHIOPIA**Sileshi Lulseged, MD<sup>1</sup>, MMed, Workenesh Ayele, PhD<sup>2</sup>

Every year, road traffic injuries (RTIs) are the cause for the death of about 1.35 million people and some 20-50 million non-fatal injuries globally, many of them incurring disabilities (1). Two decades back, RTIs ranked ninth among the leading causes of disability adjusted life years lost (DALYs) among adults and children (2,3). Currently, they are the leading cause of death in young people 15-29 years of age worldwide and are among the top three causes of mortality among people 15-44 years of age, the mortality being higher (73%) among males (4). The number of lives lost from RTIs in high-income countries indicates a downward trend in recent decades (1,4). The highest burden of RTIs is borne disproportionately by poor people in developing countries. Indeed, more than 85% of all deaths and 90% of DALYs lost from RTIs occur in developing countries, where the RTI burden - in terms of societal and economic losses to individuals, their families, and to nations as a whole - is rising substantially (5).

In Africa, the number of road traffic injuries and deaths has been increasing over the last three decades (6). According to the 2015 Global status report on road safety, the WHO African Region had the highest rate of fatalities from road traffic injuries worldwide at 26.6 per 100 000 population (7). These injuries occupy 30-70% of orthopedic beds in hospitals across the region (8). In this issue of the Ethiopian Medical Journal (EMJ), Assefa A, et al. reported that some 13,500 RTI victims were seen in five hospitals in Addis Ababa over a period of three years. The age group 25-34 years was most commonly affected, twice as many males as females were involved in these accidents, and the head and extremities were the most commonly affected parts (9). These reports from facility settings, though they constitute the tip of the iceberg, indicate the burden RTIs pose on the health care delivery system.

As in many other developing countries, cars, buses, trucks, motorcycles, taxis, carts, pedestrians, animals, and other categories of travelers share the roads in Ethiopia (10). In many places, the road network is constructed without considering children (11). Children may live close to, or play, or even work on the roads. All these interactions with roads, together with a range of other risk factors associated with childhood behavior increase the susceptibility of this group to RTIs. These and other complex societal and economic factors make the occurrence of RTIs extremely high in Ethiopia, where about three percent of the population encounter a traffic accident equivalent to three million people suffering from RTIs in 2015 (12). There are indications that the fatality rate or injury crash in Ethiopia is about 30 times higher than the rates reported from developed countries (13).

Available evidence suggests that there is a small difference in the magnitude of RTIs in urban and rural dwellers, 2.8% and 2.6%, respectively, and that about two in 10 (20%) are seriously injured. Poor road network, absence of knowledge on road traffic safety, mixed traffic flow system, poor legislation and failure of enforcement, poor conditions of vehicles; poor emergency medical services; and absence of traffic accident compulsory insurance law have been identified as key determinants of RTIs. Nearly three-quarters (74%) of RTIs are associated with or compounded by drivers' behavior (12). Male young adults and vulnerable road users are at an increased risk of road traffic accidents (RTAs). Deaths and injuries among females, younger age victims, cyclists/motorcyclists and pedestrians were under-reported by traffic police (12,14). As any for many developing settings, interventions need to be customized to the particular mix of situations in Ethiopia, where there is a substantial number of two- and three-wheel vehicles, vehicles with poor maintenance status, locally designed vehicles, high-density living and mixed land use, pedestrians carrying loads, and children and adolescents playing in the streets.

The current traffic safety conditions in Ethiopia, as in other developing countries, are already extremely precarious; it will undoubtedly worsen in the near future, in the face of the rapid increase in the use of motorized means of transport, within travelling and social environments that are not prepared to accommodate such changes. Available evidence confirm that majority of the RTAs in the developing world affect all communities, but the extent to which they affect populations in Ethiopia is overwhelming. Traffic accidents are already of epidemic proportions and will continue to get worse unless dramatic and holistic measures involving multiple sectors (transport, police, health,

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education, media, etc.) are taken to turn the tide. Measures taken by the country to date, such as putting in place relevant laws on traffic speed limits, mandatory seat belt use, road safety management and curbing major risk factors by requiring alcohol level testing in drivers, as well as the enhancement of road infrastructure are encouraging steps, but the enforcement of these measures leaves a lot to be desired.

In order to turn the tide of the RTI epidemic, a systems approach to road traffic safety advocated by the World Bank and WHO that emphasizes involvement at all levels of the road traffic system, needs to be instituted in a holistic manner. Indeed, there is an urgent need in Ethiopia for bringing road safety to the country's public health agenda (15). To curb this growing problem, high-level political commitment and immediate actions and decisions are required. A strong commitment is needed towards road safety education in schools, which should start in early school years. The training and education system should also give emphasis to reaching the community. Dwellers should be trained to be good road users at all stages of their lives. In due course, there should be viable means of improving the standards of driving. Maintenance of roads, traffic lights, signs and symbols and strengthening and implementation of vehicle-testing procedures are urgently required. Strengthening systems is necessary to obtain accurate information on road accidents and human casualties (16).

Generally, there is no source in the country that independently provides comprehensive and accurate coverage of road traffic incidents and related deaths and injuries in the country. Organized and timely information should be available to all stakeholders - traffic police offices, road engineers, insurance companies, mass media, statistical authorities, and the public at large – ideally designed and implemented with a local language interface for maximizing the usability of the system. As suggested by results from recent studies (17), immediate and pragmatic steps need to be taken to curb the wanton destruction of lives that are occurring on the roads of Ethiopia. The question begs to be asked about what price the country is willing to pay for mobility, and for how long, as this is an issue, which literally risks driving development in the wrong direction. In particular, there is urgent need to introduce road safety interventions to address the public health hazard that is claiming too many lives, including the lives of many from the economically productive age group.

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