numbers are punched retrospective from 2010. Information on alcohol and drugs was found in the free text variable. Definition of Recidivism: In some studies more than two injury episodes. The present study includes five or more. Aim of study is identification of target groups and tailoring community interventions.

Results Out of 27090 records on 18667 persons, we identified

Results Out of 27090 records on 18667 persons, we identified 360 treated for five or more injury episodes. These 360 were treated in 2321 different injury treatment episodes. The range of episodes was five to 41. Overrepresented groups were: 1) females age 19–29, treated for self-harm, alcohol/drugs/narcotics involved in most cases 2) males age group 19–29, treated for interpersonal violence, also with stories including alcohol and drugs 3) elderlies falling, 4) adolescent and young men in high energy activities. Conclusions A continuous hospital based injury registry can iden-

Conclusions A continuous hospital based injury registry can identify characteristics and distribution of injury recidivists in a population.

315

RECENT TRENDS OF ROAD TRAFFIC FATALITIES IN CHINA: COMPARING NATIONAL AND SUBNATIONAL DATA SOURCES

Qingfeng Li, Huan He, Hailun Liang, David M Bishai, Adnan A Hyder. *Johns Hopkins International Injury Research Unit, Department of International Health, Johns Hopkins Bloomberg School of Public Health*

10.1136/injuryprev-2016-042156.315

Background This study aims to better understand public data sources and evaluate recent trends in road traffic fatalities (RTF) in China.

Methods We systematically reviewed and compared multiple national sources of RTF data. These included: population-based reports from the Ministry of Public Security (MPS), sample-based estimates from the vital registration system of Ministry of Health (MOH) and the Disease Surveillance Points System (DSP), as well as model-based estimates from the World Health Organisation (WHO) and the Global Burden of Disease Study (GBD). A comprehensive review of publications focused on subnational RTF was also conducted. We based our assessment of the recent trend of RTF on using fixed effects and random effects longitudinal models.

Results Despite the discrepancies in estimates, all national data sources indicated that RTF had been increasing prior to 2005. Since then, the MPS reports indicate a declining trend, DSP estimates showed a flat trajectory while estimates from MOH, GBD and WHO continue to show increases in RTF. Data from local death registration systems are largely consistent with MPS reports.

Conclusions Reflecting a non-representative sample, MOH data were used in generating model-based estimates by the WHO and GBD; consequently, the trends from these sources are open to.

MPS and local independent jurisdictional health data indicate that RTF have been declining since 2005. This may be consistent with recent interventions to reduce RTF. China's experience may be of great value for other developing countries though RTF still impose a tremendous health burden in the country.

316

THE ROLE OF SELEKTION BIAS IN A CASE-CROSSOVER STUDY ON OCCUPATIONAL INJURIES

¹<u>Anna H Oesterlund</u>, ²Flemming Lander, ³Søren Rytter and ¹Jens M Lauritsen. ¹*Accident Analysis Group, Orthopaedic Department, Odense University Hospital and Institute of Clinical Medicine, University of Southern Denmark, Denmark; ²Department of Occupational and Environmental Medicine, Odense University Hospital, Denmark; ³Department of Orthopaedics, University Clinic for Hand, Hip, and Knee Surgery, Regional Hospital West Jutland, Denmark*

10.1136/injuryprev-2016-042156.316

Background The case-crossover studies in injury epidemiology research are gaining ground. The method compares transient exposure during intervals when an outcome occurs, to exposures during intervals without outcome for the same individual. Although non-responding is a concern in all interviewed based studies, previous studies have not involved and discussed the importance of selection as a source of bias that could influence the overall reliability of the risk outcomes. Due to the unique Danish identification number it is possible to examine data between responders and non-responders in our case-crossover study concerning injuries, industry, sex and age.

Methods The population base for the study was derived from two public Hospital Emergency Departments in Denmark. All contacts due to occupational injuries during 2013 were included. An occupational injury was based on asking the patient whether the injury occurred during paid work. All such injured patients were asked to participate. Those confirming participation (responders) were compared with those not responding or denying (non-responders).

Results Among all 4002 injured, 1693 were responders (42%). The overall tendency of sex, age and distribution of injury were the same between both responders and non-responders except for "other types of injuries". When dividing into minor and major injuries there were no difference between responders and non-responders. Further investigation of potential bias for subgroups or industries awaits further analysis.

Conclusions So far, our results indicate no serious selection bias in sex, age and injury distribution in spite of low participation rate, and thus, provide good possibility for broader generalisation of the risk outcomes. This indicates a strengthening of the overall reliability of the risk outcomes from our and previous case-crossover studies.

317

NON-FATAL INJURIES UNTREATED AT HOSPITALS IN HUNAN, CHINA: IMPLICATIONS FOR HOSPITAL-BASED SURVEILLANCE SYSTEMS

¹Yue Wu, ²Wei Zhang, ²Lin Zhang, ³David Schwebel, ²Peishan Ning, ²Xunjie Cheng, ⁴Xin Deng, ²Li Li, ²Jing Deng, ^{1#}Guoqing Hu. ¹Department of Occupational and Environmental Health, School of Public Health, Central South University; ²Department of Epidemiology and Health Statistics, School of Public Health, Central South University; ³Department of Psychology, University of Alabama at Birmingham; ⁴Xiangya Hospital, Central South University

10.1136/injuryprev-2016-042156.317

Background Disability adjusted life year (DALY) is among the most commonly-used indicators of disease/injury burden. It relies on accurate data concerning non-fatal conditions, which may be collected through hospital-based surveillance or population-based