

passengers in a light truck (compared to sedan) had higher odds of rear seatbelt use in Bandung, while a belted front passenger was associated with rear seatbelt use in Bangkok.

**Conclusions** Rear seatbelt use was low in Bangkok and even lower in Bandung. Gender, age, and the behavior of other occupants were key predictors of rear seatbelt use.

**Learning Outcomes** Findings highlight the need for rear seatbelt laws in Bandung and improved enforcement of existing rear seatbelt laws in Bangkok.

#### 8A.006 ROAD SAFETY PEER EDUCATION IN BELGRADE – AN EXAMPLE OF GOOD LOCAL PRACTICE

Marija Markovic\*, Nevenka Kovacevic, Svetlana Mladenovic Jankovic, Gordana Tamburkovski, Andjelka Brkovic, Dusanka Matijevic. *Institute of Public Health of Belgrade, Belgrade, Serbia*

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**Background** Road traffic injuries are the leading cause of death and disability at the age of 15–19. Accordingly, the Institute of Public Health of Belgrade introduced peer education on road safety in Belgrade's high schools. Since November 2016, 13 educations with 665 participants have been held. The aim of our research was to evaluate the impact of peer education on road safety knowledge of high school students.

**Methods** A field survey was conducted in the period January–December 2018. The 218 peer education participants completed pre and post-test of knowledge. SPSS -20 was used for statistical analysis. Hi-square test was used to compare the pre and post-tests results.

**Results** The advancement in knowledge was noticeable in our aspects of road traffic behavior, especially the knowledge of the correct emergency services numbers. After the education, the percentage of incorrect answers to this question was almost twice lower - only 7, 4%, ( $p < 0.001$ ,  $\chi^2 = 77,654$ ). Also, the percentage of those not knowing the proper treatment of injured decreased significantly ( $p < 0.001$ ,  $\chi^2 = 33.683$ ).

**Conclusion** Study results have shown the improvement of knowledge among high school students and confirmed the fact that peer education is an effective way of transferring and acquiring knowledge and skills in the field of road safety since the message is transferred through the age-adjusted language, which makes it more accessible to the target population.

**Learning Outcomes** Our study indicates the need to increase the coverage of older adolescents with this type of education.

#### 8A.007 EVALUATING THE IMPACT OF A ROAD SAFETY EDUCATION PROJECT IN MADAGASCAR SCHOOLS

<sup>1</sup>Paolo Perego\*, <sup>1</sup>Federica Biassoni, <sup>2,3</sup>Ana Luisa Silva, <sup>4</sup>Sam Clark, <sup>3</sup>Jesse Randrianarisoa. <sup>1</sup>Traffic Psychology Unit of Research, UCSC, Milan, Italy; <sup>2</sup>CEsA – ISEG Centro de Estudos sobre África e Desenvolvimento, Universidade de Lisboa, Lisbon, Portugal; <sup>3</sup>ONG Lalana, Antananarivo, Madagascar; <sup>4</sup>Transaid, London, UK

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**Context** Road crashes are the leading cause of death for children and young adults aged 5–29 worldwide. Education is an important part of a safe systems approach to improve

road safety. However, evaluating the effectiveness of road safety education projects is challenging. This presentation shares the experience of a quasi-experimental approach to assess the impact of an NGO project implemented in six primary schools in Antananarivo, Madagascar, between 2017–2018.

**Analysis** The project evaluation was conducted in August 2019. Photos showing nine Malagasy road crossing scenarios were presented to students in random order. Students should consider that they were in the perspective of the person who took the photo and wanted to cross the road. They must therefore indicate the areas of the photo where they would look at first, at second and third.

**Outcomes** Data was analyzed for two samples: 250 students from project participant schools and 300 students from other schools in the same city. The number of students able to apply the correct rules for different road crossing scenarios (look first left, second right and left again before crossing) was on average 20% higher in project participant schools.

**Learning Outcomes** The results of this impact assessment, combined with a separate teacher evaluation, will contribute to a revision of the techniques used by the NGO to build teacher capacity and to teach students to correctly apply the rules when facing a real situation. The methodology is a cost-effective tool to evaluate the impact of road safety education in schools.

#### 8A.008 CO-DESIGN: DEVELOPING A DECISIONAL SUPPORT RESOURCE FOR OLDER AUSTRALIAN DRIVERS

Nadine Veerhuis\*, Victoria Traynor, Melanie Randle. *University of Wollongong, Wollongong, Australia*

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**Context** A multiplicity of issues impact older driver decision-making when self-regulating driving behaviour. Ensuring decisions are timely, so that safe driving is maintained, requires engagement with a diverse range of health practitioners. Regardless, decisions are also underpinned by demographics, psycho-social and environmental factors. The complexity of issues impacting driving decisions leads to an equivalent co-design approach to the development of a decisional support resource.

**Process** Systematic reviews and empirical data collection informed discussions for six workshop collaborations engaging end-users, stakeholders and diverse professional groups. Iterative synthesis of outputs to inform core concepts for the content and format of the resource were produced at each workshop, using participatory action research methodology.

**Analysis** Workshop collaborations were conducted with two separate groups each on three occasions over eight months. Older drivers (N=8) comprised the core senior community group. A diverse range of health professionals and academics (N=10) from seven distinct domains and two transport safety specialists comprised the core advisory panel.

**Outcomes** A decisional support resource unique to the Australian context was developed with, and for, older drivers in collaboration with health professionals, academics and transport safety specialists.

**Learning Outcomes** Co-design approaches rarely involve engagement of multiple and diverse groups in the

development of health interventions or resources. Challenges with heterogeneity of tenets, time and resources required are tempered by a realistic, functional, evidenced-based resource which meets the needs of older drivers and their social support networks.

## 8B – Drowning – Program and Campaign, March 25, 2021

### 8B.001 BUSH NIPPERS: FEASIBILITY OF AN INLAND LIFESAVING PILOT PROGRAM FOR VICTORIAN CHILDREN

Grace Strugnell\*, Rhiannon Birch, Trudy Micallef, Kate Simpson, Bernadette Matthews. *Life Saving Victoria, Port Melbourne, Australia*

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**Background** In 2018–19, residents in regional Victoria, Australia were almost twice as likely to drown compared to those in metropolitan Melbourne. ‘Nippers’ programs provide lifesaving and water safety knowledge and skills to children aged 5–14 years in coastal locations. However, a 49% increase in inland waterway drowning compared with the 10-year average, highlights the need to provide a similar program to children in inland regions.

**Aim** To determine the feasibility of the Bush Nippers pilot program in inland regions.

**Methods** The existing Nippers program was adapted for inland settings. Three programs delivered content at river and/or pool locations. Evaluation included two age groups; with skills assessed by program instructors, and independent researchers conducting pre-post program quizzes, and parent and instructor surveys.

**Results** This study is nearing completion; with final results presented at the conference. Preliminary results indicate over 400 children participated in Bush Nippers. Participants’ lifesaving and water safety knowledge increased 11% (Under 9, n=26) and 7% (Under 12, n=23); and they attained skills, particularly rescues, survival swimming, lifejackets and rescue boards.

Parents (100%, n=49) and instructors (89%, n=9) would recommend the program and parents (92%) thought their child would participate again.

**Conclusion and Learning Outcomes** Given the high regard and demand for the program, and importance of lifesaving skills, provision of a scalable lifesaving program in inland regions may address the drowning trend and improve aquatic participation. State-wide adoption by schools and other providers is possible. Content, delivery and training should be location-specific, flexible and economically sustainable.

### 8B.002 GETTING LOCAL OWNERSHIP OF THE DROWNING PROBLEM IN THE BAY OF PLENTY

Neil McInnes\*. *Water Safety New Zealand, Wellington, New Zealand*

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**Context** The Bay of Plenty (BoP) has one of the highest regional drowning rates in New Zealand. In 2017 Water Safety New Zealand (WSNZ) embarked on the development of a regional water safety strategy for BoP. This strategy was

focused on reducing drowning deaths and injuries and building a culture of safe enjoyment around water in BoP.

**Process** The development of the BoP regional water safety strategy was underpinned by direct engagement to build a consensus view on water safety interventions for BoP. A Project Leadership Group of representatives from regional organisations with interest in water safety was established to act as the owners of the BoP strategy development process.

**Analysis** Regional water safety strategies seek to identify the priority work streams and investment priorities for water safety. To achieve this WSNZ had to ensure greater community ownership of drowning prevention/water safety activities. This meant facilitating regional ownership of both the development and implementation of regional strategy.

**Outcomes** In June 2019 a BoP water safety strategy document was launched and in September 2019 a strategy manager was recruited to implement the BoP water safety strategy with funding provided by local and national funders. Initiatives that address the priority actions of the strategy were implemented.

**Learning Outcomes** The most important lesson for WSNZ was the importance of ‘hand holding’ - maintaining a regional profile even after the strategy was being locally implemented, and being seen to continue to support the recruitment of funders and identification of initiatives.

### 8B.003 THE VALUE OF DROWNING PREVENTION PROGRAMS FOR ‘HIGH-RISK’ POPULATIONS IN AUSTRALIA

<sup>1,2</sup>Stacey Willcox-Pidgeon\*, <sup>1,2</sup>Richard Franklin, <sup>2</sup>Peter Leggat, <sup>2</sup>Sue Devine, <sup>1</sup>Justin Scarr. <sup>1</sup>Royal Life Saving Society – Australia, Sydney, Australia; <sup>2</sup>James Cook University, Townsville, Australia

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**Context** Drowning is a public health challenge worldwide; however, not everyone has access to prevention programs. In Australia, people from migrant backgrounds have been identified as being at greater risk for drowning with 26% of drowning deaths being people born outside of Australia and 81% male. This study explores adult migrant experiences with targeted swimming and water safety programs in Sydney, Australia.

**Process** A qualitative study using semi-structured focus groups were conducted in November–December 2019 among adults from migrant backgrounds, who had recently completed a subsidised swimming and water safety program. Focus groups were recorded, transcribed and thematically analysed.

**Outcomes** Study participants were female, aged over 25 years, first generation, and living in Australia for  $\geq 10$  years. Most were non-swimmers and were fearful of water prior to the program. Key themes were: perceived benefits of the program (health, well-being, social inclusion), motivation for and barriers to participating, addressing community needs, and attitudes toward drowning and water safety.

**Conclusion** These programs were highly valued by the participants. Recommendations for sustainability and continued participation include: developing policies addressing social determinants (cost, transport, cultural factors); and designing programs specifically for adults with limited swimming experience overcoming a fear of water. Creating mechanisms that enable both women and men from migrant backgrounds to access programs are vital for reducing drowning among this ‘high-risk’ population.