Abstract P1-S6.38 Figure 1 Cascade of HIV service bundling for October 2007–January 2011.

counsellors for HIV and STI testing who are skilled in working with youth. This abstract discusses the HIV and STI outputs of the Youth Friendly clinic based on the quantitative reported data.

Methods Routine programme data submitted for the period October 2007–January 2011 was reviewed. Data was collated for the purposes of graphing, and calculating percentage difference and percentage change.

Results The target age for service delivery fluctuated in line with WHO and is currently 15–24 years. There was inconsistent reporting of headcounts for the review period. In 2007 the clinic saw 15–19 year olds (ratio of 1 male: 2 female). From 2008 this changed to a ratio of 30% male: 70% female. The age threshold moved to 24 years and clinic population became 35% of 15–19 year olds: 65% of 20–24 year olds. Total number of HIV tests conducted was 10 132 (3515 males and 6617 females). 10% tested HIV positive. 77% ($n=764$) had blood draws for CD4 count testing. 722 results were received from the laboratory, of which 571 (79%) were collected by patients. 414 results were <200 cells/mm³ see Abstract P1-S6.38 Figure 1. All eligible patients were worked up for ARVs and referred to the initiation facilities. 5176 clients accessed STI services. In 2007 50% males and 50% females were treated for STIs. During the review period this changed to 44% males and 56% females. Both HIV testing and STI services were lowest from October 2007 to February 2008 and peaked from May 2009—to July 2009 and again from September 2009 to November 2009. The reported data did not distinguish between new and repeat clients for HIV testing and STI treatment.

Conclusion The increase in target population age led to more services being accessed by 20–24 year olds. Over time there was an increase in the number of people accessing HIV and STI testing and treatment. There was an increase in males accessing the clinic and a decrease in STI services required by males. Lab reporting of CD4 counts and CD4 results collection needs to be strengthened. Routing data needs to be collected on new and repeat clients as a means of addressing casual factors for STI acquisition.

P1-S6.39 CAN PROFESSIONAL MIDWIVES INTERPRET RAPID SYPHILIS TESTS ACCURATELY?

doi:10.1136/sextrans-2011-050108.263

¹M A Chiappe Gutiérrez, ¹K Soto, ¹L Lopez-Torres, ¹C Cárcamo, ¹M I Valderrama Calderón, ¹S La Rosa, ¹P Mallma, ¹P García, ²R Peeling. ¹School of Public Health and Administration, Universidad Peruana Cayetano Heredia, Lima, Peru; ²London School of Hygiene & Tropical Medicine, UK

Background Congenital syphilis produces miscarriage and severe complications in newborns. Rapid syphilis testing (RST, Syphilis 3.0

Bioline) was introduced in antenatal care and reproductive health services of 16 health centers at Ventanilla (Callao), Peru, aiming to improving access to syphilis screening and treatment in the first contact of pregnant women with professional midwives. We present the results of a quality control assessment evaluating internal (IQC) and external quality control (EQC) of such tests when performed by professional midwives.

Methods We developed quality controls panels consisting of the Dried Tube Specimen (DTS). Open label positive and a negative control DTS were distributed as IQC bimonthly to services performing RST, to evaluate the test performance under the service storage conditions. Additionally, closed label controls (EQC) were distributed biyearly to evaluate the performance of each professional midwife performing RST. The ECC panel was composed of a weak positive, an intermediate and a strong positive DTS, as well as a negative DTS. Midwives were trained in DTS reconstitution, as well as result interpretation and recording.

Results 28 DTS panels were distributed for IQC (16 to antenatal and 3 to emergency services), with 100% concordance. 119 DTS panels were distributed as EQC, with 100% concordance observed in most (95%) of midwives evaluated. Six midwives read the weak positive DTS as negative (75% concordance). These six professionals were retrained in their health centers. IQC and EQC were well accepted by midwives, giving them a sense of confidence with their performance with the test.

Conclusion Excellent IQC and EQC results were observed, with good acceptance of the evaluation by midwives.

P1-S6.40 VCT SITES IN MSM FROM MEXICO CITY: AN OPPORTUNITY TO ACTION

doi:10.1136/sextrans-2011-050108.264

¹C Magis-Rodríguez, ¹A González-Rodríguez, E Bravo-García, ¹L Juárez-Figueroa, ¹E Rodríguez-Nolasco, ¹C De Azcárraga Urteaga. ¹Programme on HIV/AIDS in Mexico City, Mexico, Mexico

Background Mexico has a concentrated HIV epidemic (15% HIV prevalence among Male Sex Workers; 11% in MSM; 5% in IDU; and 2% in FSW). Voluntary counselling and testing (VCT) for HIV is a strategy for case detection and deliver prevention messages. This study analyses the HIV prevalence in MSM in two different settings, in order to identify potential opportunities for HIV prevention.

Methods We realised a comparative study between the men that received VCT inside the clinic, and the men reached with VCT in a mobile unit. Both services were offered by the Clinica Condesa in

Mexico City (January, 2010). We described and analysed the population demographics, HIV prevalence, condom use, and sexual practices. All data were considered to identify the MSM and the factors associated with their HIV prevalence.

Results 956 men were HIV tested in January 2010 (401 in VCT site, and 555 in mobile unit). The percentage of MSM was 57.9 vs 47.9%, respectively; however, the HIV prevalence in MSM from the VCT site (27.6%), was seven times great than HIV prevalence in MSM from mobile unit (3.8%).

Conclusions Results suggest that the MSM attending the VCT site are different than the one attending the mobile unit. MSM tested in VCT site have the self-selection bias. However, due to higher HIV prevalence, the VCT site is an excellent place to develop intensive prevention programs in MSM.

Epidemiology poster session 6: Preventive intervention: Vaccination

P1-S6.41 DETERMINANTS OF HUMAN PAPILLOMA VIRUS VACCINATION (HPVV) AMONG QUEBEC (CANADA) TEENAGERS

doi:10.1136/sextrans-2011-050108.265

¹M Guay, ²P Clément, ¹A Hamid, ²E Dubé, ²C Sauvageau, ²N Boulianne, ³M Landry, ¹J Lemaire. ¹Université de Sherbrooke, Longueuil, Canada; ²Institut national de santé publique du Québec, Canada; ³Ministère de la Santé et des Services sociaux du Québec, Canada

Background In 2010, 76% of Quebec female students aged 14 and 15 received complete HPV vaccine through a publicly funded school-based program where teenagers can elect to be vaccinated (parental consent not mandatory). Quebec's free HPV vaccine program also targeted female teenagers up to age 18 in various settings (mostly public clinics and schools). A study was conducted to identify the determinants of HPV vaccine among Quebec teenagers targeted by the program.

Methods A mailed and electronic survey was conducted in 2010 of a random sample of 3000 females (aged 14 to 18) listed in the public health insurance data registry. The survey questionnaire was based on a model elaborated following an extensive literature review and upon an adaptation of the Health Belief Model and the Walsh and McPhee model. The model developed takes into account the mutual influence of teenagers and their parents, as well as interactions with health professionals, on the vaccination decision. Prior to the survey, two focus groups were conducted with vaccinated and non-vaccinated teenagers to improve the model, and the questionnaire reliability was tested on 110 students aged 14 and 15. The final questionnaire had 38 Likert scale and multiple-choice questions. Bivariate and multivariate analyses were done.

Results The response rate was 46%. Generally, teenagers have a good knowledge of HPV vaccine and the virus transmission. However, 68% thought that men cannot catch the virus. The HPV vaccine coverage for one dose decreases with age: from 94% for teenagers aged 14 to 68% for those aged 17–18 ($p < 0.001$). HPV vaccine was significantly associated with better knowledge, HPV vaccine perceived benefits, vaccination habits, encouragement from the school nurse or a teacher, relatives? Encouragement and parental approval (adjusted OR: 1.1–4.3). Not having HPV vaccine was significantly associated with concern about HPV vaccine side effects, family discouragement, and media promotion of HPV vaccine (adjusted OR: 0.27–0.50).

Conclusions School-based HPV vaccine is more effective in reaching high vaccine uptake. Information on the virus transmission has to be improved; by targeting girls, the program suggests that only females can be infected. Even if their consent is not mandatory for teenager HPV vaccine, parents play a major role in their daughter's vaccination decision. The media influence on unvaccinated teenagers must be deepened as it has a paradoxical impact.

P1-S6.42 HPV VACCINE AND SEXUAL BEHAVIOUR AMONG US ADOLESCENT AND YOUNG ADULT WOMEN

doi:10.1136/sextrans-2011-050108.266

N Liddon, J S Leichliter, J Hood, L E Markowitz. US Centers for Disease Control and Prevention, Atlanta, USA

Background Monitoring HPV vaccine uptake can identify potential disparities in coverage and guide vaccine implementation efforts. While there are several national estimates of HPV vaccine uptake among US women, there are few data on vaccination status in relation to sexual behaviour. We analysed receipt of HPV vaccine and intent to get vaccinated by demographic and sexual behaviour data from a nationally representative US survey.

Methods In 2007–2008, 1243 females aged 15–24 years in a nationally representative US survey answered questions about receipt of at least one dose of HPV vaccine. Unvaccinated women were asked about their intent to get vaccinated in the next 12 months. Demographic and sexual behaviour correlates were evaluated in bivariate and multivariable analyses by age for (a) receipt of HPV vaccine and (b) intention to receive HPV vaccine.

Results Overall, 23.1% of respondents reported receiving HPV vaccine; significantly more 15–19 year olds were vaccinated compared to 20–24 year olds (30.3% vs 15.9%, $p < 0.001$). There was no difference in receipt of vaccine by race/ethnicity for 15–19 year olds, but 20–24 year old non-Hispanic blacks were less likely than non-Hispanic whites to have received vaccine [aOR=0.2 (0.1, 0.4)]. Women who had insurance were more likely to have received HPV vaccine. HPV vaccination was not associated with being sexually active or lifetime number of sex partners. Among sexually active 15–19 year olds, those who received HPV vaccine were more likely to report always wearing a condom [aOR=3.0 (1.1, 7.9)] than those who had not received vaccine. A majority of unvaccinated women in both age groups are not likely to get vaccinated in the next 12 months (62% of 15–19 year olds and 58.0% of 20–24 year olds). Sexually active women were more likely to intend to get vaccinated [15–19 year olds: aOR=2.6 (1.2, 5.5); 20–24 year olds: aOR=2.2 (1.1, 4.3)].

Conclusions These nationally representative data from the US highlight disparities in HPV vaccine uptake by insurance status among 15–24 year old women and by race/ethnicity among women above age 19. Our data do not suggest that HPV vaccination results in more sexually-risky behaviour, however, further data on timing of vaccination and sexual initiation are needed. Continued efforts are needed to encourage vaccination before initiation of sexual activity when the benefit of vaccination would be greatest.

P1-S6.43 HPV VACCINE COVERAGE AMONG HIGH-RISK WOMEN: RACIAL AND SOCIOECONOMIC DISPARITIES AND BARRIERS

doi:10.1136/sextrans-2011-050108.267

¹L Niccola, ¹N Mehta, ¹P Julian, ²A Bilinski, ³L Sosa, ¹J Meek, ⁴S Hariri, ⁴L Markowitz, ¹J Hadler. ¹Yale School of Public Health, New Haven, USA; ²Yale College, New Haven, USA; ³Connecticut Department of Public Health, Hartford, USA; ⁴Centers for Disease Control and Prevention, Atlanta, USA

Background Human papillomavirus (HPV) is a necessary cause of cervical cancer and two vaccines are recommended for routine use among females ages 11–12 years with catch-up through age 26. Reducing disparities in cervical cancer will depend on achieving adequate vaccine coverage among racial and ethnic minorities and low-income women. The purpose of this analysis was to describe racial, ethnic, and socioeconomic differences in HPV vaccine coverage and identify barriers to catch-up vaccination.