Identifying peer-selected venues for delivering HIV prevention programs

Background

Rates of HIV are high among youth in South Africa. New HIV infections are highest among younger girls ages 15-30. In addition sexual violence against women is also high. Rates are highest in the health district of "City of Johannesburg".

Our organization current implements a public health program that engages and supports young women 15-30 to reduce the risk of acquiring HIV. The program is a behavior change curriculum which addresses sexual and risk awareness, skills for safe sexual encounters, and strategies for preventing and mitigating gender-based violence. The program focuses in two (of six) health-subdistricts in Johannesburg where HIV is highest.

Problem statement

The evidence-based curriculum is a 14-week program, conducted in 45-min sessions that are held once a week. Until now, all programs are conducted either on site at a social welfare organization, at a community center or in a school classroom. The program currently recruits girls and young women through government social service sites as well as government-funded social welfare organizations with partnerships with schools. Girls and young women of the target age group (15-30) must be recruited to participate in the program and come to the site for participation.

Because youth are best influenced by their peers, an alternative approach may be useful to improve recruitment, retention, and completion in the program. We would like to explore conducting these program sessions at venues that are popular with youth, where youth choose to go to hang out, dialogue and meet friends and new people. The logic is that this approach will reach more youth, bring like-minded youth together in different settings, engage the youth on difficult topics right in their favourite venues, and ultimately increase retention and completion of the program. At the same time, these venues are nearby to additional social services that youth can access for more private sessions. Should the approach prove successful, a future vision might also entail that such venues might become extensions of the health program with reputations for supporting youth with useful information and informed clients.

Purpose and Audience

The purpose of this analysis is to identify popular and appropriate venues that are in close proximity to the government-funded social services and social service organizations within two subdistricts of Johannesburg where HIV is highest. "Appropriate venues" is defined as a venue suitable for conducting small-group discussion of 45-min with 5-10 youth, once a week for 13 weeks. The result of the analyses will provide the program staff (i.e. the audience) with a guided list of venues to approach for engagement and participation in this important health program.

Data

Data for this analysis comes from two sources.

The first set of data comes from the current program files, with a list of 480 social service sites (government service sites and non-profit organizations (NPOs) covering all but 2 regions in South Africa. A subset of these data will narrow the list down to 2 health subdistricts in the City of

Johannesburg District, covering health subdistricts A and F. The service sites are all geotagged with GPS coordinates.

The second source of data will come from Foursquare, both venue and user data. Venues that are within 500 meters of the program sites will be initially selected, although some exploratory analysis to find a suitable distance if the number of venues is too few (or zero) for some sites. The resulting list of venues will then be reviewed for suitability for hosting the program and narrowed down (selected) based on their listed types (e.g. cafes, bars, internet stations, youth locations, etc). The analysis may use up to two available tips from each site may also inform the appropriateness of each venue for program delivery.

The top 5 most popular venues among clients clustered around each site will be selected, presented, and mapped. Further exploration will also look to see if the clustering by women users results in changes to the list. The final list will provide recommendations regarding the top appropriate sites identified for program implementation.