

P2-473 PRESENT TREND OF CERVICAL CANCER SCREENING IN BHARATPUR, NEPAL

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Introduction According to Alliance for Cervical Cancer Prevention (ACCP) 2004, cervical cancer is the most common form of cancer among women in developing countries. According to hospital based data, in Nepalese women it is the most common cancer. Pap smear is the very significant screening test for reduction of incidence and mortality from cervical cancer. WHO recommends high coverage (80%) and screening of the population at risk is utmost importance but many developing countries have failed to accomplish this.

Objective To evaluate cervical cancer screening coverage of women in Bharatpur.

Methods Population based cross sectional study was done from October 2006 to March 2007. 1547 ever married women aged 15–59 were selected with cluster randomisation procedure from Bharatpur municipalities. Cervical cancer screening was conducted in collaboration with IARC, France and cancer hospital in Bharatpur. Ethical clearance was sought from Nepal Health Research council. Face to face interviews were performed using a standard questionnaire to elicit information about number of Pap test in the past that they had.

Results Our study result for women who had Pap smear taken at least once in their lifetime showed 29% for 405 women who are age group 16–29 and 46.6% for 446 women with age group 30–44.

Conclusion Present opportunistic cervical cancer screening in Bharatpur is directed towards screening significant proportion of women with less risk. This should be discouraged and focus on risk group of women with 35–45 years of age.

P2-474 FAMILIAL PREDICTORS OF VARIABILITY IN PRE-SCHOOL CHILDREN'S HEALTH: THE LIFEWAYS CROSS GENERATION COHORT STUDY

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Introduction The child's health in first 5 years of growth has critical adult and intergenerational consequences. Material, psycho-social and lifestyle factors are principal pathways determining health inequalities in children, and families constitute significant contributory micro-ecosystems. We examined the relationship of familial demographic, social and behavioural predictors with self-reported health (SRH) by mothers of their children, followed prospectively from ante-natal recruitment. SRH has been established as a valid measure of morbidity.

Methods Of 1082 original birth families, 547 mothers responded, when children averaged age 5, at school entry point. Univariate associations were first analysed between SRH of children and 4 groups of characteristics (family-related, child-related, mother-related and father-related). A multivariable logistic regression analysis then re-examined the statistically qualifying predictors.

Results In univariate analysis, the following were associated with rating of child's SRH as excellent or very good: families where father participated also in the study [OR (95% CI)=2.1 (1.0 to 4.3)], families not entitled to means-tested healthcare [OR (95% CI)=2.1 (1.0 to 4.3)], families with high weekly household income [OR (95% CI)=3.0 (1.6 to 5.9)], mothers' own SRH positive [OR (95% CI)=5.1

(2.6 to 9.9)], mothers consuming lower energy diet [OR (95% CI)=2.2 (1.1 to 4.3)], fathers' own SRH positive [OR (95% CI)=3.0 (1.5 to 6.0)], and fathers not smoking [OR (95% CI)=2.2 (1.1 to 4.4)]. In the final multivariable model ($\chi^2=45.3$, df=17, N=353, p<0.001) four variables remained predictive of favourable SRH of children: mothers' SRH positive [OR (95% CI)=6.2 (2.1 to 17.7)], mothers consuming lower energy diet [OR (95% CI)=3.6 (1.3 to 10.3)], family with high weekly household income [OR (95% CI)=3.4 (1.1 to 10.4)], and fathers' employment status positive [OR (95% CI)=5.4 (1.0 to 28.2)].

Conclusion The findings substantiate the familial influence on child health during the early developmental stage, which is socially patterned and related particularly to economic circumstances.

P2-475 HIV RISK BEHAVIOUR AND PREVALENCE OF SELF REPORTED SEXUALLY TRANSMITTED DISEASES AMONG MEN WHO HAVE SEX WITH MEN, REGISTERED WITH SELECTED NON-GOVERNMENTAL ORGANISATIONS IN DELHI, INDIA

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Introduction In India HIV/AIDS rates are almost stable in high risk groups except among Men who have Sex with Men (MSMs). There are scarce data available on MSMs. The objective of this study was to assess knowledge, practices and risk behaviours and self-reported STIs among MSMs.

Methods A cross-sectional survey was conducted in three non-governmental organisations working with MSM in Delhi. 250 MSMs were interviewed over a period of one year. This study examined MSM in the last six months.

Results The mean age of study participants was 24.6 years (SD \pm 5.8); 20% were adolescents. Most of the participants were well aware of the various routes of transmission of HIV/AIDS. However only half were using condoms. The number of sexual partners ranged from 1 to 20 per month. Nearly one-third (38.4%) of participants were involved in sex for pay. The prevalence of self-reported STIs was 41.2%.

Discussion A substantial proportion of participants were young, literate, often married. Reported knowledge in this study was higher than that in previous studies which was reflected in the practice of participants. NGOs have played a significant role in promoting safer sexual practices.

Conclusion The participants had adequate knowledge about HIV prevention. However, prevention practices were poor. A significant proportion of the MSM experienced one or more episode of the STIs. Perceived risk of getting HIV was high.

P2-476 ASSOCIATION BETWEEN MATERNAL EXPOSURE TO BIOMASS SMOKE AND BIRTH WEIGHT: AN ANALYSIS OF 2005–2006 INDIA DEMOGRAPHIC HEALTH SURVEY DATA

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Introduction Observational epidemiological studies and a systematic review have consistently shown the association between maternal exposure to biomass smoke and reduced birth weight.

Methods We analysed 47 139 most recent singleton births of 2005–2006 India DHS. Information on birth weight was obtained from health card or mothers' recall. "size of baby" at birth in a fivefold classification was re-coded as "smaller than average" and

“average or larger” to represent low birth weight and normal birth weight respectively. The fuel type was classified as high pollution, and low pollution. Univariate and multivariate logistic regression models were developed using SURVEYLOGISTIC procedure in SAS system in which child factors, maternal factors and demographic factors were added step-by-step to the main exposure variable.

Results Babies not weighed at birth in households using high and low pollution fuels was 71.4% and 26.1% respectively. Missing information on size at birth was only 6.4%. The results for association between high pollution fuels use and low birth weight were as follows: univariate OR was 1.41 (95% CI 1.27 to 1.55). Adjusted ORs in models 1, 2, 3 were 1.41 (1.29, 1.57), 1.21 (1.06, 1.32), 1.07 (0.94, 1.22) respectively. Gender, birth order, mother's BMI, haemoglobin level and education were significant throughout. In model 3, there was no association between birth weight and fuel type but wealth index and religion were significant.

Conclusion Our results are consistent with previous observational studies. The effect size of association between size at birth and exposure to biomass smoke during pregnancy was small and was masked by wealth index and religion.

P2-477 THE ASSOCIATION OF ADIPONECTIN GENE POLYMORPHISMS (+45T>G AND +276G>T) WITH ADIPONECTIN LEVELS BUT NOT WITH CHARACTERISTICS OF THE INSULIN RESISTANCE SYNDROME IN NORTHERN INDIA

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Introduction Adiponectin, the major adipocyte secretary protein, improves insulin sensitivity and possesses anti-inflammatory and anti atherosclerotic properties. In the present study, we investigated the association of adiponectin gene (APM1) +45T>G (rs2241766) and +276G>T (rs1501299) polymorphisms with serum adiponectin levels and metabolic parameters of the insulin resistance syndrome, in northern Indian population.

Methods A case control study was conducted with 642 subjects (309 obese subjects (BMI \geq 30) and 333 non-obese (BMI<30) subjects) to examine the association of adiponectin gene (APM1) polymorphisms with serum adiponectin levels and other metabolic parameters in northern Indian population. All subjects were genotyped through PCR-RFLP. Insulin, leptin, lipid profile and glucose levels were estimated using standard protocols.

Results The variant G-allele of SNP +45T>G and T-allele of SNP +276G>T were associated with significantly higher serum adiponectin levels ($p=0.0001$ and $p=0.0001$, respectively). The most frequent haplotype TG defined by both loci showed a strong association with lower serum adiponectin concentrations, higher levels of insulin, and HOMA-IR index.

Conclusion We observed a strong association of the APM1 45–276 genotypes and TG (rs2241766, rs1501299) haplotypes with adiponectin levels in healthy northern Indians. The TG haplotype associated with higher levels of insulin, HOMA-IR index, and lower serum adiponectin concentrations.

P2-478 WITHDRAWN

P2-479 DETERMINANTS OF FUNCTIONING AND DISABILITY IN AGED PERSONS: RESULTS FROM THE KORA-AGE STUDY

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Introduction Increasing attention is paid on functioning and disability as determinants of autonomy and independent living in aged persons. Yet, determinants of functioning and disability have not been studied extensively in this age group. Most studies took a disease-oriented approach by investigating populations with specific health conditions. So far, few representative findings on the prevalence of disability and its determinants in aged persons are available. The objective of our study is to examine distribution and determinants of functioning and disability in aged persons in the community.

Methods The data originate from the MONICA/KORA study, a population-based cohort study established in 1984 in Germany. Survivors of the original cohorts aged 65 years and above were examined from 01/2009 to 12/2009. Disability was assessed with the Health Assessment Questionnaire. Logistic regression was used to estimate raw effects and conditional inference trees with Bonferroni adjusted p-values were used to identify high risk groups.

Results We analysed a total of 4127 individuals (51.2% female) with a mean age of 73.3 years (SD=6.1). Disability was present in 44.7% of all individuals (54% for women, 35% for men). Prevalence of disability increased from 28.8% for 65–70 year old individuals to 75.9% for individuals over 80. Prevalence was 31.6% in individuals without comorbidity, else 55.9% (RR=1.77). High risk groups were found among all age groups.

Conclusion Minimal disability is highly prevalent in aged persons. The results give a representative overview of the prevalence and determinants of disability in the aged in the German population.

P2-480 INTERNATIONAL COMPARISON ON THE VALIDITY AND THE RELIABILITY OF THE “INTERNATIONAL AIDS QUESTIONNAIRE”

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Introduction “International AIDS Questionnaire (IAQ)” was originally proposed by Davis in 1998 and has been used in Australia, China and the U.S. The IAQ enables to assess adolescent's awareness to HIV/AIDS by four factors; (1) misconceptions about HIV transmission, (2) prejudice/attitudes towards infected people, (3) personal risks and (4) factual knowledge about HIV/AIDS. The objective of this study was to validate the IAQ among Japanese adolescents.

Methods We developed the “International AIDS Questionnaire Japanese Version (IAQ-J)” by using back translation technique. IAQ-J was assessed on a sample of national high school students and private high school students from Eastern Japan. We conducted Exploratory and Confirmatory Factor Analysis and calculated Cronbach's α for total and each factor.

Results The results indicated that four-factor model was suitable to IAQ-J (GFI=0.903, AGFI=0.872). This result coincides to Chinese and English versions of IAQ. Total Cronbach's α of IAQ-J was 0.79. However, Cronbach's α for the “attitudes” factor was 0.66, indicating less reliable results. More than 70% of the students answered “no idea” to one question from the “attitudes” factor. After the exclusion of this item, Cronbach's α of the “attitudes” factor was raised to 0.75. This may indicate that this question was not appropriate for Japanese. Cronbach's α of the “factual knowledge” of IAQ-J was higher than other language versions of IAQ.

Conclusion IAQ is a simple and useful tool to assess the awareness on HIV/AIDS among adolescents. We recommend more language versions are tested and shared for international studies to prevent HIV/AIDS.