Road deaths and injuries in India: Action required on the five pillars of road safety

Gopalakrishna Gururaj

Road deaths and injuries are increasing in India due to unprecedented motorization and expansion of infrastructure amidst absence of strong road safety policies and programmes. In 2014, 141,000 persons died and 4,77,731 persons were injured as per official reports (1). However, data from World Health Organization, Global Burden of Disease 2013 and independent Indian studies estimate these numbers to be much higher due to underreporting of Road Traffic Injuries (RTIs). Nearly 10-30% of hospital registrations are due to RTIs and majority of them are discharged with varying levels of disabilities. Individuals in the age group of 15-44 years, men and, middle and poorer sections of society are affected most in RTIs. Pedestrians, motorcycle riders / pillions and bicyclists, the vulnerable road users, are killed and disabled in large numbers. The economic losses from road crashes are estimated to be 3% of GDP and are increasing from year to year (2). Amidst significant regional variations, many Indian states have road deaths much above the national average. Indian states that have progressed in development, infrastructure, education and per capita incomes also have the highest rates. While urban deaths account for nearly a fifth of total deaths and injuries, Indian highways account for more than 50% of deaths and injuries and are likely to increase with further growth in infrastructure (1). This distribution clearly implies that transport and mobility growth should be accompanied by road safety as well.

Road crashes occur due to a complex interaction of human, vehicle and environmental factors in heterogeneous transport environments. Despite the growing number of crashes, the understanding of road crashes in India has been limited. All official reports till date indicate ‘human error, driver negligence, rash driving, careless driving’ as the major cause, thereby implicating human behaviour to a larger extent. However, independent limited research in recent years has informed that several issues in road environment, vehicle safety, behaviour of road users, enforcement of safety laws, availability and affordability of trauma care and others are responsible for both causation and poor outcomes in road crashes (3). Most glaringly, the absence of an efficient road safety management system has resulted in piecemeal and fragmented solutions. Many high-income countries implemented systematic interventions based on a scientific understanding of road safety (Haddon’s matrix, safe systems approach, public health understanding, and others) and successfully demonstrated that road crashes are predictable and preventable (4). As the causes for road crashes are multiple, interventions need to be several and needs prioritisation in India. Road safety management through a clearly defined road safety policy, a central coordinating agency to guide-coordinate-monitor-direct-implement and evaluate activities, improving human/financial/ physical resources are urgently required to develop a
road map for future activities. Safe infrastructure development through low cost and sustainable engineering solutions that are geared for people's needs and travel patterns addressing both mobility and safety is critical. Vehicle safety that adheres to safety standards is vital to make people safer. Strict implementation of proven and effective interventions (e.g., helmets and safety belt laws, drink drive laws, speed control measures, and visibility related measures) are required to make people safe and reduce poor outcomes. Good trauma care practices that include rehabilitation services are highly essential to save the injured. Undoubtedly, all these activities need to be driven by evidence based practices and data driven systems. As road safety is the shared responsibility of different ministries and departments at this time, it requires participation from health and all other sectors to develop integrated, intersectoral and coordinated approaches (5).

References
إن أسباب حوادث السير متعددة، وكذلك يجب أن تكون التدخلات متعددة ومحددة الأولويات في الهند: إذ توجد ضرورة لملحّة إدارة السلمية على الطرق من خلال سياسة واضحة للمعامل السلمية على الطرق وكيفية تنسيق مركزية لقيادة الطرق وتنسيقها وتبنيها، وتوجيهها وتطبيقها. وهناك حاجة أكيدة لتحسين الطرق والمحور الطرقية والمادية لوضع خارطة طريق للاستدامة المستقبلية. لا يدّبر من تطوير بنية تحتية تتطلب أمنة وسلامة المركبات، وحولت هذه البنية مستدام التي تشمل السلمية بالطرق والHexString نقل السلمية بالطرق والتخطيط والتدريبات السلمية التي تتطلب منها أن تكون较高 الأشخاص أداءً، كما يجب التوجيه الصحيح للتدخلات المتنوعة والمتنوعة.

على سبيل المثال، استخدام النجاح، وقوانين حركة الآمن، وقوانين طريق اهتمامات تحت تأثير الكحول، وتداخلات مراجعة السرعة الزائدة، والこともあります المتعلقة بوضع الرؤية على الطرق (لجعل حياة الناس آمنة وآمنة التبادل، ضرورية للحفاظ على النقل السلمي). ويجب بالتأكيد أن جميع هذه الطرق بشكل وعمليات وتبنيها في جميع الأمثلة على الأدلة ونظم قائمة على البيانات، ونظام السلمية على الطرق مسؤولية مشتركة بين الوزارات والإدارات المختلفة في هذا الوقت، فهي تتطلب مشتركة من قطاع الصحة وجميع القطاعات الأخرى لوضع نهج متكامل ومستدام (0).

المراجع