Conclusion All targeted MSM immunisation scenarios tested were cost-effective by averting high costs related to each cancer case avoided and given the relatively low number of vaccine doses required within this population, compared to the male population at large.

017.5 IMPACT OF COMPREHENSIVE HIV/AIDS - YOUTH PEER EDUCATION PROGRAM WITH INTEGRATED 'LIFE SKILLS' AND 'COMMUNITY LINKS' COMPONENTS ON KNOWLEDGE, ATTITUDE AND BEHAVIOUR OF YOUTHS IN 65 SCHOOLS IN 2 DISTRICTS OF KARNATAKA STATE, INDIA

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Background Rapid physical and psychosocial development, wrong information, tendency to experiment and sociocultural sensitivity to discuss issues around sexuality make young people vulnerable to HIV. In 2009, young people aged 15–24 accounted for 41% of new HIV infections in people aged > 15. The objective of this evaluation was to analyse the impact of comprehensive HIV/AIDS Youth Peer Education Program (April 2008-March 2011) on knowledge, attitude and behaviour of targeted youths comparing with those without any such intervention.
Methods As part of evaluation in February–March 2011, a sample of 26 programme schools was chosen (confidence level of 95% and confidence interval of +/- 15%). One non-programme school was selected for every two sample programme schools. The multistage stratified systematic random sampling method was deployed for selection of students and self-administered structured questionnaires were given. Descriptive statistics, graphical representations and cross tabulation of relevant factors were used for data analysis. Also, z and chi - square tests were applied at relevant places.
Results Overall knowledge about HIV/AIDS was found significantly better in schools having peer education mechanism. Awareness on HIV testing centres was more among programme students (92%) in-comparison to non-programme student (62%). Most students from programme schools (99%) indicated positive attitude towards people living with HIV than non-programme students (39%). Adaptations of 'prevention methods' was high in programme students (91%) than in non-programme students (53%). Most of the programme students reported getting influenced to adopt safe sex practises (z-6.062, p-0.0001). Statistically significant no. of parents of programme students reported noticing improvement in inter-personal behaviour of their children (z-8.411, p-0.0001).
Conclusion Comprehensive youth peer education with integrated 'life skills' and 'community links' components can be the strategy for India and many other countries who are struggling for a comprehensive, culturally appropriate, sustainable and cost-effective strategy for adolescent/youth education on HIV/AIDS.

017.6 EXPANDED HIV TESTING PROGRAM IN STD CLINICS FAILS TO IMPACT DIAGNOSIS OF NEW HIV-POSITIVE CASES

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Background The Centers for Disease Control recommends routine HIV testing in clinical settings. The evidence for an increase in HIV diagnoses as a result of these testing programmes is inconclusive. We examined the North Carolina (NC) expanded HIV testing programme's impact on HIV testing and the diagnosis of new HIV-positive cases in sexually-transmitted disease (STD) clinics.
Methods The NC expanded HIV testing programme implemented routine, opt-out HIV testing in STD clinics in November 2007. All persons aged 18–65 who were tested for HIV in NC STD clinics July 2005-June 2011 were analysed. The monthly change in the number of HIV tests performed, number of new HIV-positive cases identified, and HIV positivity proportion per 1000 tests before and after the intervention were evaluated. Interrupted time series analysis with autoregressive components was used to account for underlying temporal trends and autocorrelation.
Results From July 2005-June 2011, 414,612 HIV tests were performed, yielding 1293 new HIV cases (0.3%). Prior to the intervention, the number of HIV tests performed increased by 60 tests per month (rate difference [RD] = 60.4, 95% confidence interval [CI]: 50.6, 70.2). However, after the intervention, the monthly increase in testing slowed to 42 tests per month (RD = 41.7, 95% CI: 36.8, 46.6). After the introduction of the intervention, neither the number of new HIV-positive cases identified nor the HIV positivity per month differed from expected case detection trends without the intervention (number of new HIV-positive cases: RD = –0.11, 95% CI: –0.33, 0.11; HIV positivity per 1000 tests: RD = 0.04, 95% CI:-0.001, 0.073).
Conclusion Despite the introduction of an expanded HIV testing programme in NC STD clinics, no change in HIV testing or HIV case detection was observed. A lack of evidence for programme yield in a clinical setting with high baseline levels of HIV testing questions the intervention's appropriateness.

O.18 - Diagnosis of sexually transmitted infections

018.1 MOLECULAR TECHNIQUES FOR DIFFERENTIATION OF THE *T. PALLIDUM* SUBSPECIES AND SPECIMEN COLLECTION WITH FTA ELUTE CARDS

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Introduction The causative agents of venereal syphilis (*Treponema* subsp. *pallidum*), yaws (subsp. *pertenue*), and bejel (subsp. *endemicum*) are indistinguishable on the basis of morphology, syphilis serology and existing diagnostic PCR. Our objective was to develop a real-time (rt) multiplex PCR assay that can simultaneously detect all three organisms in a single tube. In addition, we evaluated the potential use of FTA Elute cards for collection of skin lesion specimens for molecular testing.
Methods Serial dilutions of purified genomic DNA from *T. pallidum* were spotted onto FTA cards and air dried. Cards were stored at ambient temperature (~23°C) for up to 1 month. DNA was eluted from a 6-mm disc and tested by a *polA* PCR, a rt PCR for macrolide point mutations in the 23S rRNA gene, and the CDC typing method (PCR/RFLP analysis of *tpr* and *arp*). The rt triplex PCR targets the *tp858* and *tp0620* genes and the assay was evaluated using DNA from 25 strains of *T. pallidum*, 14 strains of *T. pertenue,* and 2 strains of *T. endemicum*.
Results The rt triplex PCR distinguished all three subspecies and had an analytical sensitivity of 1–10 genomic copies using purified DNA from *T. pallidum* strain Nichols. The detection limit of *polA* rt PCR was approximately 10–100 genomic copies/6-mm disc. The molecular subtype and azithromycin susceptibility genotype was easily determined using the spiked FTA cards.
Conclusions The rt triplex PCR is a specific and sensitive assay for differentiation of the *T. pallidum* subspecies and should be useful in areas where both syphilis and yaws or bejel are endemic and, in determining the extent of yaws worldwide. The FTA Elute card provides a simple way to collect, store and transport specimens at ambient temperature in the absence of a cold chain and involves minimal sample processing prior to molecular testing.