

## Road traffic mortality in China: good prospect and arduous undertaking



According to WHO in 2018, road traffic deaths ranked eighth among all causes of death in the world—leading to 1.35 million deaths per year.<sup>1</sup> However, data for road traffic deaths and the mortality rate in China are inconsistent. Data reported by the Institute for Health Metrics and Evaluation (IHME), the Traffic Administration Bureau of the Ministry of Public Security of the People's Republic of China, and WHO differ widely.<sup>2,3</sup> China has a vast territory and the largest population in the world, a great number of motor vehicles, and unbalanced economic development. It is important to study the characteristics of road traffic in China and the mortality rate from road traffic accidents, for health policy and to reduce road traffic deaths.

In *The Lancet Public Health*, Lijun Wang and colleagues<sup>4</sup> used data from China's disease surveillance points system to analyse road traffic deaths in China from 2006 to 2016 according to sex, age, location (urban and rural), province, and road user. Mortality increased from 12.6 (SE 0.03) deaths per 100 000 population in 2006 to 15.5 (0.03) deaths per 100 000 population in 2011, then decreased to 10.4 (0.03) deaths per 100 000 population in 2016. Mortality rates differed according to urban or rural location, sex, age, and province. The most vulnerable road users in traffic accidents were pedestrians, pedal cyclists, and motorcyclists. China's progress has a substantial effect on global road traffic safety; therefore, it is important to study recent patterns, mechanisms, and trends of road traffic mortality for policy making and improving road safety.

Reducing road traffic mortality is complex. Over the past decade, relevant Chinese Government departments and traffic administration bureaus have made various efforts to reduce the incidence of road traffic accidents and deaths from traffic injuries. These efforts include investment in public transport infrastructure, construction of a high-speed railway network, establishment of the National Ministry of Emergency Management, and issuing of regulations and laws—eg, for emergency lane management and targeting drunk driving. As a result, the incidence of road traffic accidents has been substantially reduced.<sup>2</sup>

While public health prevention approaches are crucial to reduce road traffic accidents, it is also

important to have a strong health system to respond and care for the injured. Rapid and suitable transport of people injured in traffic accidents and efficient medical treatment are both crucial to reduce mortality from road traffic accidents. To solve problems such as insufficient training of prehospital emergency personnel, low success of prehospital resuscitation, long transit times to hospital, ineffective cooperation and communication between prehospital emergency services and hospital admission, poor information exchange and early warning linkage, and a paucity of standardised trauma centres,<sup>5</sup> the China Trauma Rescue Alliance has developed trauma treatment systems and trauma centres throughout the country. By the end of 2018, this initiative had been implemented in 431 hospitals in 28 provinces covering 55 cities and nearly 200 million people. Over 200 training courses have been held and more than 20 000 medical service trainees have been trained in the past 5 years. Moreover, the National Health Commission has implemented a series of policies to improve the ability of medical staff to treat severe trauma throughout China, to strengthen regional trauma treatment systems with trauma centres at its core, and to promote public health education.<sup>6</sup> The trauma centre at Peking University People's Hospital in Beijing has been at the forefront of such developments. Currently, the mortality rate of severe trauma patients (Injury Severe Score  $\geq 16$ ) is less than 10% in our centre. Hopefully, through these joint efforts, mortality from road traffic accidents will be further reduced in China.

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We declare no competing interests.

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- 1 World Health Organization. Global status report on road safety 2018. [https://www.who.int/violence\\_injury\\_prevention/road\\_safety\\_status/2018/en/](https://www.who.int/violence_injury_prevention/road_safety_status/2018/en/) (accessed April 13, 2019).
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