KNOWLEDGE OF HIV/AIDS AND REPRODUCTIVE HEALTH AND SELF-REPORTED SEXUAL BEHAVIOURS AMONG SENIOR HIGH SCHOOL STUDENTS IN PAPUA AND WEST PAPUA PROVINCES, INDONESIA

SP5-10

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Papua and West Papua Provinces have the highest prevalence of HIV/AIDS in Indonesia. In 2009, 94.4% HIV/AIDS cases in Papua Province were transmitted through heterosexual intercourse and HIV/AIDS cases among 15–19 years of age were in the fourth rank. A study in 2007 revealed 46.9% Junior High School students in the province had misconception on HIV/AIDS transmission and prevention. Previous studies also found high-risk sexual behaviours in some Papuan cultures, including multiple sex partners and early initiation of sexual activity. These features motivated the first author to carry out the 2009. Reducing the Risk of HIV/AIDS: Intervention Trial for Young Papuans Study. 16 Senior High Schools were randomly selected and agreed to participate to either receive the HIV/AIDS and reproductive health program or act as a control group. Students of Year 11 from the selected schools (N=1082) took a pre test and 2 months later, a post-assessment test. The aim of this study was to analyze the association between knowledge of 25 HIV/AIDS and reproductive health questions on the pre test and the self-reported sexual behaviours before the intervention. We also used a qualitative method to explore perspectives and experiences on sexuality. Results showed more than 50% students had limited knowledge on HIV testing, safe sex and STDs prevention. Although female students had better knowledge test and demonstrated less sexual intercourse experiences (28.5% compared to 46.5% of males), they carried a more unfavourable condition related to the impact of premarital sex, including pregnancy and unsafe abortion.

HIGHLAND MALARIA OUTBREAK IN HOMEYO DISTRICT, PAPUA PROVINCE, INDONESIA: AN ENTOMOLOGICAL INVESTIGATION

SP5-11

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The first highland malaria outbreak and associated deaths was reported in May 2010 from several villages in Homyoeo District, Papua Province. Homyoeo is 1900 M above sea level with 15–25 C air temperature, an uncommon condition for mosquitoes to breed. The epidemiological and parasitological survey in June 2010 conducted by the Papua Health Department found Plasmodium Falciparum serotype ogawa caused the EAM cholera-outbreak affecting mostly young adult-males. Drinking water from contaminated River-A was the major risk-factor. Boiling or chlorination of water was initiated based on our recommendations and this controlled the outbreak.

SOCIOECONOMIC ASPECTS ASSOCIATED TO MALARIA IN PREGNANCY IN COLOMBIA

SP5-13

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Background Income, education, work and access to prevention measures have been identified as socioeconomic aspects related to malaria. For groups at risk such as pregnant women these aspects are little known, particularly outside Africa. The objective of this study was to determine socioeconomic aspects of pregnant women associated to malaria in a Latinamerican region.

Methods A case-control study was conducted from April 2005 to December 2006 in unstable transmission malaria region. Case was pregnant who had positive thick blood smear for Plasmodium during antenatal care or delivery. Data were collected by physician using a structured questionnaire that enquired about education,
employment and income, housing and basic services, social security and access to malaria prevention measures. Data were analysed using SPSS version 17.0.

**Results** 115 cases and 63 controls were interviewed. Income <1 USD per day, <5 years of school, marital status single, single-parent family, without social security and no bed-nets in house were not associated to malaria in pregnancy in bivariate analysis (p>0.05). Pregnant women who had a farmer as a family member (OR 2.39, 95% CI 1.12 to 5.13), bodies of water around the house (OR 4.66, 95% CI 2.24 to 9.66), house roof made of palm tree leaves (OR 2.45, 95% CI 1.16 to 5.15) were more likely to have had malaria in multivariate analysis.

**Conclusion** In rural areas of Colombia where poverty is very common quality of house and access to basic public services explain better social differences of pregnant women that are related with malaria frequency.

### SP5-14 A STUDY TO DETERMINE THE KNOWLEDGE AND PRACTICE OF FOOT CARE IN PATIENTS WITH CHRONIC DIABETIC ULCERS
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**Introduction** Diabetic foot ulcers account for many hospital admissions and is a major cause of amputations. This is preventable by effective identification, education and preventive foot care practice.

**Objective** Determine the level of knowledge and practice of foot care among patients with chronic diabetic foot ulcers.

**Methodology** Individuals with diagnosed diabetic foot ulcers (n=110) were selected from National Hospital of Sri Lanka for this descriptive study. They were given an interviewer administered, pre-tested questionnaire. Patient perceptions of foot care were enquired. A scoring system ranging from 0 to 10 was employed to analyse the responses given for level of knowledge and practice of diabetic foot care.

**Results** Mean age was 58.4 years (SD ±8.6) and 57.3% were males. Non-healing ulcers were present among 82.7% and amputations amounted to 38.2%. The control of diabetes was poor in 60%. Regarding foot care knowledge, the mean score was 8.37, 75.5% had scored above mean and 52.7% were aware of all principles of foot care. Regarding foot care practices, the mean score was 4.55, 47.5% participants had scored below mean and 22.7% did not practice any foot care principle and hence scored 0. A Statistically significant difference exists between the foot care knowledge and practice scores (p<0.001, z=-8.151). 51% have not been educated prior to the occurrence of complications.

**Conclusion** Results demonstrate a satisfactory knowledge on diabetic foot care but practices of preventive techniques were unsatisfactory. Good patient follow-up to increase compliance would help to improve this situation.

### SP5-15 "KNOWLEDGE-ACTION GAP" AMONG BANGLADESHI TYPE 2 DIABETIC SUBJECTS
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**Introduction** The association of knowledge against actual practice has not been properly investigated in the BIRDEM (a tertiary care hospital of BADAS). The aim of this study was to assess the level of knowledge about type 2 diabetes mellitus (T2DM) and to see the association between knowledge and action among T2DM patients.

**Methods** An analytical cross-sectional design. A total of 500 patients withT2DM (M 58%, age 49.4±8.8 years) were selected from the outpatient department. Knowledge score was categorised as poor (<45%), fair (45–60%) and good (>60%) on the basis of education criteria in our 10th and 12th grade public examinations.

**Results** The levels of knowledge were poor in 45%, fair in 47% and good in 9% of the study subjects. Only 12% subjects had good level of HbA1c. Among them the levels of knowledge were poor in 44%, fair in 48% and good in 8%. About 24% subjects belonged to fair HbA1c level and the levels of knowledge were poor in 59%, fair in 52% and good in 9% among these subjects. More than half of the subjects (64%) had poor glycaemic status. In this group the levels of knowledge were poor in 46%, fair in 45% and good in 9%. A significant negative association was found between total knowledge score and HbA1c level (r=-0.08, p=0.05).

**Conclusion** There is a knowledge-action gap in Bangladeshi T2DM subjects which may indicate largely ineffective education programs. Patient empowerment may facilitate better control of diabetes.