

866 FIT TO DRIVE? POLICY AND PRACTICE IMPLICATIONS OF ASSESSING FITNESS TO DRIVE IN THE UK

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Background Cognitive impairment caused by illness or injury, or neurodegeneration associated with ageing is likely to increase with an ageing population. There is a need for clear policy and practice in order to support the safe mobility of people with cognitive impairment.

Methods A narrative review of research evidence and current policy in the UK was conducted. This covered evidence on the road safety risk associated with cognitive impairments, research on screening tools and their effectiveness, and clinician's knowledge of guidelines and their confidence in decision making.

Results The assessment of fitness to drive is problematic because there is little good evidence of the safety risk of those who drive with cognitive impairment partly because drivers self-regulate, taking themselves out of the system before they are at risk. Research evidence suggests that universal screening at a given age would not be cost effective because age is not a functional criterion given the variation of cognitive impairment caused by age related diseases in older people. Neuropsychological test batteries for other illnesses and injuries affecting the brain have shown inconsistent results and so their validity for clinical decision making remains questionable. There is a lack of confidence among clinicians about how to advise patients about fitness to drive and few specialist driving assessment centres for them to refer patients to.

Conclusions There needs to be more evidence on the safety risk of people driving with injury or illness affecting the brain. A standard care pathway would help to manage the safe mobility of people with cognitive impairment. A protocol for general practitioners and other health professionals is needed to guide how to discuss fitness to drive with their patients. Research is needed to develop a clinically viable desk based assessment of driving safety. Given the growing number of older drivers there is a need for more specialist driving assessment centres.

867 PROFILE OF ROAD TRAFFIC INJURIES IN BANGLADESH: IMPLICATION FOR FUTURE INTERVENTION IN LOW-INCOME COUNTRIES

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Background Approximately 1.25 million people died on the world's roads, and another 20 to 50 million sustain nonfatal injuries in 2013. In Bangladesh, the deaths from road traffic crashes are notably high (13.6 per 100,000 population) like other low-income countries. Road traffic injuries has not yet been addressed comprehensively in Bangladesh despite of high burden. In this study, we aimed to explore the magnitude and determinants of road traffic injuries in Bangladesh.

Methods A community-based active surveillance system covering around 150,000 population was developed in three unions (lowest administrative infrastructure) of a sub-district of Sirajgonj district, Bangladesh in 2005. Every year, four rounds of data are being collected from the each and every households of the

surveillance areas. July 2009 to June 2010 data from this surveillance system was analysed for this study.

Results It was revealed that rate of road traffic injuries were significantly higher among adults than children (589.72 and 210.85 per 100,000 population per year respectively). Rate of injuries among male were significantly higher than female (406.92 and 94.29 per 100,000 population per year respectively). Bicyclist (21%), motorcyclist (17%), passenger of rickshaw/van (17%) and pedestrians (14.9%) were the most vulnerable road users. Rate of permanent disability due to road traffic injury among adults and children are 4.13 and 1.27 per 100,000 population per year respectively. More than half (50.1%) of the victims were on their way to work place. 40% of the victims lost their mobility due to injury. It was found that almost half (44.8%) of the victims were the main income earner of their families.

Conclusion As the socioeconomic structure are almost similar in all low-income countries, so the result of the study could be an insight to the policy makers of low-income countries including Bangladesh to develop realistic and effective intervention strategies to combat the issue.

868 THE DISPROPORTIONATE RISK OF YOUNG DRIVERS FOR ROAD TRAFFIC INJURY AND FATALITY IN QATAR: EVIDENCE FOR POLICY

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Background Road traffic injury (RTI) rates have been decreasing¹ but are still the leading cause of death in Qatar.^{2,3} Young drivers (age less than 30) were identified as high-risk for RTI^{4,5} in Qatar but a systematic review of evidence is needed.

Methods A systematic literature review was conducted on 7 electronic peer-reviewed databases between 2003 – 2015 using pre-defined search terms in truncation and using Boolean terms, documents from international organisations and grey literature. Retrieved articles were screened using a set of inclusion/exclusion criteria. Data was extracted and secondary analysis done for evidence on the risk of young drivers for RTIs and RTI fatalities.

Results 21 articles met inclusion criteria; 12 retrospective observational descriptive studies, 2 grey literature papers (secondary analysis of data and systematic literature review), 1 cross-sectional study, 1 descriptive study, 1 regression analysis for prediction of RTIs, 1 survey, 1 information note by the World Bank, 1 retrospective literature review and 1 re-meta-analysis paper. 15 papers focused on Qatar solely and 6 compared its data with other countries. There was consistent evidence that young male drivers were more likely to: 1.) use a mobile phone while driving 2.) have more traffic violations than females and older drivers 3.) be involved in a four-wheel drive crash, 4.) avail of ambulance, emergency department or trauma services for RTI 5.) sustain severe injury and death on ejection from a vehicle and be involved in all forms of motor vehicle crashes. The relative risk for road mortality of this group was 10 times higher than the general population.

Conclusions Young drivers in Qatar are at a disproportionate risk for risky driving behaviour, traffic violations, involvement in 4WD crashes, ejection in a crash, severe RTI and mortality. A multi-disciplinary strategy, composed of proven interventions, to reduce this health burden must be implemented as a public health priority.