## Contextual Influences on Sexual Behavior Among Youth in Two Latin American Countries Sarah Gilman MPHc<sup>1</sup>, Rob Stephenson PhD<sup>2</sup>

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The period spanning adolescence to adulthood can present youth with important choices regarding their reproductive health. Age of sexual debut, condom use and partner choice have been linked to increased risk of adverse reproductive health outcomes. High risk sexual activity increases the risk of exposure to sexually transmitted infections (STI's) like Human Immunodeficiency Virus (HIV) and Human Papillomavirus (HPV). Additionally, unprotected sex can increase the risk of unwanted pregnancy and consequently, unsafe abortion (where access to safe abortion is lacking or restricted). Individual level factors like education, wealth, media exposure and drug use have been correlated with high risk sexual activity. However, despite known links between certain individual level predictors and adverse reproductive health consequences, these predictors are seldom expanded to include an analysis of community level predictors for high risk sexual behavior.

Prior studies analyzing the impact of community level predictors on sexual behavior outcomes are primarily centered on African populations. In Latin America, negative health outcomes arising from HIV, HPV and unwanted pregnancy stem primarily from high risk sex and present major barriers to the attainment of reproductive health among youth. Nevertheless, in these countries there is a dearth of information detailing how the environment in which one lives affects a young person's sexual behavior. This analysis considers how community constructs like gender ratios in education and access to social capital influence sexual decision making among Bolivian and Dominican youth.

A better understanding of how community impacts decision making around sexual behavior in these countries would elucidate whether there are important social and cultural determinants among Latin American communities that affect young people's sexual behavior differently from prior research in Africa. Additionally, understanding the community environment and its impact on sexual behavior will better inform programmatic initiatives seeking to reduce negative health outcomes resulting from high risk sex in Latin America.

Using Demographic Health Survey Data for two Latin American countries, we examine the individual and community level factors associated with the reporting of recent sexual behavior among youth ages 15-24. The data used in this study are from Demographic Health Surveys conducted in Bolivia (2003) and the Dominican Republic (2007). Four outcome variables were defined as sexual behavior outcomes. These are:

- 1) Condom use at first sex
- 2) Condom use at last sex
- 3) Age at first sex
- 4) Number of sexual partners in the past 12 months

Factors potentially associated with risky sexual behavior were first considered at the individual level. Twenty one individual level variables were selected to be considered as variables that could potentially be associated with the four outcomes. The individual level factors included in the final analysis can be divided into four categories. These include: demographic, socioeconomic, behavior and knowledge.

Community level data was then derived from the individual level responses. In order to do so, individual data was aggregated to primary sampling units (PSU), forming proxy community measures. The choice of community level variables was guided by the work of Simon and Stephenson, who suggest several dimensions of the community environment that are influential in shaping youth behavior. Community level variables chosen were:

- 1) Ratio of men to women employed
- 2) Percentage of men and women employed
- 3) Percentage of men and women with secondary school as highest level of education
- 4) Percentage of women that have had children
- 5) Percentage of men and women in a current or prior marriage
- 6) Mean score for men and women on wealth index
- 7) Mean score for men and women on HIV and reproductive health knowledge indices
- 8) Mean score for men and women on activity indices
- 9) Mean score for men and women on decision making indices

10) Mean scores for men and women on media exposure index.

In order to form multivariate models that are descriptive of the sexual behavior outcomes, a bivariate analysis of the outcome variables was completed. Based on individual and community level variables showing significance in the bivariate analysis, models were fitted for the four outcome variables. Each outcome was based on a different model, fitted across gender and country.

Results show that the mechanism through which the community environment shapes sexual behavior varies by outcome, country and between genders. Of particular significance is the importance of the community environment on gender specific differences in sexual behavior. This indicates that a thorough analysis of sexual risk among young people in Latin America depends not only on individual level characteristics, but also on prevailing cultural, demographic and economic characteristics of each community. These results support community focused initiatives as important intervention points in future behavioral change programs.