

PITCHING SESSIONS AND POSTERS

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Child and Adolescent Safety

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398 **ASSESSING THE UTILITY OF A SAFETY AND PEACE PROMOTION INTERVENTION FOR EARLY CHILDHOOD (ECD) CENTRES IN A LOW-INCOME COMMUNITY IN SOUTH AFRICA**

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Background This study describes the implementation and evaluation of a safety and peace promotion intervention for children attending Early Childhood Development (ECD) centres in a low-income community in South Africa. The intervention comprised of teacher training to administer lessons on poisoning, burn, traffic safety and peacemaking skills to the children.

Methods Ten teachers working in four ECD centres in informal settlement received training to deliver lessons to 80 children aged 4–6 years, over the course of a ten week period. Assessments were conducted to study the implementation process of the lessons. Child assessments and teacher and parent reports of child behaviour assessments were collected prior to the intervention and after the 10 week period.

Results Although teachers were generally receptive to the intervention and thought that the content was appropriate, several concerns were raised which have implications for intervention delivery and utility. These concerns centred on language of instruction, the need to involve parents, teacher capacity, structure of lesson plans, intervention flexibility, and disclosures of child abuse.

Conclusions These findings suggest that interventions in ECD centres in low-income settings may have potential for improving child safety and social and emotional learning. However, teachers require appropriate training and support for interventions to be sustainable.

399 **PAEDIATRIC INJURY PREVENTION: ADDRESSING INJURY PREVENTION THROUGH A COORDINATED APPROACH**

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Background Over 60,000 children are seen at Children's Hospital Los Angeles (CHLA) annually with most presenting with preventable injuries. Extending the efforts to address injury prevention through utilisation of undergraduate, graduate and medical school students is the approach of CHLA's Injury Prevention Program (IPP). In an effort to increase the number of paediatric injury prevention specialists, CHLA launched the inaugural class of Paediatric Injury Prevention Scholars (PIPS) in 2011.

Methods CHLA's IPP recruited from local universities/research institutions. Selection methods were established to pool the

highest quality candidate included submission of application, writing samples, interviews and reference letters.

PIPS program was established in response to the growing needs to address injury prevention in a under resourced situation. CHLA utilised a trauma database shared within LA County to track patient injury and treatment. Adjusting for cyclic patterns and seasonal effects, gap analysis provided baseline data indicating areas for improvement. Our findings highlight the need for increased injury prevention and expansion of resources to address gaps in outreach, education and research.

Results The established PIPS curriculum provides learning opportunities to expand programming capacity, to create interest in injury prevention and to provide training opportunities. The PIPS engage in injury prevention outreach through organising and facilitating educational booths in the hospital and in the community. In addition, students learn to create culturally sensitive materials used for injury prevention education. PIPS are encouraged to discover novel areas of research, to develop strategies to promote injury prevention as a public health issue, and to apply research methods to create evidence-based recommendations. Since the inaugural class of 2011, CHLA has graduated 4 classes of PIPS cohorts.

Conclusions PIPS program provides a successful vehicle for expanding CHLA's IPP. The PIPS Program has been refined since the inaugural class to include streamlining the program curriculum to advance the development of future scholars who are committed to pursuing excellence in injury prevention through research, advocacy and education. This program allowed for IPPs around the country to have an effective program to produce injury prevention scholars and raise awareness in the field. Additionally, PIPS have enhanced programmatic function and abilities to increase community outreach and engagement of CHLA's IPP by 700% during their tenure. PIPS have also contributed greatly to our research reach through manuscript submission on topics including acute care outcomes studies, systematic reviews, and sports injury(concussion) studies.

While the PIPS Program has served as a model for programs who anticipate staff/personnel shortages, they also afford existing staff potential for leadership development, mentorship and training. PIPS provide programmatic ability to build capacity to provide sustainable and beneficial projects and expand reach outside in the community in several of trauma's service lines (disaster preparedness and injury prevention).

400 **POISON PREVENTION PRACTICES AND MEDICALLY ATTENDED POISONING IN YOUNG CHILDREN: MULTICENTRE CASE-CONTROL STUDY**

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Background Childhood poisonings are common, placing a substantial burden on health services. Education and provision of cupboard/drawer locks improves poison prevention practices but it is unclear if this reduces poisoning risk. This study quantifies associations between poison prevention practices and medically attended poisonings in 0–4 year olds.

Methods Multicentre case-control study conducted at hospitals, minor injury units and family practices from four study centres in

England between 2010 and 2013. Participants comprised 567 children presenting with unintentional poisoning occurring at home, and 2320 control participants matched on age, sex, date of event and study centre. Parents/caregivers provided data on safety practices, safety equipment use, home hazards and potential confounders, by means of self-completion questionnaires. Data were analysed using conditional logistic regression.

Results Compared with controls, parents of poisoned children were significantly more likely not to store medicines out of reach (adjusted odds ratio (AOR) 1.59; 95% CI: 1.21, 2.09; population attributable fraction (PAF) 15%), not to store medicines safely (locked or out of reach (AOR 1.83; 95% CI: 1.38, 2.42; PAF 16%) and not to have put all medicines (AOR 2.11; 95% CI: 1.54, 2.90; PAF 20%) or household products (AOR 1.79, 95% CI: 1.29, 2.48; PAF 11%) away immediately after use.

Conclusions Not storing medicines out of reach or locked away and not putting medicines and household products away immediately after use increased the odds of secondary care attended poisonings in 0–4 year olds. If associations are causal, implementing each of these poison prevention practices could prevent between 11% and 20% of poisonings.

401 MATERNAL POSTPARTUM DEPRESSION IS ASSOCIATED WITH INCREASED RISK OF EARLY CHILDHOOD INJURY

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Background Previous research indicates an association between maternal postpartum depression (PPD) and child maltreatment, but research on this association in child injury outside of the maltreatment context is limited. The Nurse-Family Partnership (NFP) is a nurse home visiting program in which nurses visit first-time, low-income moms from pregnancy until the child's second birthday, promoting healthy parenting practices. As early childhood injury or ingestion emergency room (ER) visits are primary NFP outcomes, there is an interest in determining risk factors for these outcomes within the client population.

Methods We analysed a cohort of NFP clients beginning the program between 7/1/2010 and 6/30/2012 with completed 12-month infant health care and PPD forms (n = 6271). Postpartum depression was measured using the Edinburgh Postnatal Depression Scale (EPDS) administered 1 to 8 weeks after birth, with a cutoff score of ≥ 10 indicating possible PPD. The outcome was defined as self-reported infant ER visit due to injury or ingestion on the 6- or 12-month infant health care form. Logistic regression was used to calculate adjusted odds ratios of the relationship between PPD and injury.

Results A total of 985 clients (15.8%) exceeded the possible PPD cutoff on the EPDS. Injury- or ingestion-related ER visits in the child's first year of life were reported by 385 clients (6.2%). Postpartum depression scores above the cutoff were significantly associated with ER visits after adjusting for child gender and maternal race, age, education and marital status (adjusted OR: 1.41 [1.07, 1.84], p = 0.01).

Conclusions We found a significant association between PPD and subsequent risk of childhood injury/ingestion ER visit within a cohort of NFP clients after adjusting for related confounders. Understanding how postpartum depression affects early childhood outcomes may provide opportunities for targeted injury

prevention interventions within the home visitation program context.

402 CHILD INJURIES IN CROATIA – SIGNIFICANT PUBLIC HEALTH ISSUE

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Background Injuries are the leading cause of death among children in Croatia. In recent decades, the work on monitoring and prevention of injuries has intensified, which led to a reduction of child mortality caused by injuries.

Methods The data used in the research was collected from the routine mortality and morbidity statistics, the database of the World Health Organisation: European Detailed Mortality Database (DMDB), as well as from the results of the international project TACTICS (Tools to Address Childhood Trauma, Injury and Children's Safety).

Results In Croatia, in the last ten-year period from 2005 to 2014 has been noted a trend of reducing the mortality rates from total number of injuries (V01-Y98) among children aged 0–19. The highest age-specific death rate from injuries in children in the mentioned period was 14.6/100.000 (2005), and the lowest 7.1/100.000 (2014), which represents almost double reduction in mortality. The reason for this is primarily the trend of reducing the mortality rate due to traffic accidents (V01-V99) in children (8.6/100.000 (2005); 2.6/100.000 (2014)). The leading external causes of death from injury in the observed period were: traffic accidents, suicide, drowning, followed by poisoning and suffocation. According to the European DMDB database, Croatia has been positioned around the middle of the European scale with the standardised mortality rate from injury (0–19 years) 8.8/100 000 (2012). According to the research carried out in the framework of the international project TACTICS, it was noted that Croatia has a medium satisfactory child safety level in the area of unintentional child injury prevention. In the violence prevention area Croatia belongs to the European countries with progressive politics.

Conclusions Although in the last few decades Croatia perceives a trend of reducing mortality from child injuries, further efforts in the area of monitoring, treatment and prevention of child injuries are needed.

403 CHILD PEDESTRIAN COLLISIONS, WALKING TO SCHOOL AND THE BUILT ENVIRONMENT: A CASE CONTROL STUDY

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Background Walking to school is a way to increase daily physical activity; however the risk of injury must also be considered so that walking does not lead to an increase in pedestrian injuries. Risk factors associated with the environment around schools with high child pedestrian motor vehicle collision (PMVC) rates were examined.

Methods Child PMVCs from 2000–2013, ages 4–12 years, were mapped within elementary school attendance boundaries in