

## Poisonings

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## 966 TOUGH PILL TO SWALLOW: A RETROSPECTIVE REVIEW OF POISON-RELATED HOSPITAL VISITS IN ALBERTA

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**Background** Little is known about the events and circumstances that contribute to poison-related incidents and mortality in Alberta. Poisoning events may take on any of three forms of exposure: Unintentional (including iatrogenesis – complications resulting from medical care), Experimental (including suspected suicidality), and Intentional. The objective of the current study was to review and analyse patient records from 18 hospital sites to ascertain trends in morbidity, mortality, and healthcare utilisation for medical incidents related to poisonings in Alberta.

**Methods** A retrospective analysis of health services records involving poisoning events was conducted for the 2010 calendar year. The Emergency Department (ED) and In-Patient (IP) data were analysed as separate event-sets to compare and contrast circumstances and conditions, and subsequent courses of action taken. Protocol filters yielded a total of 1,729 records used in the final analysis; 1,360 ED records and 369 IP records. The data were summarised using descriptive statistics and presented as frequency tables and graphs, and where appropriate as means. Where inferential statistics are used, the level for significance was set at  $p < 0.05$ .

**Results** The majority of records indicated intentional poisonings (i.e. voluntary self-harm). Females were implicated in 56.1% of all ED poison visits, while their male counterparts were fewer at 43.9%. The majority of cases involved adults aged 22–60 years. Young adults aged 17–21 years and toddlers aged 1–5 years were the next most represented groups. Overall, the highest number of poisonings was attributed to prescription medications. Females consumed predominantly prescription medications while males consumed primarily recreational substances.

**Conclusions** Intentional poisoning were found overall to be higher than unintentional poisonings. Exposures varied between age groups and other demographic factors. Rural populations exhibit a unique set of circumstances and outcomes given relative isolation from major centres. Poisonings are complex events that span financial, socio-cultural, and healthcare domains. These events are a considerable societal and financial burden in Alberta – both intentional and unintentional. Many poisonings that appear benign on the surface may have implications beyond the acute presentation of symptoms.

## 967 A RESEARCH ON CHILDREN'S MEDICATION SAFETY IN HOSPITAL, KINDERGARTEN AND FAMILY IN CHINA

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**Background** Poisoning is the leading causes of childhood injury told by China National Injury Surveillance System (NISS). There is no research on children's medicine safety issue in China. This research includes a retrospective study on hospital data, a

questionnaire survey among paediatricians, parents and behaviour tests among children.

**Methods** 603 medical cases that related to medication poisoning among were collected through from Beijing Capital Children's Hospital and Shanghai Children's Medical Centre during the year 2012 to 2014. Opinions of 146 paediatricians from 114 hospitals in 35 cities were collected through a questionnaire during a national seminar. Awareness of 1760 kindergarten children's parents' in 4 cities were collected through questionnaires. Ideas of 218 children were collected through one-on-one dialogue by the trained teachers and every child was asked to open medicine bottles with or without child-proof, the time was recorded.

**Results** Medication accounted over half of all poisoning cases in children's hospitals; 1–4 age group was the leading victims. Main cause is mistaking by children (79.2%); There is an out-standing increase on cardiovascular medicines mistaken by children such as anti-hypertension. Half parents have placed home medicine in an easier way for adult's reach. 98% of kindergarten children could opened non child-proofing bottles in 2.5 seconds while 16.7% of them opened child-proofing bottles in 9.6 seconds; 41% paediatricians thought it a must to talk with parents on medication safety while almost all paediatricians admitted that they barely have time to do so.

**Conclusions** There is a strenuous need on Child medication safety in China. Safe storage is the key action for the intervention. Paediatricians have a great opportunity to be involved in medication safety promotion. There is another opportunity to engage grandparents as they are one of the main caregivers.

## 968 ENVIRONMENTAL INVESTIGATION FOR MASS LEAD POISONING AMONG CHILDREN IN DUSTRIAL AREA, THAILAND

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**Background** In 2012, a girl with blood lead level of 166 mcg/dl was admitted in Ramathibodi hospital due to status epilepticus. She lived with her parent in the recycling factory where high lead dust was found around the area inside. Children in the school which located around 100 metres from such recycling factory were investigated and found that the prevalence of high blood lead level (BLL)  $\geq 10$  mcg/dl was 44.2% (75 in 165 children).

**Methods** We conducted a case-control study with 43 cases of school children with BLL  $\geq 10$  mcg/dl, and a control group of 43 children from the same school by matching criteria of gender and classroom. The interviewed personal data, information on environmental risk factors and collected household environmental samples were collected by questionnaire and laboratory technique to identify the association between environmental factors, BLL  $\geq 10$  mcg/dl, and to study the prevalence of low IQ and learning disability among children with BLL  $\geq 15$  mcg/dl. Determined factors influencing BLL were analyses by univariate analysis and multiple logistic regression analyses. Children with