Title:

A Positive Deviance Approach to Understanding HIV Risk and Testing

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Session Title:

Rising Stars of Research and Scholarship Invited Student Poster Session 1

Keywords:

Global Health, HIV Risk Behavior and HIV/AIDS

References:

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Abstract Summary:

Does being different from your community matter? This study applies positive deviance as a framework in understanding factors that influence recent testing for HIV in men within six sub-Saharan African Countries

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to define the concept of positive deviance and how it illuminates potential risk factors and teaching points in high-risk individuals.	Background information will be provided about positive deviance, and about past studies that have incorporated positive deviance into both sexual and non-sexual health. Background information will also include a description of how positive deviance can uncover an individual's inclination to test for HIV.
The learner will be able to compare and contrast demographic and community differences in the countries surveyed in the study	Graphs and charts will provide demographic data, as well as the individual, community, and positive deviant variables. There will be comparisons between countries for each variable examined in the study.
The learner will be able to name the important variables that influence positive deviants to routinely test for HIV	Graphs of each variable will detail an increased or decreased odds ratio of testing. Each graph will show how a certain variable

positive deviant from their community in that variable.

Abstract Text:

Background and Significance

Despite high adult prevalence of HIV, routine testing for HIV remains low in many Sub-Saharan African countries. There is strong evidence that men are less likely to test for HIV than women, who typically receive routine HIV testing as part of antenatal care. Increasing routine HIV testing is a significant prevention priority; HIV testing can act as a gateway to care for those who are HIV positive, and other behavioral and medical prevention options (e.g. PrEP) for those who are HIV negative. Understanding the factors associated with the adoption of HIV testing is a vital first step in designing programs to encourage routine HIV testing in at-risk individuals. Positive deviance – sometimes referred to as resiliency – refers to the process in which individuals achieve a goal despite their disadvantaged surroundings. In this study, we examine the extent to which positive deviance – operationalized as individual differences to community aggregates –are associated with the uptake of recent (<12 month) HIV testing among samples of adult men from six African countries.

Objectives/Aims

Applied to HIV testing, positive deviants would be men who test routinely for HIV in an environment of low testing and where cultural norms are against testing. In this study we analyze Demographic Health Survey (DHS) data from six African countries; Cameroon, Ghana, Malawi, Lesotho, Swaziland and Zambia were selected to represent environments with differing levels of HIV prevalence.

Methods

Survey data was selected from the DHS to acquire a broad sample size from African countries with both low and high rates of HIV infection. We selected countries with DHS data within the last 10 years, and included survey data of men from ages 15-45. The sample sizes are 7191 from Cameroon; 4388 from Ghana; 7175 from Malawi; 3317 from Lesotho; 4156 from Swaziland and 14773 from Zambia. Individual variables were chosen that influence how often an individual tests for HIV. The individual variables that were selected included age, age at sexual debut, socioeconomic status, place of residency, amount of education, stigma towards HIV and people who have HIV infection, knowledge about HIV pathology and transmission, marital status, and number of sex partners. Community variables are then created from calculating the means of the individual's community through the primary sampling unit (PSU). From the calculated community means, we subtracted the individual from the community aggregate to determine a positive deviance variable. We assigned a binary sequence to separate the positive deviants from the community outputs. Using regression modeling, we examine how individual differences from community norms (positive deviance) are associated with recent HIV testing, and how this changes with varied rates of HIV infection within the different countries.

Results

As this study is currently in analysis, there are no results at the moment of abstract submission.

Conclusions/Implications

The results can inform the development of public health and clinical messaging aimed at increasing routine HIV testing, and provide a corollary along education and level of risk for individuals to determine positive deviance risk.