Poster session 1

Results In the unpaired analyses, an inverse educational gradient in CVD risk was observed, particularly in women. This association was not replicated in the intrapair analyses of female MZ twins, but it persisted among female DZSS twins. For men, the pattern was less clear.

Conclusions The attenuation of association in the intrapair analyses suggest that shared familial factors account for part of the observed association between education and CVD. The fact that it was primarily attenuated in MZ twins may point to genetic factors as an important source of confounding. However, since education was associated with CVD in the intrapair analysis of DZSS twins, there was still some evidence of effect of education. Finally, these Danish data suggest that the social inequality in CVD is larger for women than for men.

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EFFECTS OF OUTDOOR TEMPERATURE AND RAIN ON THE **RISK OF HEMORRHAGIC STROKE**

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Introduction Changes in meteorological parameters have been associated with stroke occurrence. The incidence of primary intracerebral haemorrhages (PICH) seems to increase in days with cold/ mild outdoor temperature. In Portugal, neurologists forward the hypothesis that the incidence of PICH increases in rainy days and not particularly low temperatures. This study aims to study the association between occurrence of PICH and weather parameters.

Methods Data from ACINrpc-project, involving 78 patients suffering a first-ever-in-the-lifetime PICH over a 2-year period in the city of Porto was used. Information on daily weather parameters was obtained from the National Meteorological Office. A Poisson model was used to estimate the association between weather parameters and PICH incidence. Using a conditional logistic regression model, a case-crossover design was then used to estimate the risk of PICH following specific exposures associated with PICH incidence: low diurnal temperature range (DTR) and rainy days. For each subject, the case period was matched with 4 control periods, the same weekday in the previous 4 weeks.

Results PICH incidence increases by 11.8% (95% CI 3.8 to 20.4%) for 1°C drop in DTR and 3.1% (95% CI 1.1 to 5.1%) for a 1 mm/m² in precipitation. Following a day with a DTR<4°C the OR is 2.9 (95% CI 1.4 to 5.8), increasing to 8.8 (95% CI 1.7 to 44.8) after a 48 h exposure. Following days with low DTR and rain, the OR is 3.2 (95% CI 1.3 to 8.1) and 9.5 (95% CI 1.1 to 88.9) for a precipitation>10 mm/m² and 40 mm/m², respectively.

Conclusion Precipitation by itself is not associated with PICH incidence, nevertheless has a synergistic effect in low DTR days.

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SERO-PREVALENCE OF RIFT VALLEY FEVER IN SOUTHWESTERN SAUDI ARABIA

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Introduction The objective was to study seroepidemiology and potential risk factors of Rift Valley Fever (RVF) virus infection in South Western Saudi Arabia.

Methods A random sample of the general population were studied. Through questionnaire interviews, data were collected regarding sociodemographic status, housing conditions, animal contact and other relevant information. Blood samples were taken and tested for RVF-specific IgG and IgM utilising enzyme-linked immunosorbent assays (ELISAs).

Results Out of 2322 persons included in the study, only 139 were positive for RVF-specific IgG giving an overall prevalence of 6.0%. On the other hand, none of the study samples were found to be sero-positive to RVF-specific IgM. The highest prevalence of sero positive RVF IgG was observed in Al Birk of Aseer region (13.3%) followed by Al-Arda of Jizan Region (11.8%), where the first animal deaths were reported during 2000–2001 outbreak. The study revealed zero prevalence of specific IgM and IgG among children born after the 2000-2001 outbreak. Using multivariate binary logistic regression analysis, the following significant risk factors were identified; lacking house electricity, having animals in the house, history of slaughtering animals, contact with or transporting aborted animals.

Conclusion The lack of recent virus activity mandates the rigorous maintenance of the control measures undertaken by the Ministries of Agriculture and Health. It is recommended to have regular seroepidemiological surveillance of RVF among humans, fostering public health messages in the region for risk reduction on reducing the risk of animal-to-human transmission as a result of unsafe animal husbandry and slaughtering practices.

P1-468 Towards a mode of collective construction of **EPIDEMIOLOGICAL KNOWLEDGE**

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Several Latin-American authors (Breilh, Almeida Filho, Czeresnia, among others) and some Europeans (as Tognoni) argue critically about the ways of constructing knowledge in epidemiology. They coincide in pointing out the limitation of the expert eye to account for the processes collective health. They debate how to manage knowledge and mechanisms to coordinate the management of institutional knowledge to the collective management of knowledge, in order to generate conceptual and methodological tools to impact effectively on the life stage of communities. We hypothesise that comanagement of knowledge, as inter-subjective process between academics and communities, promotes the transforming and democratising actions. In this regard, two national universities in the province of Cordoba, along with a local institution of healthcare built since 2008 an area of informal training, the Permanent Seminar of Epidemiology Community (EC), whose line of work is health as indicator of life, autonomy, knowledge and democracy in the communities. Participants are workers and health promoters from different districts of the province, members of community-based organizations and universities (students and teachers). In this context, it has been done during 2009-2010 a province-wide survey of experiences in community health, encouraging integration of community members to the EC research network. The progress made in terms of health monitoring and community organising around health is the subject of a manual about EC co-management of knowledge, and realises the real possibilities of achieving them.

P1-469

SOCIOECONOMIC STATUS OF INJURED CHILDREN IN ZANJAN, IRAN

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Introduction Injuries are one of public health priorities in Iran. Information on injuries in children and its related factors are less well known. The aim of this study was to describe the socioeconomic factors in injured children in Zanjan, Iran.

Methods This descriptive study was carried out on a random sample of 638 injured children aged 15 or less who were admitted to the emergency units of Valiasr and Moosavi Hospitals from June 2008 to March 2009 in Zanjan. Information on demographics, and socioeconomic factors such as parental education and family income was gathered.

Results The major causes of injuries were motor vehicle crashes (36%), falls (34%), falling objects (13%), burns (12%) and poisoning (6%). Three hundred ninety one (61.3%) of injured children were male and 247 (38.7%) were female. The mean age of the injured children was 7.8±4.2 years. Motor vehicle crashes were more common among older children, while burns and poisoning were common in younger children. Most injuries in boys than girls occurred between 10 and 15 years old (45% vs 30%, p<0.0001). Injuries were more prevalent in children whose father was a manual worker or mother was a housewife. The level of education of both parents was low in most cases. More than half injuries occurred for children who were living in a low-income family. These patterns were observed for all types of injuries.

 $\textbf{Conclusion} \ \ \text{The results highlight the need for targeted injury prevention}$ efforts among children and families with a low socioeconomic status.

SOCIOECONOMIC DETERMINANTS OF PASSIVE SMOKING DURING PREGNANCY AND BIRTH WEIGHT OF **NEWBORNS**

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Introduction It is well known that maternal smoking during pregnancy results in adverse reproductive outcomes. However, the impact of passive smoking on fetal growth is less clear. The aim of this study was to determine the socioeconomic status of pregnant women who were exposed to tobacco smoke and its influence on birth weight of their newborns.

Methods This descriptive study was conducted on 450 nonsmoker women with singleton live births. Data on demographic, social and reproductive characteristics were obtained. Women were asked for details of their exposure to smoking at home or in the workplace. Data were analysed using χ^2 , independent t-test, ANOVA and Regression methods.

Results One hundred seventy seven women (39.3%) were exposed to tobacco smoke. A significant association between passive smoking and socioeconomic indices such as the educational level and the occupation of the women and their spouses was found. The proportion of passive smokers was lower in families with higher income. Infants born to passive smokers weighed a mean of 28 g lighter than those born to non-passive smokers (p=0.53). The mean birth weight of infants born to women whose husbands smoked more than 10 cigarettes per day was 3.110 kg, resulting in a greater difference of 49 g. Conclusion The results provide no significant decrease in birth weight of infants born to passive smokers in comparison with nonpassive smokers, which may be related to a lower extent of exposure in this population.

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FACTORS ASSOCIATED WITH EXCLUSIVE BREASTFEEDING TO 6 MONTHS AMONG CANADIAN INUIT: RESULTS FROM THE INUIT HEALTH SURVEY FOR CHILDREN

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Introduction Inuit Canadians are less likely to initiate breastfeeding compared to other Canadians, although they are more likely to practice exclusive breastfeeding to 6 months. The objective of the present research is to identify factors associated with practicing exclusive breastfeeding to 6 months among Inuit Canadians.

Methods We used the Inuit Health Survey for Children, a crosssectional, population based survey of pre-school aged Inuit children to identify factors associated with exclusive breastfeeding to 6 months. The survey was administered in 16 communities in the territory of Nunavut in 2007 and 2008. Caregivers of Inuit children ages 3 to 5 who lived in a participating community were randomly selected to complete the interviewer- administered questionnaire. Of the 537 caregivers successfully contacted, 388 participated and 242 initiated breastfeeding and were included in our analyses. We used a forwards, stepwise, weighted logistic regression procedure to calculate ORs and 95% CIs for selected variables.

Results Preliminary findings suggest that among those initiating breastfeeding, 24.8% (n=60) practiced exclusive breastfeeding to 6 months. Inuit Canadians who speak primarily non-traditional languages in the household (OR=0.47, 95% CI 0.27 to 0.87) and who report severe food insecurity (OR=0.67, 95% CI 0.30 to 0.97) were less likely to practice exclusive breastfeeding to 6 months in multivariable models.

Conclusions This is the first study to explore the role of food insecurity on breastfeeding practices among Canadian Inuit. This interesting finding deserves further exploration, particularly given the high prevalence of food insecurity in this population.

P1-472 | SOCIOECONOMIC STATUS AND SELF-RATED HEALTH: A NATIONWIDE STUDY FROM IRAN

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Introduction Little is known about the relationship between socioeconomic factors and self-reported health in developing countries such as Iran. As part of a large study on health perception in Iran this relationship was investigated.

Methods This was a nationwide cross sectional study. A random sample of individuals aged between 18 and 65 were entered into the study. Respondents were asked to rate their own present health status on a 5-point scale. The record of demographic and socioeconomic data included age, gender, education, marital status, employment, income, place of residence, and chronic diseases. Logistic regression analysis was used to estimate ORs and 95% CIs for indicating of the contributing factors to self-reported health.

Results In all 27883 individuals were studied. The mean age of the respondents was 32.7 (SD=11.8) years, 71.5% rated their health as good or better than good while the remaining 28.5% indicated their health less than good and poor. The findings showed that in addition to some demographic variables, the most contributing factors to poor self-rated health were: income [OR=2.81 for lower income], and presence of chronic diseases [OR=7.6, 95% CI 6.8 to 7.9]. Living in smaller towns was found to contribute to a better self-reported health [OR=0.89, p=0.01].

Conclusion The findings indicated that there were inverse relationships between self-reported health and socioeconomic and ecological factors. The results suggest that social determinants of health play an important role in people's evaluation of their own health status. Policies need to address these concerns.