

Occupational Health” carries out active work directed to working conditions optimisation, protecting workers’ health, and decrease working losses dealing with occupational and work related diseases, invalidity and premature mortality, that will result in creation of the best conditions to increase the population and working longevity. The plan is focused to ensure full coverage of all workers, including those employed in the informal sector, small and medium enterprises and agriculture, as well as migrant workers, etc. in the field of occupational health.

Conclusions The concept of implementation of state policy aimed at Russian workers’ health maintaining for the period up to 2020 and future includes the national action plan on workers’ health and contains main principles and measures directed occupational health and safety ensuring.

92 RELIGIOUS AND CULTURAL FACTORS: BARRIERS TO DEVELOPING INTERVENTIONS AND SAFETY COUNTERMEASURES

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Background Most of the world’s people live in developing countries yet there has been limited application of scientific methods of injury control in many of them. Traditional cultural and religious values can act as a barrier to health-promoting and injury prevention behaviours, in general and especially in relation to road safety, and may also contribute to risk-taking behaviours. Such beliefs, including fatalism and superstition, can present significant challenges for health advocates who aim to change behaviour in order to avert road crashes and diminish their consequences.

Methods Qualitative research was undertaken in Islamabad, Rawalpindi and Lahore in Pakistan with a range of drivers, religious orators, police and policy makers to explore cultural and religious beliefs and their association with risky road use, and to understand how they might affect development of road safety interventions.

Results Overall, findings indicated a variety of strongly-held religious and cultural beliefs (such as fatalism and superstition), many that were non-scientific in nature, about road crash causation and ways in which people protect against harm on the road. The findings highlight a range of issues, including the identification of aspects of beliefs that have complex social implications when designing safety intervention strategies. The pervasive nature of such beliefs can affect road user behaviour by reinforcing the presumption that the individual has no part to play in safety, thereby supporting continued risk taking behaviours.

Conclusions The mechanisms of culture and religion should be taken into account when trying to change attitudes and behaviours relating to public health. For effective road safety interventions in developing countries, it is important to understand the prevailing cultural and social beliefs towards road crashes which influence behaviour and thereby preventive measures and responses to interventions adapted from developed countries.

Falls

Parallel Mon 1.5

93 OLDER ADULT FALL PREVENTION—GETTING TO OUTCOME MEASURES IN THE CLINICAL SETTING

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Background Worldwide falls are a threat to adults 65 and older. In the United States, one in three older adults will fall annually costing the health care system \$34 billion. With U.S. fall rates on the rise, and 10,000 older adults turning 65 each day, falls are a major health threat.

Description of the problem Falls can be prevented by addressing modifiable risk factors (e.g., medication usage, vitamin D deficiency, vestibular disorders, vision deficits) with effective clinical interventions; however, few older adults talk to their health care provider about falls. Therefore, CDC launched the STEADI (Stopping Elderly Accidents, Deaths, and Injuries) initiative. STEADI uses established clinical guidelines and evidence-based interventions to empower primary care providers to screen, assess, and treat elderly patients’ modifiable fall risk factors. This session describes the STEADI implementation process, key implementation steps, and subsequent health outcomes.

Results STEADI was implemented in multiple health systems. Critical in implementing STEADI was the proactive leadership of clinical champions embedded within the clinical practice; the identification of relevant quality and financial drivers; the modification of electronic health record tools; and the adoption of a STEADI clinical workflow for patients, staff, and providers that aligned with existing workflows. Preliminary measures in one setting indicate providers have screened upwards of 70 per cent of their older adult patients, and hospitalizations and emergency department visits for fall-related injuries are declining.

Conclusion Fall interventions offered in clinical settings can prevent falls among older adults, thereby improving their health, independence, and quality of life. These interventions can reduce medical costs associated with fall injuries, including hospitalisation costs for traumatic brain injuries and hip fractures. Using these data, CDC is disseminating the adoption of STEADI nationwide.

94 FALLS IN MIDDLE-AGED ADULTS PRESENTING TO EMERGENCY DEPARTMENTS IN QUEENSLAND, AUSTRALIA: RISK FACTOR EXPLORATION

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Background Falls represent a significant public health issue, with previous studies focusing on older adults. With an ageing population and corresponding escalation of health expenditure, the need to target the current and future health of middle-aged population is evident. However, little is known about the characteristics of fall risk factors in middle-aged populations. This study

examine age and gender differences in fall risk factors among middle-aged adults who presented to an emergency department (ED) due to a fall.

Methods A sample of patients aged 40–64 years who presented to one of the three chosen public hospital EDs due to an unintentional fall were approached for a survey between July 2013 and Mar 2014. Patients were eligible when a fall event was indicated in the Presenting Complaint Code or Presenting Problem text field in the Emergency Department Information System (EDIS) database. Information obtained from the survey included demographic data and other health information which was collected as potentially important predictors of falls. Potential fall predictors include a history of falls, having co-morbid conditions and medications, feeling of losing balance, hazardous drinking patterns, poor physical functioning, insufficient exercises, and being underweight or obese.

Results There were 305 participants presenting to one of the three EDs in South-East Queensland during the period. The majority were females (59.3%) and the mean age of the sample was 54 years (standard deviation 7.2). Age and gender were associated with different fall risk factors among the middle-aged adults. In the multivariable analysis, increasing age was associated with poor physical functioning (odds ratio (OR) 1.05, 95% CI: 1.003–1.09). Women were two times more likely than men to report a fall in the past year (OR 2.10, 95% CI: 1.24–3.58) and occasionally/often report feeling of losing balance (OR 2.12, 95% CI: 1.17–3.84). Conversely, women were 65% less likely than men to consume three alcoholic drinks or more per day (OR 0.35, 95% CI: 0.20–0.61). Increasing age was significantly associated with increasing number of fall risk factors in the univariate analysis. However, no association was found between age and number of risk factors in the multivariable analysis.

Conclusions This is the first study to explore fall risk factors among middle-aged adults presenting to ED using self-reported data. Our findings present valuable information that is critical for informing evidence-based strategies for falls prevention policy and initiatives which aim to reduce the burden of disease in this population in later life.

95 DIFFERENTIAL TRENDS IN FALL-RELATED FRACTURE AND NON-FRACTURE HOSPITALISATIONS FOR PEOPLE WITH DEMENTIA

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Background Injury, predominantly fall-related injury, is the most common reason for hospitalisation for people with dementia. Trends in fall-related injury hospitalisations for older people generally have changed over the past decade. It is unknown what impact dementia has on these trends.

Methods Fall-related injury hospitalisations during 1 January 2003 to 31 December 2012 for people aged 65 and older admitted to a hospital in New South Wales, Australia were identified. Hospitalisation records were probabilistically linked to provide comprehensive person-based records. Rates were age-standardised to the 2001 Australian Standard population. Trends over time were analysed using negative binomial regression analysis

Results There were 52,502 hospitalisations for people with dementia and 203,330 for people without dementia. People with dementia were more likely to be admitted for a hip fracture

(ARR 1.76; 95% CI: 1.73–1.79, $p < 0.0001$) and traumatic brain injury (TBI) (ARR 1.08; 95% CI: 1.03–1.14, $p = 0.0027$), but less likely to be admitted for other (non-hip) fractures (ARR 0.72; 95% CI: 0.71–0.73, $p < 0.0001$) or non-fracture injuries (ARR 0.96; 95% CI: 0.95–0.97, $p < 0.001$). Hospitalisation rates for people with dementia decreased by 4.2% (95% CI: –5.6–2.7, $p < 0.001$) per annum for hip fractures and 1.6% (95% CI: 2.3–0.8, $p < 0.001$) per annum for other fractures, but increased by 7.5% (95% CI: 4.2–10.8%, $p < 0.0001$) for TBI and 2.0% (95% CI: 0.1–4.0, $p = 0.0388$) for other non-fracture injuries. In contrast, hip fracture hospitalisation rates remained constant and other fracture and non-fracture injuries increased for people without dementia.

Conclusions Fall-related fracture rates, notably hip fractures, have decreased over the past ten years in people with dementia, whilst there has not been a corresponding decrease in people without dementia. Rates for non-fracture injuries including TBI have increased in both people with and without dementia. The reasons for these differences are not clear.

96 HIP FRACTURE AND THE INFLUENCE OF DEMENTIA ON HEALTH OUTCOMES AND ACCESS TO REHABILITATION FOR OLDER PEOPLE

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Background Recovery following hip fracture can be aided by access to, and participation in, rehabilitation-related activities. However, access to rehabilitation can differ for individuals with and without dementia. This study compares the characteristics and health outcomes of individuals with and without dementia following a hip fracture; and their access to and outcomes following hospital-based rehabilitation.

Methods An examination of hip fractures involving individuals aged 65 years and older with and without dementia using linked hospital separation, rehabilitation and mortality records during 1 January 2009 to 31 December 2013 in New South Wales, Australia. Comorbidities were identified using a 1-year lookback period and a modified Charlson Comorbidity Index. Logistic regression was used to examine the association of a hospital-based rehabilitation and individual characteristics.

Results There were 8,785 individuals with and 23,520 individuals without dementia who sustained a hip fracture. Individuals with dementia had a higher age-adjusted 30-day mortality rate compared to individuals without dementia (11.7% vs 5.7%), a lower proportion of age-adjusted 28-day re-admission (17.3% vs 24.4%), and a longer age-adjusted mean length of stay (22.2 vs 21.9 days). Compared to individuals without dementia, individuals with dementia had 4.3 times (95% CI: 3.90–4.78) lower odds of receiving hospital-based rehabilitation. However, when they did receive rehabilitation they achieved significant motor functional gain at discharge compared to admission assessed using the Functional Independence Measure ($p < 0.0001$), but to a lesser extent than individuals without dementia.

Conclusions Within a population-based cohort, older individuals with dementia can benefit from access to, and participation in, rehabilitation activities following a hip fracture. This will ensure that they have the best chance of returning to their pre-fracture physical function and mobility.