

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

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**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

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**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

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**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.