

with the PHQ-9, and classified as mild or moderate to severe. Ordinal logistic regression was used to assess statistical associations between depression and sex, age, illiteracy, family income and centre.

Results 1020 participants were included, 446 in São Paulo and 574 in Manaus, of whom 248 (24.3%; 95% CI 21.7 to 27.1) were classified as mild depression and 93 (9.1%; 95% CI 7.4 to 11.1) as moderate to severe depression. The prevalence of mild and moderate to severe depression was very similar in the two centres. Women were almost twice as likely as men to present with depression of any severity. We did not find any association between depression and age, illiteracy or family income.

Conclusion Depression is highly prevalent among primary care clients, especially women. Mental healthcare must be integrated into primary care in order to reduce the treatment gap for depression.

P2-528 ADULT PERCEPTIONS OF YOUTH MENTAL HEALTH ISSUES IN A CANADIAN PROVINCE

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Although 15% of Canadian youth experience mental health problems, barriers to disclosure and treatment exist. This population-based study assessed adult's beliefs about the prevalence of mental illness among youth, treatment for mental illness, and comfort interacting with youth with moderate mental health problems. In 2010 a random sample of 1203 adults residing in Alberta Canada were surveyed. χ^2 Tests and t-tests were used to understand responses by demographic factors. Logistic regression was used to determine factors predictive of Albertans comfort in interacting with youth with moderate mental health problems. Twenty percent were able to correctly identify the prevalence of youth mental health problems. Over 50% stated that they believed that <10% of youth with mental health problems received treatment. Approximately 70% of the sample reported they would be comfortable interacting with youth with moderate mental health problems in work, school, social and community settings. Consistent predictors of comfort interacting with youth with moderate mental health problems included: being between the ages of 18–24, high school completion, Caucasian ethnicity, and annual household income >\$40 000/year. There are meaningful gaps in Albertans understanding of the prevalence of youth mental health issues, but the majority of adults would be comfortable interacting with youth with moderate mental health problems. Many respondents identified that youth with mental health problems may not be receiving treatment. Increased public awareness about the prevalence and detrimental impact of youth mental health issues may help policy makers allocate resources to effective screening and treatment for youth with mental health concerns.

P2-529 CHILDREN LIVING IN POOR HYGIENE AND SANITATION CONDITIONS: WHY DOES IT MATTER?

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Background It is estimated that at least 200 million children, mostly from developing countries, suffer from developmental delays. Poor hygiene and sanitation conditions are known to influence growth faltering and increased risk of morbidity and mortality, yet little is known about role of these conditions on child growth and development. The study aims to contribute to an understanding of the relationship between family hygiene, sanitary conditions and psychomotor development in the first 3 years of life.

Method A cross sectional household survey was conducted in urban and rural Sindh, Pakistan, by trained personnel. Children aged <3 (n=1244) were assessed at home visits using (1) Bayley's Infant Developmental Scale for psychomotor development; (2) anthropometric status, and (3) socio-economic, hygiene and sanitation conditions via maternal interview. Socioeconomic, hygiene and sanitation indices are created using principal component analyses

Results Rural areas are highly correlated with hygiene index (HI) and sanitation index (SI), as compared to their urban counterparts. Age and sex adjusted SI is highly correlated with socioeconomic index (SEI). Multilevel modelling analysis showed that SI is significantly associated with child's delayed development, stunting and being underweight; while HI is associated with underweight and stunting status of children, independent of SEI and rural-urban neighbourhood.

Conclusion Due to a strong association between hygiene and sanitation conditions and development, recognition should be given to the growth and developmental needs of children living in such conditions.

P2-530 SOCIODEMOGRAPHIC PROFILE AND EFFICACY OF 4 ART REGIMES IN HIV PATIENTS REGISTERED AT AN ART CENTER-A DEVELOPING NATION SCENARIO

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Introduction People living with HIV in 2008 worldwide are 33.4 million with 2.7 million new cases and 2 million deaths. Southeast Asia has 4.7 million HIV patients. Five countries account for majority of the HIV infections-India (2.31 million), Thailand, Myanmar, Indonesia and Nepal. Hence we sought to study the sociodemographic profile of HIV patients registered at ART center in Mysore. Cluster Designation 4 (CD4) count at the initiation of ART and 6 months thereafter were compared.

Methods The study sample was taken from the records of the ART center at Krishnarajendra hospital, Mysore that consisted of 1702 patients on ART from June 2007 to March 2010. Socioeconomic & demographic details, sexual practices, HIV status (WHO staging) & CD4 counts at the initiation and after 6 months of treatment were collected.

Results Majority of the patients on ART (77%) were males between 21 and 40 years, educated heterosexuals who mainly presented with fever and weight loss. 68% of spouses knew their HIV status and among them 36% were HIV positive. Majority of them were categorised under stage 3. There was an improvement in mean CD4 count by around 200. ZDV +LMV+NVP regime showed a significant increase in mean CD4count over the other three regimes and there was statistically significant correlation.

Conclusion Most of the HIV patients were young educated heterosexual males and showed a significant increase in the CD4 cell count after 6 months of antiretroviral therapy.

P2-531 A COMPARATIVE STUDY OF FACTORS AFFECTING PSYCHOLOGICAL WELL-BEING OF URBAN AND RURAL ADOLESCENTS

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Aims and Objectives We have limited studies and data allowing us a bleak tunnel vision into the world of adolescent mental health. A comparative study was initiated to have a better understanding of

the determinants affecting adolescent psychological well-being. **Methodology:** In Mysore District, India, 319 adolescents 16–18 yr, were from urban and rural 11th and 12th grades. A structured questionnaire based on the “General Psychological well being scale” was used.

Results No significant difference in the scores of urban and rural adolescents [$v^2=1.12$, $df=3$, $p>0.05$]. Economic backwardness positively correlates with the psychological stress in adolescents [$v^2=9.15$, $df=3$, $p<0.05$]. In grade 2, 64% reported difficulty in concentration compared to 10% in grade 5. [$v^2=47.01$, $df=2$, $p<0.001$]. There was no significant gender difference in the psychological score [$v^2=1.44$, $df=1$, $p>0.05$].

Conclusions Our study shows that there is no significant influence of urban and rural residence or gender on the psychological health of the adolescents. We conclude that the economic constraints on the adolescents were associated with lower psychological health. Lower psychological health is associated with decreased concentrating ability and thereby scholastic performance.

Recommendations The study also shows how a rapid screening technique can be incorporated into school health screening camps thereby enabling us to integrate mental health screening at an early stage into mainstream. The policies towards betterment of adolescent mental health should be directed towards their economic and academic needs than their areas of residence or gender.

P2-532 A COMPARATIVE STUDY OF FREQUENCY OF POSTNATAL DEPRESSION AMONG SUBJECTS WITH NORMAL AND CESAEREAN DELIVERIES

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Background Prevalence of postnatal depression (PND) is 12%–15%. Recent studies are equivocal about the earlier inference that PND is higher among cesarean than normal delivery.

Objective The aim of this study is to investigate the frequency of PND among the Indian women and the association between the mode of delivery and PND.

Material and Method Fifty subjects each; having delivered normally and by cesarean section was chosen. All the women were within 3 months post delivery and could understand Kannada language. Those who consented were asked to complete the Edinburgh Postnatal Depression Scale (EPDS). Those found to have scores suggestive of depression on EPDS were assessed for depression according to ICD-10. The data were analysed using paired t test and χ^2 test.

Conclusion Among Post caesarean subjects, depression was diagnosed in 20% ($n=10$) as compared to 16% in subjects that delivered normally. However there was no significant difference in the frequency of depression among the two groups. Due to the small sample size the results cannot be generalised.

P2-533 AN EVALUATION OF THE FIRST GENDER-SPECIFIC SMOKING CESSATION COUNSELLING PROGRAM FOR FEMALE SMOKERS TO QUIT IN HONG KONG: A 3-YEAR FOLLOW-UP

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Introduction Woman smoking is a complicated addiction, and they always find smoking cessation difficult. A nurse-led gender-specific

smoking cessation counselling program was initiated to address these problems in Hong Kong. This study aims to test the efficacy of the program at a 3-year follow-up.

Methods A gender-specific smoking cessation programme has been set up for female smokers in 2006. Women smokers aged 15 years or above and smoked in the past month were recruited to receive 3-sessions of individualised face-to-face stage-matched smoking cessation counselling at baseline, 1-week, and 1-month. They were followed up at 6 month, 1 year, and 3 years to assess their smoking status. We reported the quit rate and compared changes in their cigarette consumption from baseline to 3 year.

Results From November 2006 to November 2010, we received over 800 inquires and provided smoking cessation counselling to 386 eligible female smokers. A total of 174 participants were eligible for follow-up at 3 years, and 130 (74.7%) were successfully contacted. Participants aged 36 years (range: 15–74), had smoked for 18.2 years ($SD=8.9$) with a mean daily consumption of 15.4 cigarettes ($SD=8.8$). Using intention-to-treat analysis, the self-reported 7-day point prevalence quit rate was 11.4% (44/386). Among those continued to smoke ($n=84$), the cigarette consumption reduced from 16.0 ± 9.4 to 11.9 ± 8.0 ($p<0.001$) on average; and 29.8% ($n=25$) had reduced cigarette consumption by at least half.

Conclusion The gender-specific cessation programme seemed to be effective in promoting smoking cessation and reduction among Chinese female smokers in Hong Kong.

P2-534 CULTURAL PRACTICES AND BELIEFS OF PENIS ENLARGEMENT AND IMPLANT IN PAPUA, INDONESIA

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Papua Province has the highest prevalence of HIV/AIDS in Indonesia and in 2009, 94.4% cases were transmitted through heterosexual intercourse. High risk sexual behaviours, including multiple sex partners, early initiation of sexual activity, penis enlargement and implant, have been widely practiced among Papuan men. These practices have been passed from generation to generation through sexual culture and beliefs without understanding the health consequences that it might cause. The uses of “wrapping leaves”, such as *Dendrocnide stimulans* and *Eurycoma longifolia*, dried leech oil, tree sap or silicon injection, as well as implanting a metal or plastic subcutaneously to enhance the erect phallus are commonly found among Papuan men. The aim of this study was to explore various types of penis enlargement and implant, the extent and the reasons of the practice, health consequences and treatment seeking behaviour. We used qualitative method, including in-depth interview among men, their partners, medical and non-medical profession, as well as observation. The first author is a medical doctor stationed in Jayapura and has been documenting cases of penis enlargement and implant in his clinic.

Results Indicated that the practice is carried out in unhygienic condition. The practice was usually started in teenage years either by traditional healer, with a help from a friend or self. Almost all men who had penis enlargement or implant visited the doctor when they experienced severe inflammation, infection, penile tissue damage or other medical complication that hindered their reproductive function and made them more susceptible to HIV/AIDS and other STD infection.