LIMCs. RTI is one of the leading causes of fatal and non-fatal in Bangladesh.

Methods The nationwide a cross sectional survey was conducted between March-June 2016 using a pretested semi-structured questionnaire. Multistage cluster sampling method considering probability-proportional-to-size strategy was used in the surveys to obtain the desired sample. Verbal autopsy method was used to ascertain the cause of death.

Result The mortality and morbidity rates due to RTI were 14.37(95%CI;10.67–19.35) and 2164.32(95%CI;2113.00–2217.00) per 100,000 person-years respectively. The highest incidence rate of fatal was recorded as 21.89(95%CI;09.35–51.25) along with the age group ≥60 years and the highest incidence of non-fatal was recorded as 2702.51 (95%CI;927.14–2789) along with the age group from 25 to 59 years. The fatal and non-fatal rates were significantly higher among males 22.79(16.31–31.85) compare to females 6.03 (3.17–11.47) and urban 16.00(9.99–25.63) compare to rural 13.47(9.19–19.74). The highest rate of fatal and non-fatal injury occurred in day time between 9.00am-12:00pm and 12.00pm-15.00pm respectively. Usage of seatbelts was 2.1% among the drivers and only 28% motorcyclists used helmets. Talking with mobile phone was 4.50% and drug addicted was 3.8% among driver and motorcyclist at the time of accident.

Conclusion The magnitude of fatal and non-fatal RTIs was remarkably high in Bangladesh. People aged 25 to 60 years were the most vulnerable group.

Learning Outcome A country-specific strategy and interventions are needed to reduce road traffic injury burden in Bangladesh.

Road safety has long been a worldwide challenge. In fact, the World Health Organization (WHO) has noted a 1.25-billion death toll in 2010 or one person losing his life every 25 seconds which prompted them to raise awareness in road safety by declaring 2010–2020 as the Decade of Action for Road Safety. In the Philippines, 10,379 deaths were recorded in WHO’s latest World Status Report in Global Road Safety in 2015 with the low-income group dominating its number. With regards to national policies, the Department of Transportation Road Safety Management group are implementing the speed limit law, motorcycle helmet law, drug-driving law, drink-driving law, seatbelt law, and mobile phones while driving law.

With Western Visayas in focus, the program looks into three factors namely, number of fatal and injury-resulting road crashes, national primary and secondary road density, as well as review of the said laws. It aims to determine and classify high risk cities and municipalities in Western Visayas through a tool called local vulnerability score (LoVS). The tool will be applicable to all cities and municipalities in the Philippines provided initial data is provided to which local governments use to assess their programs toward eradicating cases of road crashes.

Background Road traffic crashes and drowning are among the leading causes of injury mortality among youth, especially in low- and middle-income countries. The aim of this population-based study was to examine trends in road traffic and drowning related mortality from 1989 to 2018 in Seychelles.

Methodology The population civil death register was used to identify cases. Coding was done according to the ICD-10 codes for external causes of mortality. Mortality rates were estimated using the crude and age standardised rates. The WHO standard population was used to standardise the rates. Negative binomial regression was used to estimate the trends and annual percent changes over time.

Results Drowning and road traffic injuries accounted for approximately 21.9% and 17.5% of all injury-related deaths. Males had a higher risk both for drowning (RR 6.14, 95% CI 3.92, 9.62; p<0.001) and road traffic injury mortality (RR 2.25, 95% CI 1.43, 3.53; p<0.001). The drowning age standardised mortality rate was 25.9 per 100000 person-years, and road traffic mortality was 18.0 per 100000 person-years among males; and correspondingly 3.4 per 100000 and 4.6 per 100000 person-years among females, respectively. The drowning mortality increased by less than 0.01%, while the road traffic mortality increased by 2.7% among males.

Conclusion The major cause of mortality was drowning. However, the annual increase in the road traffic mortality was higher during the 30-year period.

Learning outcome Policies to reduce the road traffic crashes need to be actively implemented to reduce related mortality in order to achieve the SDG target.

Background Internet-based big data may offer important and timely information concerning road traffic injury data, supplementing official government statistics. We developed computer-based approaches to define, extract and automatically collect internet-based Chinese language big data on road traffic injuries.
Methods Based on injury prevention matrices and ICD-10, we established a thesaurus set and analysis framework for data extraction. A dilated convolutions neural network classifier was developed to filter eligible news stories based on 10,000 researcher-annotated news sources, and algorithms were built to extract information concerning relevant variables. Word frequency was reported using a Python Chinese word segmentation module (jieba). Pearson correlation coefficients examined relations between internet-based big data and official statistics.

Results 650,140 media reports were captured from 27 Chinese news websites, and 92,813 news pieces were filtered as eligible reports (accuracy=86%). Searches captured information about 71,829 traffic crashes from January 2013-September 2019. The words ‘crash’, ‘vehicle’ and ‘scene’ were the most frequently used words in the stories. Our results revealed characteristics that official statistics did not cover, such as changes in travel patterns for the elderly. The number of media-reported crashes was highly correlated with official statistics (r=0.84, p=0.035).

Conclusion Internet-based big data offers information about traffic crashes that can supplement official government statistics and aid in road traffic injury prevention strategies. Extension to countries where government data and statistics are unreliable, but news reporting is reliable, appeals in particular.

Learning Outcomes Internet-based big data offers data that can supplement existing road traffic injury sources and guide prevention efforts.

3B – Systems, March 23, 2021

3B.001 PREVENTING SUBSEQUENT INJURIES: PERSPECTIVES FROM HEALTHCARE PROVIDERS AND PEOPLE INJURED

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Background Some people experience multiple injury events over time. For example, of 2856 people who presented to healthcare providers following injury, 58% had at least one subsequent injury involving an Accident Compensation Corporation (New Zealand’s no-fault universal injury insurer) claim over the next 24 months. Contact with healthcare providers following injury offers a potential intervention point for subsequent injury prevention however it is not known if this potential is being optimised. This qualitative research examines subsequent injury prevention opportunities from the perspectives of: 1) healthcare providers, and 2) people who have had multiple injury events over time.

Methods Individual face-to-face interviews were undertaken with healthcare providers (n=13), and people who had incurred multiple injury events over the previous twelve months (n=16). Thematic analysis was carried out using the Framework method.

Results A key topic of interest was the perceived role of healthcare providers in subsequent injury prevention. Both healthcare providers, and participants who had experienced injuries, provided insights into potential opportunities for subsequent injury prevention. These ranged from micro individual level actions such as getting ‘buy-in’ from patients, actions aimed at improving social connectedness and advocacy for macro policy level interventions.

Conclusion Findings are important to inform the development of practical ‘real-world’ interventions to prevent subsequent injuries among people seeing healthcare providers following injury.

Learning Outcomes A substantial proportion of people presenting to healthcare providers following injury have subsequent injuries. This research explores potential untapped injury prevention opportunities with the aim of contributing to reducing the considerable injury burden.