CONDOM EXPOSURE RISK and RISKS of HIV INFECTION in SPAIN

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This study uses data from the nationally representative Health and Sexual Behaviour Survey of Spain (HSBS) fielded in 2003 among 10838 male and female respondents aged 18-49 years, to assess the extent to which 'condom exposure risk' predicts HIV infection, so as to improve the knowledge base for the planning and successful implementation of HIV/AIDS policies and programs in Spain. We do so by analyzing and comparing condom exposure risk and the risks of HIV infection in all communities forming Spain so as to pinpoint the differences and similarities across them. Indeed, of the behavioural and clinical approaches to HIV/AIDS prevention strategies, condom use remains one of the most efficient and cost-effective strategies and condom use has been identified in various settings as the primary behavioural variable of interest in intervention studies. However, because condom use has been used as a proxy outcome in the absence of direct data on sexually transmitted infections including HIV, studies have repeatedly failed to demonstrate a clear relationship between various measures of condom use and infection. In Spain, while over 93% of the sample in the 2003 survey has ever had sexual intercourse, only about half of the sample used condom during the first sexual intercourse. In this study, we incorporate the context of behaviour in the construction of 'condom exposure risk' and test the imprinting hypothesis and the influence of condom exposure risk on HIV infection risks. We examine the effects of condoms on HIV infection risks after incorporating the contexts (both individual-based and community-based) of behaviours in our dataset. Our constructed condom exposure risk variables defines higher risk as not using condoms at first sexual intercourse, not using condom at last sexual intercourse, or not using condom with casual/multiple sexual partners. Our data have a wealth of information on knowledge of modes of transmission and means of protection, risk perception, and attitudes towards prevention and information sources about HIV infection and AIDS. We have also imputed a series of community-level variables into these dataset, making them more complete for carrying out multivariate multilevel analyses that will consider the role of contextual factors on studied relationships. The survey also gave importance to HIV risk and prevention given the number of questions on condom use and opinions about condom. This study has two targets. **First**, it tests the imprinting hypothesis that condom use at sexual debut predicts subsequent condom use. We will use logistic regression to model the influence of condom use at first sexual intercourse on the probability of using a condom at the last sexual intercourse, controlling for other influential factors that have been identified in the literature on condom use. **Second**, this study tests the hypothesis that the composite variable 'condom exposure risk' predicts HIV infection risks. We use information available in the dataset on: 1) ever being diagnosed with sexually transmitted infections (11 STI items); 2) efficiency of preventive measures against HIV (9 items); and 3) being at risk of getting infected with HIV (7 items) as proxies for HIV infection risks. We will construct three 'HIV infection risk' outcomes based on the score from each of the three variables, and will use multilevel analyses to account for individual-level and community-level variations in the influences of condom exposure risk on these outcomes.