INCORPORATING DATA INTO GLOBAL BURDEN OF DISEASE METHOD TO ASSESS NATIONAL BURDEN OF ROAD TRAFFIC INJURIES IN THAILAND

V Ditsuwan, JL Veerman, MB Bertram, T Vos. 1Faculty of Health and Sports Science, Thaksin University, Phatthalung, Thailand; 2The University of Queensland, School of Population Health, Brisbane, Australia

Background Conducting a burden of road traffic injuries (RTIs) in developing countries is difficult due to the paucity and inconsistency of data.
Objectives  This study aims to assess the burden of RTI in Thailand with a focus on long-term disability and examine the effect of replacing Global Burden of Disease (GBD) assumptions with data from Thailand.

Methods  We used methods developed for the GBD to quantify burden of RTIs. We used two alternative sets of data on the proportions of injuries that go on to suffer long-term disability and the weights thereof: the diagnosis-specific values used in original GBD and aggregate values based on new data derived from a study in Thailand (Thai model). To evaluate changes over time, we also calculated burden of RTIs in 1999 using the method and assumptions that were used in 2004.

Results  The total loss of disability-adjusted life years due to RTIs was 673 000 (95% uncertainty interval [UI]: 546 000–881 000). Mortality contributed 88% of this burden. The use of local data, in Thai model, led to a significantly higher estimate of the burden of long-term disability due to RTIs (74 000 DALYs [95% UI 55 400–88 500] vs 43 000 [42 700–43 600]) compared to using the GBD assumptions. However, this difference constitutes only a small proportion of the total burden.

Conclusions  The burden of RTI in 2004 remained at the same high level as in 1999. The use of local data on the long-term consequences of RTI enabled a more valid estimate of this burden and its uncertainty.