

believe this for some developmental domains ( $p < 0.05$ ). Overall, 32% of parents had sought information on child development and behaviour from childcare providers. Independent predictors of using childcare providers as a resource included having children under the age of 6 years (OR=1.65, 95% CI 1.11 to 2.46), having children in care for more than 6 h per week (OR=19.88, 95% CI 11.51 to 34.35), and being unmarried (OR=2.08, 95% CI 1.16 to 3.73).

**Conclusions** Among Alberta adults who recently interacted with children, there was support for public funding of childcare. Adults recognised that childcare providers play a critical role in supporting optimal child development and their beliefs about the need for education among childcare providers are in line with research evidence in the area. Policy and decision makers may find this information helpful in allocating resources to promote child development.

### P1-360 INCIDENCE OF STROKE FOLLOWING HERPES ZOSTER AMONG POPULATION 50 YEARS AND OLDER

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**Introduction** Although varicella zoster virus (VZV)-induced vasculopathy and stroke after herpes zoster (HZ) attacks have been previously reported, data regarding stroke frequency after zoster attacks are lacking. This study investigates the risk of stroke after HZ in a general population age 50 years and older.

**Methods** This is a retrospective cohort study of HZ cases who had received treatment for HZ from 1 January 2007 to 31 October 2010 at Kaiser Permanente Southern California. These cases had no records of stroke within 1 year prior to their index HZ diagnosis date. The comparison cohort included subjects who had no HZ during the same period and were matched 1:1 to the HZ cohort on age, date of HZ diagnosis, and the setting of medical care. Incident cases of stroke were identified from hospitalisation records with primary diagnosis as stroke.

**Results** There were 227 stroke cases in the HZ cohort and 224 in the comparison cohort. The 1-year Kaplan-Meier cumulative incidence of stroke was 0.88% (95% CI 0.77% to 1.00%) for the HZ cohort and 0.89% (95% CI 0.78% to 1.00%) for the comparison cohort ( $p$  value: 0.98). The HR of stroke after any HZ or herpes zoster ophthalmicus, after controlling for sex, race, heart diseases, diabetes, lung diseases, kidney diseases, liver diseases, hypertension, and demential status was 1.11 (95% CI 0.92 to 1.33) and 3.33 (95% CI 1.05 to 10.53), respectively.

**Conclusions** These data suggest that the risk of stroke following herpes zoster was increased in only those with ophthalmic involvement and not in subjects with HZ involved in distant dermatomes.

### P1-361 HISTORY OF CHILD ABUSE AND SELF-INJURIOUS BEHAVIOUR

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**Introduction** It is not well known what kind of health problems is associated with the history of child abuse. The aim of this study was to observe the current situation of child abuse in Japan, and to confirm our hypothesis that history of child abuse is associated with self-injurious behaviour.

**Methods** Data from the Lifestyle and Attitude towards Sexual Behaviour Survey were used for the secondary analysis. Using the

two-stage stratified random sampling method, 3000 people (aged 16–49) were selected throughout Japan. Visit custody investigation was conducted to collect each one's data, including general characteristics (gender, age, education, occupational status, marital status, tobacco use, and alcohol consumption), history of parents' divorce, history of child abuse, and self-injurious behaviour. The  $\chi^2$ -test and the logistic regression analysis were used to analyse the relationship between history of child abuse and self-injurious behaviour.

**Results** A total of 1540 participants (51%) were included in the analysis. Of these, 77 participants (5%) experienced child abuse. Also 108 participants (7%) had experience self-injurious behaviour at least once. Although 6% of the participants without the history of child abuse attempted self-injurious behaviour, 33% of the participants with the history did attempt self-injurious behaviour. History of child abuse was significantly associated with self-injurious behaviour in crude and adjusted model.

**Conclusion** We found that history of child abuse was associated with self-injurious behaviour. Public health workers and clinicians should pay attention to the future self-injurious behaviour in caring for child abuse.

### P1-362 CHARACTERISATION OF ABORTION CASES AT A PUBLIC MATERNITY IN NATAL, BRAZIL

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**Introduction** Legal abortions in Brazil are restricted to risk of maternal death and rape. The aim of this study was to characterise abortion cases at a public maternity in Natal, Brazil. Method: This is a quantitative descriptive study. The population included all adolescents and young adults (1554) hospitalised as a result of illegal abortions in 2007 and 2008.

**Results** Abortion accounted for 98% of emergency cases; mean age was 20 years; mean gestational age was 11 weeks; 93% denied induced abortion. The most common cause of hospitalisation was abdominal pain accompanied by haemorrhage (60%); incomplete abortion (74.4%); 60% underwent curettage and 40% manual intrauterine aspiration. There was a positive association between aspiration, higher gestational age and maternal age; one-day hospitalisation without complications or counselling (93%).

**Conclusion** There is a serious public health problem with high occurrence of abortions in progress and only emergency care.

### P1-363 THE IMPACT OF SCHOOL CLOSURE DURING THE A/H1N1 EPIDEMIC 2009 INFLUENZA PANDEMIC AMONG SCHOOLS IN JAPAN

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**Introduction** In Japan, the first infected person to the influenza(A/H1N1) was confirmed, May 2009, and spread widely, especially among children. Schools conducted various preventive actions under a general guideline by the local education board. School or class closure was one of them, which was decided by each school. However, it is not clear whether school closure is effective. The objective of the study was to examine the effectiveness of school closure.

**Methods** Data were collected from June 2009 to February 2010, from all elementary and junior high schools located in a northern sub-prefecture of Ibaraki, 100 km north of Tokyo (approximate population of 280 000). The information included school name, school address, the enrolment number by school, dates of absentees from influenza-like illness (type-A), date of class closure and date of school closure. Impacts of school closure was analysed considering timing of closure, enrolment number, geographical location.

**Result** All 68 schools responded for study. 8576 out of 23 880 (143 280 person-months) enrolled school children were infected. We classified these schools into two groups according to date of school closure. The difference of incidence between two groups was estimated with the RR with 95% CI. The incidence rates in the early and late school closure groups were 71.6 and 64.9 (1/1000 person-months), respectively. RR was 1.10 (95% CI 1.05 to 1.15), which was significant.

**Conclusion** The result would show that the early school closure may have impact to prevent infection number of A/H1N1 influenza.

**P1-364 IS SOCIAL CAPITAL IN THE WORKPLACE ASSOCIATED WITH WORK-RELATED INJURY AND DISABILITY? A SYSTEMATIC REVIEW OF THE EPIDEMIOLOGIC LITERATURE**

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**Introduction** Social capital is defined as resources embedded in social relationships. Social capital in the workplace may include social support, interpersonal trust, respect, and reciprocity; and may occur at both the worker and workplace level. The objective of this study was to determine if social capital in the workplace is associated with work-related injury or disability.

**Methods** A systematic review of the epidemiologic literature was conducted. Studies were identified from 1990 to 2008 relevant to social capital in the workplace and work-related injury or disability. Identified studies were critically appraised for methodological quality by two qualified independent reviewers. Findings represent a best evidence synthesis of the literature.

**Results** Sixty-six studies were scientifically reviewed. Forty-two were excluded due to poor methodological quality. The remaining 24 consisted of 14 studies examining the association between social capital in the workplace and work-related injury, eight focused on disability, and two studied both injury and disability. Only two studies included workplace-level social capital, the remaining focused on individual-level worker social capital. Limitations of the literature include unclear social capital, injury and disability definitions, limited study populations, and weak study designs.

**Conclusions** Limitations preclude stating consistent conclusions. The evidence suggests an association between individual worker social capital and work disability. Group-level social capital may be important in the development of work-related injury and disability. We summarised the literature, highlighted its strengths and weaknesses, and provided suggestions for future work.

**P1-365 ASSOCIATION OF DISTANCES TO URBAN GREEN SPACES AND OPEN SPORT SPACES WITH PHYSICAL ACTIVITY IN TEENAGERS OF PORTO, PORTUGAL**

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**Introduction** It is expected that the proximity to urban green spaces (UGS) and open sport spaces (OSS) can increase physical activity (PA), but their potential is not fully understood.

**Objective** To examine the association between distances from adolescent's residences to UGS and OSS with the intensity of PA and sports activity.

**Methods** We evaluated 1489 (51.4% girls) 17-year-old adolescents living in Porto, Portugal (EPITeen cohort). Residences were georeferenced. Buffers of 250 m and 500 m around each space were created and distances to residences were classified in  $\leq 250$  m (class1),  $>250$  m and  $\leq 500$  m (class2) and  $>500$  m (class3). Association between distances to spaces and Intensity of PA (adjusted to BMI, and parents' education) and with sports activity (adjusted to parents' education and obesity) were measured using OR and 95% CI using logistic regression analysis.

**Results** Considering class1 as reference, in girls the association between distance to UGS and Intensity of PA was 0.99 (0.70;1.42) for class 2 and 0.81 (0.54;1.24) for class 3. Among boys, those results were 0.85 (0.58;1.24) and 0.69 (0.46;1.03), respectively. Regarding the association between distance to OSS and intensity of PA, in girls, was 0.75 (0.50;1.13) for class 2 and 1.14 (0.76;1.71), for class 3. Among boys, those results were 1.30 (0.84;2.01) and 1.38 (0.90;2.11), respectively. Similar results were found between distances to UGS and OSS and sports activity.

**Conclusion** Adolescents closer to UGS and those most far from OSS were more physically active, although in general no statistically significant association was reached.

**P1-366 A PROSPECTIVE MIXED METHODS COHORT STUDY TO ASSESS ETHNIC INEQUITIES IN PATIENT SAFETY IN DUTCH HOSPITAL CARE**

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**Introduction** USA studies showed an increased risk of patient safety incidents in hospital care among ethnic minorities, but in Europe ethnic disparities in patient safety have never been analysed. The present study aims to 1. Assess the risk of patient safety events in patients of non-western ethnic origin in comparison to Dutch patients 2. Analyse the determinants of the risk of adverse events in patients of non-western origin, and 3. Explore causal mechanisms in patient-provider interaction.

**Methods** Prospective mixed methods cohort study in four hospitals. In total, 2000 patients (1000 Dutch, 1000 of any non-Western ethnic origin, age range:45–75 years) will be included. Data on explanatory variables (eg, Dutch language proficiency, health literacy, education, religion) are collected at admission. After discharge, a two-stage medical record review study, based on a Dutch record review study, is conducted by experienced reviewers to determine the incidence of adverse events. Determinants will be analysed by multilevel multi-variable stepwise logistic regression. Mechanisms in the care process will be explored in qualitative interviews with patients and providers.

**Results** Recruitment has started in December, 2010 and will continue for 24 months. Presently, 50 patients were recruited. By August, preliminary data and practical lessons from data collection will be available.