

Currently 94% of all children are transported in child restraint systems. Road accidents statistics show that the number of children killed in passenger cars dropped by 55% in relation to decrease of 35% in number of all people killed in road accidents in Poland from 2004 (before the campaign) till 2013.

705

# LESSONS LEARNED FROM CONDUCTING ROAD SAFETY CURRICULUM IN THAI SCHOOLS

<sup>1</sup>Danulada Jamjuree, <sup>2</sup>Saifon Srathongphun. <sup>1</sup>Srinakharinwirot University, Thailand; <sup>2</sup>Lampang Hospital, Thailand

10.1136/injuryprev-2016-042156.705

Teaching and learning road safety has been recommended as a core strategy in both nation and international levels. In Thailand, the Ministry of Education has launched a policy to integrate road safety with school's core curriculum since 2003. In 2006, Road Safety Safety Group Thailand(RSC) reemerged road safety curriculum to foster road safety behaviours in children. Beginning with 2 schools in Lampang Province, Northern of Thailand and the number increased later. Now 6 primary and secondary schools in Lampang manage road safety curriculum. This research focused on road safety curriculum, instructional approach, and outcomes found in 6 schools in Lampang Province.

**Methods** The After Action Review(AAR) was conducted to explore lessons learned in road safety curriculum. Two studies from this curriculum are a content analysis of road safety curriculum in 6 schools and focus group discussion with stakeholders. It was conducted between December 2012 to April 2013.

**Results** 1. **Patterns of integrated road safety curriculum.** Results can be described in 4 patterns: (1) themes of road safety that share contents within each subject of school's core curriculum, (2) activities on road safety in one subject that connect to another subjects, (3) integration road safety curriculum within each subject of school's core curriculum, and (4) mix methods of pattern 1 and 2. 2. **Key success factors.** (1) teacher's knowledge and skills for integrating road safety curriculum to school's core curriculum, (2) school's readiness, (3) teacher's participation and empowerment, and (4) principal's supportive and facilitation. 3. **Outcomes.** Results found that most of students (1) had increased road safety skills especially in walking on the street, crossing road and using helmet, (2) had more knowledge and understanding about traffic policy, (3) the concern about wearing helmet behaviour increased from 49% to 88.7%.

**Conclusions** This study shows that road safety curriculum can be done and works well with school's core curriculum. The success of the application is depended on (1) school's readiness, (2) knowledge and understanding of teachers to road safety curriculum and nature of road safety, (3) administrator's policy and support, and (5) reconcile teacher's attitude at the beginning of taking this curriculum to school.

706

# CHILDHOOD SAFETY EDUCATION IN RURAL UGANDA

<sup>1</sup>Mary Goretti Nakabugo, <sup>2</sup>Marissa Swanson, <sup>3</sup>Olivia Schneider, <sup>2</sup>David C Schwebel. <sup>1</sup>Twaweza/Uwezo East Africa; <sup>2</sup>University of Alabama at Birmingham; <sup>3</sup>Arlington Academy of Hope

10.1136/injuryprev-2016-042156.706

**Background** Rural Uganda is an especially hazardous environment for children with limited parental supervision, open fires,

speeding traffic, sharp farm tools, and flowing rivers. Effective safety education has the potential to reduce injury risk among this vulnerable population. Although safety instruction is a required component of the national curriculum, schools face challenges of overcrowding, understaffing, lack of resources and teacher training, and absenteeism which may inhibit student learning of safety behaviours. Given this context, there is need to investigate the content, quality and effectiveness of the safety units as currently taught in Ugandan schools.

**Objective** Qualitatively assess primary teacher perceptions of 1) childhood injury risks in a rural Ugandan community, and 2) the current state of safety instruction.

**Results** 21 teachers in grades 1–6 from 5 schools in rural eastern Uganda completed surveys on child injuries and safety instruction. Falls, cuts, and burns are considered the most common injuries among children. Children are frequently left without adult supervision, beginning between ages 3–7. Children are especially likely to be alone when either the child or parent is busy farming, fetching water, or at market. Safety units are most commonly taught in grades 1, 2, 4 and 6. The most common topics are safety around roads/transport and safety at home. The most common instructional strategies include providing information/safety rules, safety demonstrations, and first aid training. All teachers report their students adopt safer behaviours after instruction. Only one teacher reports ever receiving training in safety instruction.

**Conclusions** Injury risk is high in rural Uganda but children often receive inadequate supervision. Teachers are motivated to teach safety skills but lack supportive training and resources. Explicit training and materials developed for Ugandan teachers has the potential to reduce childhood injury risk in rural Uganda.

707

# REDUCING SCHOOL BULLYING WITH THEATRE AND ART

<sup>1</sup>Corinne Peek-Asa, <sup>1</sup>Marizen Ramirez, <sup>2</sup>Jennifer Fawcett. <sup>1</sup>University of Iowa Injury Prevention Research Centre, USA; <sup>2</sup>Working Group Theatre, New York, USA

10.1136/injuryprev-2016-042156.707

**Background** Bullying is the most common form of school violence worldwide. School-based bullying prevention programs have shown varying success, and new, innovative programs with a stronger evidence base are needed. Arts-based programming, which appeals to the active emotional brains of adolescents, is a promising approach.

**Description of the program** Injury prevention researchers and a theatre group collaborated to develop a play called "Out of Bounds," informed by qualitative and policy research. The play tells the story of a cyberbullying event and promotes themes of forgiveness, friendship, identity and labels. "Out of Bounds" was performed in ten Iowa middle and high schools and has more recently been on a national tour. Because viewing a play is unlikely to support behaviour change on its own, the team developed a program of arts-based activities to accompany the play. The activity toolkit is called "HEAR: Helping Educators use Art to Reduce Bullying." Activities were developed for multiple age groups and multiple settings, including classrooms and after school programs. Activities include games, acting, photovoice, reflective writing, drawing, and appreciative inquiry.

**Results** The play and toolbox were pilot tested through a service learning course with public health students and a school district. The play was performed in eight schools, and teachers chose activities from the toolkit to implement in their classrooms.

Service learning students assisted with the activities. Through an online evaluation survey, over 90% of teachers assessed the program as very positive. One activity was assessed as neutral by all teachers, and this activity was revised. Teachers reported that 75% to 90% of students were highly engaged.

**Conclusions** Schools rarely use arts-based approaches to target behaviour change, although they are a promising approach and schools increasingly seek ways to integrate arts into core education.

## Strategies and Policies

Post Tue 2.9

708

### STRENGTHENING THE INJURY SURVEILLANCE SYSTEM BY ESTABLISHING A U-HEALTH-BASED SMART DOCTOR SYSTEM

<sup>1</sup>IG Kim, <sup>2</sup>JH Paik, <sup>3</sup>JH Joo. <sup>1</sup>Executive Director of Songpa Public Health Centre, Korea; <sup>2</sup>Safety Management Officer of Songpa Public Health Centre, Korea; <sup>3</sup>Smart Doctor System Management Officer of Songpa Public Health Centre, Korea

10.1136/injuryprev-2016-042156.708

**Background** Songpa District was initially designated as an international safe community in 2008 and re-designated in 2013. Its Injury Surveillance System (ISS) comprises the Web-based ISS, injury yearbook, and infant and child ISS for the high-risk group. An attempt was made to strengthen the ISS by using the *U-Health-based Smart Doctor Program*, which is being implemented by the Songpa Public Health Centre to more easily and extensively collect citizen injury data.

**Description of the problem** Methods previously used to collect the local community's injury data include home visits, requests to public and relevant organisations for materials, visits to locations with an injury risk environment, local resident surveys, injury reports of nursery facilities and materials from national statistical institutions. Materials of national statistical institutions were mostly on the entire nation, pointing to the need for more personnel and resource input to obtain local community-level data. There was thus a need to strengthen the ISS using the ubiquitous healthcare.

**Results** The U-Health-based Smart Doctor System is an information technology-based health management system that is customizable for individuals. Songpa District residents use kiosks to easily check their health information (physical data, blood pressure, BMI, etc.). Collected data is interfaced to the website and mobile phone application to enable real-time receipt of help from doctors and nutrition and exercise experts. This system is used by a great number of citizens, and is used to collect injury data along with health data to strengthen the local community's ISS.

**Conclusions** The U-Health-based Smart Doctor System is provided free based on Songpa District's independently developed program. It is regarded as an effective system for collecting resident health and injury data in the nation's large cities that have a good ubiquitous mobile environment. Also, system advancements can be made to obtain diverse information using big data.

709

### ANALYSIS OF THE SONGPA SAFETY DOCTOR PROGRAM BASED ON SOCIAL NETWORK ANALYSIS

<sup>1</sup>JH Paik, <sup>2</sup>IG Kim. <sup>1</sup>Safety Management Officer of Songpa Public Health Centre, Korea; <sup>2</sup>Executive Director of Songpa Public Health Centre, Korea

10.1136/injuryprev-2016-042156.709

**Background** Since 2005, the Songpa District has implemented the Safety Doctor Program (SDP), which involves having a dedicated doctor for a nursery facility to quickly respond to safety-related incidents at nursery facilities. By analysing cooperative relations among local community members in a network that was established by the SDP, this study ascertains the characteristics of the safe community program network and defines the direction of development.

**Methods** A social network analysis survey was conducted on 233 people from the Songpa Public Health Centre (SPHC), Songpa Medical Association, and Songpa Nursery Facility Association that are participating in the SDP. This was followed by a network relations analysis using social network analysis indicators – centrality, centralization, density, and exchange relations.

**Results** First, from among the SDP members, the SPHC indicates the highest centrality (degree centrality: 0.650) and the highest centralization (in-degree centralization: 64.469%), and thus leads the flow of information and resources.

Second, network density is overall low. Network density that excluded the SPHC (0.9%) is lower than the network density that included the centre (1.2%). If the SPHC does not participate in the SDP, several subgroups would emerge among the members, preventing the smooth flow of resources and information and resulting in weak exchange relations.

Third, exchange relations of the network that includes the SPHC consist of education, medical services, and public interests. A cooperation evaluation indicated a high level.

**Conclusions** The SDP member network is focused on the SPHC, but the Program has great significance in that it promoted discussions among local community member groups. The social network analysis results can be used to motivate local community members to engage in participation and cooperation, thus further developing the infant and child injury prevention program.

710

### ROLE OF A CHAMPION ORGANISATION IN MAKING CHILD INJURY INTO A PRIORITY NATIONAL HEALTH AGENDA IN LOW-INCOME COUNTRY SETTING: BANGLADESH EXPERIENCES

AKM Fazlur Rahman. Centre for Injury Prevention and Research, Bangladesh

10.1136/injuryprev-2016-042156.710

**Background** Child injury is a major public health problem in low and middle income countries. According to a WHO estimate more than 630,000 children died due to injury globally in 2011. In Bangladesh, injury is the leading cause of death for children after one year of age.

**Description of the problem** Although injury is a leading killer of children, in many countries, it remains an unrecognised, neglected health issues mainly due to lack of data, evidences for solution, and lack of advocacy and communication. Like many