Background Juveniles who are exposed to a street life are at high risk for drug addiction, pregnancy, sexually transmitted infections (STI), among others due to their biological, psychological and social vulnerabilities.

Methodology A survey was conducted in Guatemala City, with the purpose to determine risk behaviours and HIV and syphilis prevalence among juvenile delinquents and in family abandonment situations. A stratified consecutive sampling method was used; a tablet was used to conduct a standardised face-to-face questionnaire, and both pre-consent from legal guardians as well as assent by the minor were required. HIV and Syphilis screenings were conducted. Proportions and confidence intervals (CI 95%) adjusted for the sampling type were calculated using STATA 11.1.

Results 526 participants ages 15 to 17, 72% male and 28% female were enrolled. 58% (ICR 50.1–64.9) began having sexual relations between 10 and 14 years old, 57% (ICR 29.7–44.1) used a condom at first sexual act; only 24% (ICR 18.2–29.6) and 12% (ICR 9.11–15.0) had access to free condoms and HIV tests in the past year. 81% (ICR 75.7–85.8) reported currently being sexually active, 79% (71.2–85.67) had a stable partner, 20% (13.71–28.14%) occasional partner, 45% had HIV VL below 50 copies and 80% had CD4 upper than 500 copies. 45% had HIV VL below 50 copies and 80% had CD4 upper than 500 copies.

Conclusions High pregnancy and illicit drug use proportions were reported, as well as low HIV and syphilis prevalences. Strengthening HIV prevention interventions, with an integral focus on reproductive sexual health adapted to this life stage and street context of this population, is necessary.

Conclusions The number of infected women has increased (2 years ago in same time the number of infected women was lower, 5% of total cases). So we faced risk of third episode of HIV/AIDS from IDUs to sexual contact in Iran right now. The majority of women were infected by their husband. In result we must notice bridge community and their role for spreading HIV infection in general population. It is vital that women be noticed as leader of HIV/AIDS campaign. We need to upgrade prevention programmes like training, counselling and harm reduction services for vulnerable groups especially women.
A PAP in the last year before this study was available in 30% of cases. The correlation of screening techniques with the three methods proposed: diagnostic cytology, capture hybrid and colposcopy was made in 169 women.

Prevalence of HPV infection was 39% (104 positive/165 negative). Correlation between Cyto-colposcopic and Hybrid Capture test was:

- hybrid capture (−) cytology/colposcopy (+) = 2/169
- hybrid capture (+) cytology/colposcopy (−) = 15/169
- hybrid capture (+) cytology/colposcopy = 52/169
- hybrid Capture (−) cytology colposcopy (−) = 84/169
- hybrid Capture (+) indeterminate cytology and colposcopy (−) = 19/169
- hybrid Capture (−) indeterminate cytology and colposcopy (−) = 17/169

Conclusions Despite that it was not a large sample, the negative predictive value of hybrid captures for HPV detection was 98% in this population.

We recommend the incorporation of the hybrid capture as screening technique in all women with HIV regardless of the age and all those with negative cytology and positive hybrid capture for the early detection of cervical lesions.

**P3.048**

**HIV IN CHILDREN IN A GENERAL POPULATION SAMPLE IN SOUTHERN AFRICA: PREVALENCE, CAUSES AND EFFECTS**


E L Pfaller, 1C Nyamukapa, 1J W Eaton, 1Rutsindri, 1G Chawira, 1S Munyati, 1L Robertson, 1S Gregson. 1Imperial College London, London, UK; 2Biomedical Research and Training Institute, Harare, Zimbabwe

Background The epidemiology of HIV in children in sub-Saharan Africa remains poorly understood. To help address this gap we describe the prevalence, causes and effects of HIV in children (aged 2–14 years) and adolescents (aged 15–17 years) in a southern African population.

Methods General population survey of 3,390 children and 2,130 adolescents in Manicaland, eastern Zimbabwe. Data on possible socio-demographic correlates of HIV prevalence, sources of infection, and effects of HIV infection in children were analysed using multi-variable logistic regression. The contribution of horizontal transmission was assessed by investigating the survival and HIV infection status of mothers of infected children.

Results HIV prevalence was 2.15% (75/3,390) in children and 1.97% (42/2,130) in adolescents. Infection levels did not differ by sex, age, socio-economic status, location or religion. The mothers of most infected children were either deceased or HIV-positive which is consistent with MTCT being the primary mode of transmission. A linear trend was observed among proportions of mothers of infected children.

Conclusions Despite that it was not a large sample, the negative predictive value of hybrid captures for HPV detection was 98% in this population.

We recommend the incorporation of the hybrid capture as screening technique in all women with HIV regardless of the age and all those with negative cytology and positive hybrid capture for the early detection of cervical lesions.

**P3.049**

**HIV/AIDS IN A PUERTO RICAN WOMEN POPULATION: PSYCHOSOCIAL, RISK BEHAVIOUR AND LIFESTYLE**


D M Fernandez-Santos, A M Mayor, E Santiago, E Rios-Olivares, R F Hunter-Mellado. Universidad Central del Canibe, Bayamón, PR, United States

Background This study describes psychosocial, risk behaviour and lifestyle features of HIV/AIDS women in Bayamón, PR. It also compares the psychosocial, behavioural and lifestyle profile changes of this cohort according to their entry year to the registry (2000–2010).

Methods Baseline data was analysed from a prospective survey of HIV/AIDS-infected women reported to the HIV Central Registry at the Universidad Central del Caribe, RCM1 Program from 2000 to 2010. The study group was composed of 499 adult women, with AIDS or HIV infection reported upon arrival at the University Hospital Ramon Ruiz Arnau or the Bayamón Regional Immunology Clinic. Statistical analysis included frequencies, percentages, Chi-square, Chi Square for linear trend and Fisher Exact test.

Results A large proportion of women were under 46 years (71.4%). Most reported not having graduate studies (98.8%), being unemployed (70.9%), not having a partner in the last year (57.0%) and having children (88.0%). The most frequent sexual risk behaviour was heterosexual activity (98.8%), where 71.5% reported hetero-sexual activity in the last year and 14.4% reported prostitution activity. Risky lifestyles reported by women included: smoking tobacco (64.7%), use of alcohol (38.3%), use of psychoactive substances (36.5%) and intravenous drug usage (IVDU) (36.5%). Most frequent psychosocial factors reported were: episodes of depression (32.2%), episodes of impulsivity (55.4%), isolation (44.6%), suicide attempt (23.7%), time served in prison (20.3%), voluntary miscarriage (17.7%) and having been sexually assaulted (7.1%). An increasing linear trend (p < 0.05) was observed among proportions of women that reported using psychoactive substances, attempting suicide and having been sexually assaulted.

Conclusions Women reported a wide spectrum of risky psychosocial, behavioural and lifestyle activities. Increasing changes among these were observed over the last decade. This effort was made possible by NIH grant number 8G12MD007583 and BUISMD007587 from the National Institute on Minority Health and Health Disparities.

**P3.050**

**HIGH-RISK UROGENITAL HPV INFECTIONS IN PARAMARIBO, SURINAME: PREVALENCE AND RISK FACTORS AMONG ETHNIC DIVERSE WOMEN**


J J van der Helm, 1D Geraets, 1A Gronberg, 1K Quint, 1L Sabao, 1H de Vries. 1Health Service Amsterdam, Amsterdam, The Netherlands; 2DDL Diagnostic Laboratory, Bjoovik, The Netherlands; 3Dept. of Public Health Ministry of Health Suriname, Paramaribo, Suriname; 4Department of dermatology LUMC, University of Leiden, Leiden, The Netherlands; 5Dermatological Service, Ministry of Health Suriname, Paramaribo, Suriname; 6Academic Medical Center, University of Amsterdam, Amsterdam, The Netherlands; 7Centre for Infectious Disease Control, National Institute of Public Health and the Environment, Bilthoven, The Netherlands

Background and Aim: Cervical cancer is caused by high-risk (HR) Human Papilloma Virus (HPV) infections. The mortality rate of cervical cancer in Suriname is 8/100,000 per year. Current HPV vaccinations protect against cancers induced by HR-HPV 16 and 18, and are not yet available in Suriname. We estimated prevalence of, and risk factors for urogenital HR-HPV infections among women from five major ethnic groups in Paramaribo, Suriname in a pre-vaccination era.

Methods Between July 2009 and February 2010, women aged ≥ 18 years were recruited at a Family Planning clinic and STI clinic. Vaginal swabs were collected and general HPV detection was performed using the highly sensitive broad-spectrum SPF10 PCR and DNA enzyme immunoassay (DEIA). Subsequently, DEIA-positive samples were genotyped by the LiPa25 reverse hybridization assay (Labo Bio-medical Products, The Netherlands), targeting 25 different genotypes. Logistic regression analysis was used to identify determinants of HPV infection.