Poor condom-negotiation skills, inadequate social support, depression and incarceration associated with HIV risks among young key populations in Nepal

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**Background:** Female sex workers (FSW), people who inject drugs (PWID) and men who have sex with men and transgender (MSM/TG) are more at risk to be infected with HIV, especially if young. This study assess the HIV prevalence and examines the effects of physical, social, economic and policy factors—that operate at the micro and macro level—on risk behaviours among young key populations in Nepal.

**Methods & Materials:** Out of a total of 721 young respondents (16-24 years), 215 FSW and 308 PWID were recruited through two-stage cluster sampling, while 198 MSM/TG were recruited through respondent driven sampling (RDS) technique. RDS related estimates were calculated using Giles SS estimator. Logistic regression identified correlates of non-use of condoms and use of unsafe needles and syringes.

**Results:** The prevalence of HIV among PWID, FSW and MSM/TG was 3%, 2% and 1%, respectively. Risk behaviours in the different groups ranged between 13-22%. A high level of depression was found in all the three key populations (between 8-51%). Unable to negotiate condom use and poor social support were associated with non-use of condoms among FSW. Late sexual debut for money and depression were associated with non-use of condoms among MSM and TG. Injection frequency, poor social support and incarceration were identified as barriers in reducing unsafe needles and syringes use among PWID.

**Conclusion:** Factors operated in both the micro and macro levels are influencing HIV risk behaviours among young key populations in Nepal. Future prevention strategies need to address these factors and target those young key populations who are most vulnerable.

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Ecological study of HIV cases with socio-crime factors associated in Indonesia

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**Background:** Previous publication presented in International AIDS Conference in Vienna, 2010, shows that women who experience domestic violence have potential risk of contracting HIV at least two times greater. WTO report in 2013 also support the fact that in some regions, women who are victims of domestic violence are 1.5 times more likely to contract HIV than those who do not have experienced violence with their intimate partner. Corruption is considered factors if there is misappropriation funds that hampering the HIV prevention program in the country. Indonesia has Corruption Perception Index 107/175 in the world. Until present, the HIV case and its socio-crime factors in Indonesia has not been fully understood. The study aim to measure association of domestic violence and corruption with HIV cases in Indonesia.

**Methods & Materials:** Aggregated data of HIV cumulative cases and criminal statistics per-province are collected from National statistics bureau, 2013. Pure ecological study is conducted using cross-sectional design. Two socio-crime factors: domestic violence and corruption are determined as the independent variables.

**Results:** The analysis shows that HIV cases per-province in average e^7.367862 or 1584. Poisson regression estimate for one province increase in HIV cases, given the other variables are constant. If a province were to increase the each independent variable by one point, the incidence rate for HIV cases would be expected to increase by factor 1.002075 of domestic violence (CI 95% 1.002046-1.002105, P<0.001) and 1.057 of corruption (CI 95% 1.056-1.058, P<0.001).

**Conclusion:** This indicates that domestic violence and corruption is associated with the increased of HIV cases in Indonesia. However this study can contain ecological fallacy because the global measurement by province is used. It is recommended to have further study using individual data. The study will be benefit to improve the HIV prevention program in Indonesia.

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