prevention of mother-to-child transmission (PMTCT) programme in the teaching hospital.

**Design** A cross-sectional survey of 236 HIV-positive and 162 HIV-negative postpartum women interviewed within 18 months of their expected delivery date in a public-sector health facility providing PMTCT services.

**Methods** Bi-variant analyses explored fertility intentions, and family planning knowledge and use by HIV status. Multivariate analysis identified socio-demographic and service delivery-related predictors of reporting a desire for additional children and modern family planning use.

**Results** HIV-positive women were less likely to report wanting additional children than HIV-negative women (8 vs. 49%, P < 0.001), and although a majority of women reported discussing family planning with a health worker during their last pregnancy (HIV-positive 79% vs. HIV-negative 69%, P = 0.0), modern family planning use remained low in both groups (HIV-positive 43% vs. HIV-negative 12%, P < 0.001). Condoms were the most commonly used method among HIV positive women (51%), whereas withdrawal was most frequently reported among HIV-negative women (19%). In multivariate analysis, HIV-negative women were 16 times more likely to report wanting additional children and nearly 85% less likely to use modern family planning. Women who reported making two or less antenatal care visits were 77% less likely to use modern family planning.

**Conclusion** Our results highlight success in provision of family planning counselling in PMTCT services. As family planning use was low among HIV-positive and negative women, further efforts are needed to improve uptake of modern methods, including dual protection, in the PMTCT settings.

---

**P2.174** Vaccination against HPV16/18 infection: impact on quality of life


**J Paavonen. Department of Obstetrics and Gynecology, University Hospital, Helsinki, Finland**

Genital human papillomavirus (HPV) infections and associated precancerous lesions decrease health-related quality of life (HRQoL). Since HPV vaccines protect effectively against these conditions we investigated the impact of HPV vaccination on HRQoL in young women five years after participation in a phase III HPV vaccination trial in comparison to an unvaccinated control cohort. A total of 4808 originally 16 to 17-year-old women had participated in the PATRICIA trial and received either bivalent HPV-16/18 vaccine or hepatitis A-virus (HAV) vaccine in 2004–2005. Unvaccinated adolescent women (n = 9602), from adjacent birth cohorts, consisted the control cohort. During 2009–2011, all participants received a questionnaire consisting of two generic HRQoL instruments (RAND36 and EQ VAS) and a disease-specific questionnaire (CECA10). We analysed responses to 1143 HPV-16/18 vaccinated, 980 HAV vaccinated-, and 3753 unvaccinated young women. The unadjusted mean outcome measures of the different HRQoL estimates were similar in the three different responder cohorts. In conclusion, five-years after vaccination the HRQoL of HPV-16/18 vaccinated young women did not differ from that of HAV-vaccinated or unvaccinated controls representing the general population. This was somewhat unexpected, but the study should be repeated after a few years.

---

**P2.175** Incidence and predictors of AIDS related opportunistic illnesses after initiation of HAART: results from a retrospective single-centred cohort study, Ayder referral hospital, Mekelle University, Ethiopia


'S Abebe, 'A Adenm, 'H H Brockmeyer, 'A Pothenhoff, 'J Coenenberg, 'E Bekele, 'A Skaletz-Rorowski, 'Y Adama. 'Department of Internal Medicine, College of Health Science, University of Mekelle, Mekelle, Ethiopia; 'Clinic for Dermatology, Venereology and Allergology, Ruhr-Universitat Bochum, Bochum, Germany; 'German STI-Society (DSTI), Bochum, Germany; 'German Competence Network for HIV/AIDS, Bochum, Germany; 'Department of Public Health, College of Health Science, University of Mekelle, Mekelle, Ethiopia

**Background** AIDS related opportunistic illnesses (OIs) have been major causes of morbidity and mortality before and to a lesser extent after the era of highly active antiretroviral therapy (HAART). Studies concerning their magnitude are available from different parts of the world, but are scarce in Ethiopia. The aim of this study was to determine incidence and predictors of AIDS related OIs after initiation of HAART.

**Methods** A hospital based retrospective cohort study was conducted among HIV patients aged ≥ 14 years who started HAART in Ayder referral hospital, Mekelle/Ethiopia, between January 2009 and May 2012. Simple random sampling was utilised to pick 548 participants, whose data was extracted, cleaned and analysed using SPSS version 16. OIs determinants and correlations were checked using multivariate binary logistic regression model, Odds-ratio and P-value. P < 0.05 was considered significant. Kaplan-Meier method was used to estimate OI free survival time after HAART.

**Results** Incidence of HIV related OIs after HAART was 7.5 cases/100 person-years. Oral candidiasis, disseminated tuberculosis, pneumonia and CNS toxoplasmosis were the leading OIs after HAART. Mean CD4+ count at initiation of HAART was 121 ± 21/µL, Viral-load wasn’t documented as it is determined rarely. The median OIs free survival time after HAART was 2 months (1.2–2.9). A bed ridden functional status (OR: 3.8, 1.7–8.4), presence of OIs before HAART (AOR: 2.8, 95% CI 1–6.9), non-adherence to HAART (AOR: 14.6, CI: 5.8–119), and low haemoglobin level were predictors for occurrence of AIDS related OIs after HAART (AOR: 6.8, 95% CI: 2.2–24.4).

**Conclusion** Incidence of AIDS related OIs after HAART was high. A bed ridden functional status, presence of OIs before HAART, non-adherence for HAART and low haemoglobin level were predictors for AIDS related OIs after HAART initiation. Patients with these risk factors need strict follow up to reduce the morbidity and mortality attributed to OIs.

---

**P2.176** Assessing syndromic management algorithms for the diagnosis of rectal chlamydia and gonorrhoeae among MSM clinic attendees from two cities in India


'P R Mugundu, 'P Narayanan, 'A Das, 'G Morineau. 'FH360, New Delhi, India; 'FH360, Bangkok, Thailand

**Background** Studies assessing algorithms for management of ano-rectal discharge (ARD) syndrome among men who have sex with men (MSM) are scarce. Performance of ARD management flow charts for the diagnosis of Neisseria gonorrhoeae (NG) and Chlamydia trachomatis (CT) was evaluated.

**Methods** Between 2008 and 2009, four MSM dedicated clinics, located in two Indian cities, enrolled attendees consecutively and provided follow-up visit during four months. Data collected at each visit included behavioural information, clinical data, and rectal swabs tested for NG and CT using Roche Amplicor. Eight ARD algorithms were assessed. Data were used to construct the best performing flowchart.

**Results** The 508 participants made a total of 868 clinic visits including 127 instances of rectal NG and/or CT. Among those instances of NG/CT, only one (0.8%) had ano-rectal complaint(s) and 12 (9.5%) had ano-rectal discharge, observed at clinical