1F – Emergency Services, March 22, 2021

1F.001 BEHAVIOURAL SCIENCE – IMPROVING FIREFIGHTER PARTICIPATION IN SAFETY VISITS

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Context Fire and Rescue New South Wales (FRNSW) mission is to be 'prepared for anything – to protect the irreplaceable'. Prevention and Education has been identified as a key organisational capability. FRNSW provides services across Prevention and Education, Fire, Rescue, Hazmat, Environmental Protection, Natural Disaster and Humanitarian Relief, Medical Response and Counter Terrorism to New South Wales 7.5 Million population.

Process Partnering with The Behavioural Architects, FRNSW embarked on a three-month project to understand the causes of low participation rates in its Home Fire Safety Checks program and what could be done to change behaviour. The Behavioural Architects travelled around NSW, visiting stations, attending home fire safety checks, observing the behaviour of firefighters and interviewing commanders to better understand what was preventing engagement at all levels of the workforce.

Analysis Using the insights and recommendations from the project, FRNSW completely relaunched the program at the start of the 2019/20 FY under the new name – Safety Visits. The relaunch of the program saw a total transformation in the way the program was delivered.

Outcomes Since its relaunch, an almost 60% increase in the monthly rate of delivery of the program has occurred from an average of 830 visits per month under the HFSC program, to a monthly delivery rate of over 1400 visits per month under the Safety Visits Program (despite the significant impact of the 2019/20 bushfires).

Learning Outcomes The use of a behavioural science lense can have a significant impact on understanding and overcoming the barriers to implementation of injury prevention programs.

1F.002 PRE-HOSPITAL CARE KNOWLEDGE AMONG FIRST RESPONDERS IN DELHI NATIONAL CAPITAL REGION, INDIA

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Background Despite many improvements, pre-hospital care is known to be inconsistent, unreliable or deficient in India that causes high mortality and morbidity in accident victims. Bystanders hesitate to provide first-aid due to multiple reasons. Bystanders and first aiders are not adequately trained to handle all aspects of trauma including extrication, evacuation, transfer, cardiopulmonary resuscitation, management of bleeding, and protection of the spine. Evidence says that improper pre-hospital care is the leading cause of Spinal Cord injury in developing countries as compared to the developed ones. The current study was conducted to gauge the knowledge of first-aid among first responders in Delhi NCR.

Materials and Methods Two separate surveys with closed ended questions were formulated for the general public and first aiders in English and Hindi. A sample of 511 general public respondents with no medical training, and first aiders (108 ambulance and 201 police personnel) completed the survey between February 2019-April 2019. Data were analyzed descriptively and comparisons were made across demographic variables for the general public. For first aiders, comparisons were made between ambulance and police personnel across all sub-domains.

Results The average scores for all general public respondents were below 40% in all domains. Differences across age and educational qualification were small, yet significant. Ambulance personnel scored better than police personnel. But overall, the scores are poor for all first aiders.

Conclusion Pre-hospital trauma care needs to be strengthened through improving knowledge and providing training to both the groups for essential life saving skills within the 'golden hour'.

1F.003 INNOVATIVE FIRE SAFETY PARTNERSHIPS

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Background In April, 2018, one of the UL Xplorlabs modules, Fire Forensics was adopted as a key resource in Cobb County, Georgia middle schools. UL Education and Outreach led a one-day workshop for middle-school teachers and fire fighters. Since then, we've led five workshops including teachers from twenty-five middle schools and seventy-five fire fighters and investigators. After the workshops, teachers lead the module with their students and the trained fire service personnel come into the classroom on lab days when students have open flames and on the days that the students solve the fire case in the module.

Methods We are currently conducting a mixed-methods research to understand the program outcomes for the students, teachers, and fire service. Data collection includes surveys and long narrative interviews of a random sample of participants. The goal of this study is to understand the outcomes for teachers, students, and the fire service after the workshops as this is becoming a model for working in fire safety education.

Results/Conclusions As of the submission deadline, the results and conclusions are not yet defined.

1F.004 COMMUNITY PARAMEDICINE: A NOVEL APPROACH TO PREVENTING EARLY LIFE VIOLENCE EXPOSURES

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10.1136/injuryprev-2021-safety.22

Context Community paramedicine programs (i.e., non-emergency preventive care by emergency medical services personnel under the direction of a physician) offer a novel approach to improve the wellbeing of families with a heightened risk of adverse childhood experiences (ACEs). Community paramedics

provide acute medical care and long-term support services that address the underlying causes of ACEs.

Program To participate, women must have characteristics that increase the likelihood of maternal or infant morbidity and mortality. Throughout pregnancy and the 16 weeks following birth, community paramedics make regular in-home visits to provide clinical care directed by the physician.

Community paramedics also provide services to meet the complex needs of mothers and infants. Nearly all mothers receive transportation assistance, abusive head trauma prevention education, home safety inspections, and guidance on coping, among others. Community paramedics often provide referrals to partner services, such as mental health and substance abuse services or doula services, and some unconventional services, such as connecting women with free or low-cost infant supplies. (e.g., diapers, formula) or assistance finding employment.

Evaluation As a new program, we first conducted a process evaluation. We interviewed community stakeholders and mothers, which we analyzed using content analysis.

Both groups are happy with the current program and believe it meets a significant need in the community. Several mothers discussed specific ways the program reduced violence in the home.

Learning Objectives To explain how developers considered the community needs and matched program components to these needs.

To define and summarize several challenges and strengths of the program.

1G – WHS – Impact, March 22, 2021

1G.001 LONG-TERM INJURED WORKER EXPERIENCES AFTER COMPENSATION CESSATION

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Background The Victorian Injured Worker Outcomes Study (VIWOS) was initiated by WorkSafe Victoria in 2016 in collaboration with Monash University. The broad research focus was on understanding the recovery journey both prior to and beyond 130 weeks of income replacement, which is when a worker will cease receiving income compensation unless they can prove permanent incapacity.

Methods As part of VIWOS, the Institute for Safety, Compensation and Recovery Research (ISCRR) carried out a cross-sectional survey comprising 697 injured workers three to five years post-injury. It captured a snapshot of injured worker experiences and outcomes who were on average 1.4 years after cessation of income replacement.

Results The vast majority of workers had attempted to return to work with transient employment common. The best self-reported recovery rates were seen with those who left the compensation scheme due to return to work, and the poorest rates seen with those who were on the scheme longer. Those aged 55+ had the lowest rate of employment. A positive perception of recovery increased the likelihood of a reduced time spent on benefits. A negative perception of recovery was associated with self-perception as permanently unable to work, and others at fault for their workplace injury/illness. Financial

hardship was experienced widely throughout this cohort, regardless of outcome.

Conclusion While many injured workers were seen as successfully recovering from their workplace injury or illness, this study highlighted the fact that many still perceived themselves as struggling, either from their injury or illness, in return to work and/or financially

1G.002 INSIGHTS INTO HOME AND WORKPLACE INJURIES IN NEPAL: A QUALITATIVE STUDY

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10.1136/injuryprev-2021-safety.24

Background In Nepal, there are limited qualitative data that help explain home and workplace injuries. This study explored perceptions of injury risk at home and work with residents and workers of Makwanpur district, Nepal.

Methods Focus groups and interviews with workers from diverse occupations, residents (living in slum, traditional or modern homes), health care providers and local government decision makers were undertaken between May and August 2019. Interviews and discussions were audio-recorded, transcribed verbatim, translated into English and analysed thematically.

Results Nine focus groups and nine interviews were completed. Overarching themes developed in the analysis included: beliefs that injuries were normalised; injury prevention was not a prioritised agenda within homes, communities, the workplace or at government levels; inadequate supervision of children; hazardous home and workplace environments; lack of adherence to safety regulations – both workers and employers; lack of national injury prevention programmes. To increase understanding about injury risks and explore opportunities for injury prevention, respondents stated the need for education and training. Participants believed injury research and safety enforcement could play instrumental roles in planning future injury prevention programmes and when developing measures to mitigate against injuries in different environments.

Conclusions The need for feasible, contextualised home and occupational injury prevention programmes was highlighted, led by local and national governments.

Learning Outcomes Residents and workers understand some risks associated with their living and working environments. Knowledge about how and why home and workplace injuries take place could lead to the development of interventions to reduce premature mortality (SDG 3.4).

1G.003 OPPORTUNITIES TO IMPROVE WORKPLACE ROAD SAFETY: FINDINGS FROM NEW ZEALAND

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Introduction The Sustainable Development Goals strive to halve the number of deaths from road traffic injuries. Driving