1B.004 CANADIAN DROWNING PREVENTION COALITION – INTELLECTUAL CAPACITY BUILDING

Stephen Beerman*. *University of British Columbia, Dept of Family Practice, Nanaimo, Canada*

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The WHO Global Report on Drowning recommended ‘all countries should aim to develop a national water safety plan’. The Canadian Drowning Prevention Coalition (CDPC) was formed to lead the facilitation of the Canadian Drowning Prevention Plan.

The first iteration Canadian Drowning Prevention Plan was in 2017. The plan takes an evidence based, public health approach to drowning prevention and inequality reduction. This Plan is formally updated every 6 months.

The Plan has 8 Key Focus Targets selected by a broad community input process. Each Key Focus Target has an inter-professional and multi-sectoral Technical Working Group. The Technical Working Groups have Chairpersons who sit on the CDPC Steering Committee. The Steering Committee provides leadership for Plan development.

The CDPC adds to the intellectual capital and human resource skill set, for the drowning prevention effort. The CDPC is a registered charity funded by participant organizations, donations and projects.

The Plan includes Canadian drowning data. This is an inclusive report for fatal drowning. The Plan is beginning to include non fatal drowning data. Each Technical Working Group reports on community based action, effective policy/legislation and further research. The Plan recommends priority interventions.

The CDPC and Plan aims to add value for the drowning prevention effort. Participant relationship management focuses on a unifying vision, to reduce drowning in Canada.

The Canadian Drowning Prevention Plan is an advocacy tool and guideline for engagement and action. The Plan is an electronic document available for stakeholder communications and distribution.

1C – Falls, March 22, 2021

1C.001 A SYSTEMATIC REVIEW AND META-ANALYSIS OF HOSPITAL FALLS IN PEOPLE WITH STROKE

^{1,2}Rebecca Sullivan*, ^{2,4}Katherine Harding, ³Ian Skinner, ¹Bronwyn Hemsley. ¹University of Technology Sydney; ²Eastern Health, Box Hill, Australia; ³Charles Sturt University; ⁴La Trobe University

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Background People with communication disability following stroke have a significantly increased risk of patient safety incidents in hospital. This review aimed to identify any association between communication disability following stroke and falls in hospital, and to understand more about the circumstances surrounding the falls to inform future research and identify clinical implications.

Method In July 2019, a systematic review of scientific literature on the hospital falls of people with stroke was conducted. Both descriptive analysis and meta-analysis were completed.

Results From 5036 records screened by title and abstract, 162 full text articles were retrieved. 15 studies met inclusion criteria. Falls commonly occurred in the bedroom, during transfers. Meta analysis (n=11) showed no significant association between falls and communication disability. Overall, diagnosis and severity of communication disability were poorly reported in the studies.

Conclusion Research to date reflect no association between communication disability and falls. However, studies lack sufficient data on the diagnostic profile and severity of communication disability for participants with stroke. There is little attention to the environmental factors surrounding falls. Future falls research for this group should include information on diagnosis and measures of severity of communication disability and greater attention to the circumstances leading up to, occurring during, and following the falls.

Learning Outcomes To understand the evidence on any association between communication disability and falls in hospital patients with stroke.

To identify any clinical implications for improving the safety for hospital patients with stroke and communication disability.

1C.002 ASSOCIATIONS BETWEEN MORTALITY, FALLS AND HEAD IMPACT IN NURSING HOME RESIDENTS

¹Yijian Yang*, ²Vicki Komisar, ²Helen Chong, ²Stephen Robinovitch. ¹Chinese University of Hong Kong, Hong Kong, Hong Kong; ²Simon Fraser University, Burnaby, Canada

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Background Falls are the leading cause of injury-related death in older adults, while little is known about the frequency and severity of falls on mortality in nursing homes. We examined how rates of falls and head impact were associated with death in two nursing homes.

Methods Between 2007 and 2016, we followed 194 residents (mean age: 82±9) whose falls were documented in incident reports. We captured videos of falls in common areas. We determined the occurrence of head impact through video analysis and nursing reports. We used survival analysis to examine associations between mortality, falls and head impact.

Results Among all participants, the median rate of falls was 2.5 falls/year. 60% of participants were observed on video to have at least one head impact, and the median rate of head impacts was 0.4 times/year. 117 residents died during the study, after an average follow-up period of 3.6±1.7 years. In the multivariate survival analysis, an increase of one head impact per year was associated with a hazard ratio (HR) of 1.32 (95% CI 1.14–1.53). However, rate of falls was not associated with mortality (1.003, 0.97–1.04). Men had higher mortality than women (1.89, 1.29–2.76). Age was not associated with death.

Conclusion Mortality among older adults in nursing homes is associated more strongly with the occurrence of head impact during falls, than with the frequency of falls.

Learning Outcomes Our results highlight the need to focus on strategies for preventing and reducing the consequences of falls that lead to head impact.