Abstracts

P4.016 EXPERIENCE USING REDCAP IN INJURY PREVENTION RESEARCH, NEPAL

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Context Nepal Injury Research Centre (NIRC) is dedicated to injury-related studies in Nepal. One of the key objectives of NIRC is to conduct standardized research additional to building the capacity of local researchers in adopting a robust Electronic Data Capture (EDC) system.

Process A NIRC data manager was appointed and trained by a REDCap expert from the University of Bristol, UK who then supported implementation of the system. Local data collectors were trained to use the REDCap mobile application allowing them to collect data offline and synchronize the collected data to the server when a good internet connection was available. We surveyed 24 data collectors involved in NIRC studies to gather their feedback.

Analysis Data collectors were largely positive regarding REDCap as a tool in comparison with other methods and reported the interface to be user-friendly. Data collected could be monitored remotely which helped in maintaining data quality and preparing data for analysis. It allowed sharing of data collection tools within different projects, reducing duplication of effort. However, the main reported challenge was adapting to the periodic updates in the REDCap system.

Outcomes REDCap was used successfully to capture data electronically across five studies. The few issues encountered were mitigated using available system functionalities. An in-country server was established, with potential for NIRC to offer EDC services to other researchers in Nepal.

Learning Outcomes Using collaborative approach to reflect on opportunities and challenges of using EDC is crucial to strengthen and expand local ownership of research tools and data.

P4.017 QUEENSLAND AGRICULTURE, FORESTRY AND FISHING WORK HEALTH AND SAFETY PROSECUTIONS: REPERCUSSIONS

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Context Agriculture, forestry and fishing industries are among the most dangerous industries in which to work, in Australia and internationally. Australia and its states & territories have robust work health and safety regulation, enforcement and prosecution systems outlined via Work Health and Safety (WHS) Acts (and Regulations), in Queensland the new regulations came into effect in 2011. The acts require employers to provide a safe place of work, to protect workers (via procedures and other mechanisms) and to train workers in matters relating to WHS.

Process In Queensland, details of WHS and electrical safety law breaches, against which a prosecution and conviction have occurred, are made publicly available.

Analysis A review of the agriculture, forestry and fishing prosecutions in this public registry was performed focused on incident type, industry and outcomes. Suggestions for system-related improvements are outlined.

Outcomes Since 2014 (at 27 February 2020), 33 prosecutions have been successfully brought against defendants of which a third were due to a death. Penalty costs ranged from $5k to $400k. The common injuries from the incidents included amputation, fractures and crush injuries. Prevention options will be discussed.

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P5.001 INJURY PATTERNS OF WHEELED RECREATIONAL VEHICLES IN THE TRAFFIC ENVIRONMENT

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Background Wheeled recreational vehicles (WRV) are becoming a popular transportation choice among younger commuters. While users of WRV such as skateboards, scooters, and roller-blades are legally regarded as pedestrians in some jurisdictions, injuries occurring due to the use of these devices are not often classified as pedestrian injuries unless a motor vehicle is involved.

Methods We seek to describe non-vehicle WRV accidental injury when used in public roads and footpaths. We retrospectively reviewed data from the Queensland Injury Surveillance Unit (QISU) for calendar years 2008–2017.

Results There was a total of 1922 non-intentional WRV single events occurring in the traffic environment treated in emergency departments. The mean age of the injured was 13 (SD = 7) with 99% of the events been a male. Males (73%) were most commonly injured and the trauma most frequently occurred on weekdays (60%) compare to weekends (40%). Upper extremity (54%) and the head (16%) was the most common injured body part while fractures (40%) and sprain-strains (21%) were the most common type of injury. Brain injury was found to be an important risk factor for hospital admissions.
Conclusions Head and brain injuries due to WRV non-vehicle injury could be an important contributor to considerable health care costs and long-term disabilities for young Queenslanders.

Learning Outcomes The findings support a revision of Queensland legislation currently not requiring WRV helmet use in the traffic environment.

Background Poland belongs to countries with one of the highest numbers of traffic victims in the European Union. Vulnerable road users are at high risk of being injured, among them cyclists, moped riders and motorcyclists. All three groups constitute over 20% of road fatalities in Poland.

Methods In Poland studies on helmet use among cyclists, moped riders and motorcyclists have been carried out since 2013. An external observation method is used on different road categories with specially developed mobile application. In the most recent study total data on 997 motorcyclists, 812 moped riders and 4512 cyclists were analysed.

Results The helmets were used by 99% of motorcyclists (100% riders, 99% passengers), 99% of moped riders (99% riders, 94% passengers) and only 14% of cyclists (13% riders, 94% passengers – mainly children). The distribution of wearing helmets among cyclists was as follows: children and youth <17 years (26% wearing rate), 18–24 years (14%), 25–60 years (13%), >60 years (9%); men (17%), women (7%).

Conclusion The results of the conducted study indicate that in comparison to previous year, the percentage of motorcyclists who wear helmets remains on the same high level, among moped riders 3% increase in the helmet wearing rate, among cyclists 2% increase. Wearing helmets by cyclist is not mandatory by law in Poland, opposed to motorcyclists and moped riders.

Learning Outcomes Road safety improvement measures, including educational and preventive initiatives, should be addressed to all age groups of cyclists, especially to older ones as they use helmets least frequently.

Background In Poland road safety education RSE is included in school curriculum. In 2018–2019 in Masovia province an observation study of students in the vicinity of primary schools was conducted, where children feel safe and comfortable.

Methods The study was carried out in 14 locations with different engineering solutions. The study was conducted in the morning. A dedicated app was used. Six types of children’s behaviour were analysed: walking/riding along the road, crossing/riding across the road, using public/private transport. The data included many other variables and was analysed using a statistical description of the occurrence of frequencies. The basis for the percentage was not children but observations of their behaviour, in total 3380 children’s behaviours were analysed.

Results The main issues that should be considered in RSE in Poland as indicated by the study include: as a pedestrian not looking around (62%) and not stopping (51%) before crossing the road, talking to others when crossing (20%); as a cyclist – riding a bike on zebra (54%), not signalling manoeuvres (98%), not wearing helmets (89%); as a passenger – getting off directly onto the street (13%) or obstacle (20%).

Conclusion RSE is a multi-disciplinary issue. The presented results show that we should think more about the way of implementing RSE and search for new solutions because the current ones are not effective enough.

Learning Outcomes A success of RSE depends on the cooperation of many communities (parents, schools, police etc.), equal approach to this issue and combination of actions.

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