

# **Intersecting Social Statuses and Adolescents' Sexual Health Inequities: Factor Analysis of the HIV and other STI knowledge Measures in the Demographic and Health Survey**

Helen Okoye<sup>1</sup> Mauricio Villalobos Coronel<sup>1</sup> Elizabeth Saewyc<sup>1</sup>

<sup>1</sup> University of British Columbia School of Nursing

Helen Okoye: Doctoral candidate at the University of British Columbia School of Nursing

## **Abstract**

**Introduction** Sexual and reproductive risk behaviour and the negative health outcomes are disproportionately higher for adolescents and young people living in low- and middle-income countries, particularly sub-Saharan Africa compared to their counterparts in high-income countries. The poor health outcomes in the region are attributed largely to the adverse social and environmental conditions in many countries in the continent. However, extensive body of literature focus on the behavioural and psychosocial determinants of adolescent sexual and reproductive risks. Nonetheless, evidence continue to point to the overarching influence of the broader contextual milieu in which adolescents and young people are embedded. Researchers note the possible interactions that exist among these structural determinants, but the causal pathways through which these intersecting social statuses and positions influence adolescent sexual and reproductive risk behaviour have not been adequately addressed. The purpose of this dissertation was to examine the intersecting social determinants of sexual health inequities among unmarried sexually active adolescents and young people, controlling for knowledge of sexual and reproductive risks. As part of the preliminary data analysis, we performed exploratory factor analyses to examine the factor structure of the scale that assessed HIV/AIDS, and other STIs related knowledge across seven sub-Saharan Africa countries.

**Research Methods** We generated tetrachoric correlations for the binary measures using 'polycor' package in the R statistical software. We then performed factor analyses using these correlations as the matrices of association.

**Findings** Misconceptions about HIV and other STIs loaded highly on one factor, and the knowledge of behavioural measures to prevent HIV and other STIs loaded highly on a second factor.

**Conclusion** HIV and other STI knowledge measures in the Demographic and Health Survey datasets support a two-factor solution for unmarried sexually active young people. The findings underscore the need to guide the classification of items based on their psychometric properties.