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Examining Differences in Types and Location of Recruitment Venues for Young Males and Females from Urban Neighborhoods: Findings from a Multi-Site HIV Prevention Study

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ABSTRACT *Finding and accessing members of youth subpopulations, such as young men who have sex with men (YMSM) of color or young females of color, for behavioral or disease surveillance or study recruitment, pose particular challenges. Venue-based sampling strategies—which hinge on where individuals congregate or "hang out" rather than where they live—appear to be effective alternatives. Methods used to identify venues focus on engaging members of social networks to learn where targeted populations congregate. However, it is not always clear if and how these methods differ according to gender, whether the youth accessed at a venue are actually from neighborhoods in which the venues are found, and whether the location of venues relative to neighborhoods of residence is different for young men and young women. This study illustrates the gender differences in venue type and venue location where eligible youth study participants from high-risk neighborhoods could be accessed for HIV research across 15 research sites (sites). The findings indicate that the study's method led to identifying venues where one quarter or more of the youth were eligible study participants and from the high-risk neighborhoods. Sites targeting young women of color had a higher proportion of eligible study participants who were also from the high-risk neighborhoods than sites targeting YMSM. Clubs were most commonly identified by sites targeting YMSM as recruitment venues, whereas neighborhood-based service or commercial centers were more common venues for young women of color. This study reveals how venue-based recruitment strategies can be tailored and resources maximized by understanding the key differences in the types of venues preferred by males and females and by recognizing that female-preferred venues are more likely to be closer to home.*

KEYWORDS *HIV Prevention, Youth, Venue identification, Multi-site study, High-risk neighborhoods, Gender differences*

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INTRODUCTION

Despite advances in preventing HIV and other sexually transmitted infections (STIs) in the USA, certain youth subpopulations, such as young urban impoverished women of color and young men who have sex with men (YMSM) of color, remain at considerable risk. Finding and then accessing members of these subpopulations for behavioral or disease surveillance or study recruitment poses particular challenges. Traditional sampling methods, such as household surveys, often fail to reach these individuals.[1–5] Venue-based sampling strategies—which hinge on where individuals congregate or "hang out" rather than where they live—appear to be effective alternatives.[6–8]

The success of reported methods of identifying high-traffic, high-risk venues varies based, in part, on the target population. For instance, recruiting YMSM who openly associate with "gay culture" has been successfully achieved by researchers compiling lists of popular social venues (e.g., clubs) and days/times of high traffic.[9,10] This method is less effective for finding venues with more "hidden" high-risk youth populations such as MSM of color, men who do not openly identify with gay culture, and young women of color.[11]

The existing literature suggests that finding feasible recruitment venues for harder-to-reach populations benefits from additional investigative steps. Examples include interviewing members of the target population about where they "hang out" and then observing activity and traffic at the locations,[11,12] holding focus groups, conducting street observations, and interviewing key informants with particular knowledge about the population.[13,14] Weir et al.[15,16] demonstrated the benefits of a systematic approach to identifying a large number of venues where individuals meet sex partners within a specific geographic area.

Similar to Weir and others, the study described in this paper employs a methodical process to identifying venues but goes further by (1) refining the process to target youth (12–24 years) and a single gender, (2) examining whether the youth accessed at a venue are actually from neighborhoods in which the venues are found, and (3) determining whether the location of venues relative to neighborhoods of residence is different for young men and young women. This study represented a unique opportunity to compare methods by gender specifically to look at venues for gay and non-gay identified YMSM of color and YWSM. To the extent that people recruited from venues reside in neighborhoods of the recruitment venues, interventions targeting these individuals should affect local neighborhoods, and data collected should be an indicator of behavior of local neighborhoods.

METHODS

Multi-Site Study

Our study, which took place in 15 distinct urban areas across the USA and in Puerto Rico, was conducted as part of a set of research protocols supported by the Adolescent Medicine Trials Network for HIV/AIDS Interventions (ATN). For a complete listing of the research sites participating in the ATN, go to www.atnonline.org.

Each research site (henceforth referred to as "sites") used publicly available data and geographic information software to identify neighborhoods of higher risk (i.e., high rates of HIV/STI infection), which became their "geographic area of focus" for this study.[17] Using this data, sites also depicted youth populations with high rates of

STI and/or HIV and chose a target population between 12 and 24 years old within the geographic area of focus. Eight sites identified females of color (i.e., "female sites"); six sites identified YMSM of color (i.e., "male sites"); and one site focused on male and female drug users (intravenous and other illegal drugs, i.e., "drug user site").

Sites engaged in a 2- to 4-month process in which they (1) collected initial data on venues where the target population was believed to socialize, (2) selected a subset of those venues for further evaluation as potential research recruitment venues using brief venue interviews (BVIs), and (3) conducted BVIs. BVIs were intended to reveal whether members of the target population who met study criteria could be accessed in sufficient numbers at each venue and would be willing to take part in a hypothetical 1-h survey with questions designed to reveal HIV-related risks and mitigating factors (i.e., social support).

Data Collection

Table 1 outlines the range of steps sites used to generate a master list of venues where the target population was believed to congregate. We aimed to identify the venues where young men and young women at high risk for HIV congregate by using a data triangulation process.

Ultimately, each site selected a subset of three to five venues at which to conduct BVIs (one site received approval from the protocol team to conduct BVIs in more than five locations due to a change in the security of an original venue; another site conducted BVIs at eight venues to assess venues relevant for IV drug users and non-IV drug users).

The subset of venues was selected by each site and their partners. Common variables examined included whether the venue was confirmed by multiple data sources, conditions of safety and confidentiality for future research activities, perceived venue accessibility, seasonal factors (i.e., extreme temperatures), and the likelihood of recruiting required numbers of eligible youth for study purposes.

BVI administration was modeled on an established random street intercept technique.[18] All individuals who appeared to be of the gender and within the age range of the target population were counted using a clicker, and as many of these individuals as possible were approached to participate in the interview. For the drug user site, both males and females were counted and approached. Each BVI took 5 min to complete and involved the researcher describing the study, offering a consent form, and asking if the individual would be willing to participate in the BVI; verbal consent was obtained. The researcher then asked whether the individual had previously been interviewed for this study, birth gender, race/ethnicity, age, ZIP code of residence, and hypothetical willingness to participate in a 1-h anonymous survey related to HIV. Responses were recorded by the researcher on paper in the field and later entered into a secure electronic database. Venues were visited at least three times for a minimum of 2 h per visit; the day and/or time varied during each session.

Finally, to assess the venue selection process, sites submitted a memo describing each of the venues selected for the BVIs and why they were chosen. In addition, the authors of this paper administered a brief survey to each site after the study was completed to gain a better understanding of their specific venue identification process. The survey was completed by 14 sites. Sites identified the steps that were used to gather venue ideas and ranked steps as more or less critical to the overall process. This helped us assess differences in methods for male vs. female sites.

TABLE 1 Steps used to generate and/or confirm ideas for venues

Step/Activity	Description
Interviews with HIV+ youth	Anonymous interviews with 20–30 HIV+ males and females using a computer-assisted format. Interview questions asked about risky behaviors, social networking patterns and venues where youth congregate. Youth were recruited from local clinics and enrolled in the interview after providing verbal consent.
In-depth interviews with community organizations	Sixty-minute interviews with 20 community organizations about target population risk factors, congregation venues and access to venues (e.g., gatekeepers, best days/hours to find youth at certain locations).
Discussions with community partners	Regular meetings with partners were held and provided a forum for discussion of venues; several sites held a vote with partners to confirm the final selection of venues.
Discussions with youth	Meetings (i.e., informal focus groups, youth CABs, etc.) with youth from geographic area of focus to learn about new venues and/or confirm location of venues and times when youth are likely at a venue.
Discussions with key informants	Informal discussions with individuals who may or may not represent the target population but have access to a venue or knowledge of the types of activities or people who congregate at a venue.
Venue previews	Visits to a venue by site staff prior to starting BVIs that entailed observing the types of activities and patterns of people at a venue.
Input from outreach workers (not affiliated with site)	Discussions with outreach staff who provide services at a venue. Some site staff combined a meeting with outreach workers with a venue preview.
Input from outreach workers affiliated with site or institution	Similar to above, though discussions were internal with staff from the clinic or institution of site staff.

ANALYSIS

The data triangulation process used to identify venues involved overlaying data from a variety of sources, including youth who were gay or non-gay identified but may have been engaging in same sex relationships, to assess which venues had the best potential for reaching a broader sample of our target population. Data triangulation provided a clearer and more thorough understanding of potential venues because we did not rely on one data source but instead engaged in a dynamic process of cross-comparing information as it was collected.

We examined the venues selected by each site, categorized them by type (i.e., club, social service facility, park, street, etc.) and location (i.e., inside or outside of the geographic area of focus), and reviewed the selections according to gender. Using BVI data, we calculated the following for each site: (1) the total number of individuals approached across all venues selected and, among those, identifying those who agreed to participate in the BVI (approached accepters); (2) those who met study requirements based on BVI responses (birth gender representing target population, between 12 and 24 years, and have not previously participated in the BVI process for this study) were considered "eligible accepters"; and (3) eligible acceptors who said "yes" to whether they would be willing to participate in a 1-h anonymous survey were considered "eligible study participants (ESP)." The percent of ESP helped us to determine whether a venue was a feasible recruitment spot in that it indicates whether sufficient numbers of the target population can be found there *and* willingness to take part in future research activities. Using the ESP results, in combination with the ZIP codes provided by youth and the maps created by each site, we were able to determine what percentage of the ESPs were from the geographic area of focus. This helped us to assess if the target population from the identified high-risk neighborhood was being accessed.

Finally, we summarized the findings from the memos submitted by each site and the survey that was completed. We considered differences in the process between male sites, female sites, and the drug user site.

RESULTS

Types of Venues Selected

There were notable differences in the types of venues for males vs. females (see Table 2). Five out of six male sites identified at least one club as a location to conduct BVIs; only three female sites did. In contrast, most female sites identified neighborhood-based commercial or service-oriented areas as 'hang out' locations. Described as providing health care, social services (i.e., childcare, shelter assistance), shopping, and/or recreation, these venues were "one-stop" shopping or service centers and in many instances were in close proximity to community housing. Sites typically characterized the venues as attracting young women seeking services and providing a social connection as a byproduct, thereby encouraging young women to congregate. Venues selected by the drug user site included venues targeting IV drug users (e.g., plaza, alleyway, street corner) and venues targeting non-IV drug users (e.g., discotheque, pub, mall).

Location of the Venues Selected

For female sites, 85.3% of the venues were within the high risk neighborhoods (i.e., within a site's geographic area of focus). In contrast, 13.8% of venues identified by

TABLE 2 Venue location, type and brief venue interview (BVI) results by site (city) and population of focus

Population of focus: young women of color

	Location of venues	Type of venues	BVI participant data by percent	
	Number of venues inside GAF	Examples of venues selected for BVIs	approached accepters (AA), eligible accepters (EA), eligible study participants (ESP), percent of ESP from GAF: (range, mean, median)	
Boston	4/5	Transit station; street blocks with stores, food & social service agencies; recreation center	AA: 40.0% EA: 34.5% ESP: 25.4%	*ESP from GAF* Range: 10.7–74.5% Mean: 54.0 Median: 54.5
Bronx	4/4	Movie theater; park; street corner with stores, service agencies, health care & transportation	AA: 82.2% EA: 79.3% ESP: 70.0%	*ESP from GAF* Range: 32.4–73.3% Mean: 38.3 Median: 37.1
Chicago	4/4	Park; social service agency; strip mall	AA: 82.6% EA: 78.3% ESP: 75.9%	*ESP from GAF* Range: 58.9–73.3% Mean: 66.3 Median: 64.8
Ft. Lauderdale	3/3	Mall; park; music store	AA: 99.0% EA: 85.4% ESP: 78.2%	*ESP from GAF* Range: 51.3–82.4% Mean: 64.7 Median: 68.0

Miami	3/4	Flea market; high rise building with office providing social services; public housing community	AA: 76.6% EA: 43.7% ESP: 43.4%	*ESP from GAF* Range: 40.0–72.9% Mean: 65.2 Median: 65.0
New Orleans[a]	5/6	Club; transit hub; public housing community; park	AA: 79.1% EA: 55.0% ESP: 51.3%	*ESP from GAF* Range: 6.2–90.3% Mean: 32.6 Median: 24.3
Tampa	4/4	Public housing communities with health care services, social service agencies and parks contained within	AA: 94.3% EA: 80.1% ESP: 68.8%	*ESP from GAF* Range: 71.0–86.4% Mean: 78.9 Median: 76.4
Washington, DC	2/4	Public housing community; mall; train station	AA: 98.5% EA: 95.1% ESP: 88.2%	*ESP from GAF* Range: 4.0–97.6% Mean: 31.4 Median: 23.4
Population of focus: YMSM of color				
Baltimore	0/5	Club; library; street alley; mall	AA: 96.8% EA: 92.5% ESP: 86.0%	*ESP from GAF* Range: 15.0–34.3% Mean: 22.9 Median: 21.6
Los Angeles	0/5	Club; mall; group homes	AA: 51.3% EA: 34.8% ESP: 29.2%	*ESP from GAF* Range: 0–1.2% Mean: 0.5 Median: 0.0
Manhattan	1/5	Street corner with bars; club; LGBTQ youth center	AA: 88.7% EA: 75.9%	*ESP from GAF* Range: 0–2.3%

TABLE 2 (continued)

Location of venues		Type of venues	BVI participant data by percent	
Population of focus: young women of color				
			ESP: 70.7%	Mean: 1.0 Median: 0.9
Philadelphia	0/4	Club; community center; house converted to underground party establishment	AA: 78.6% EA: 57.8% ESP: 51.0%	*ESP from GAF* Range: 3.4–47.7% Mean: 19.0 Median: 19.4
San Diego	1/5	Coffee shop; park; mall	AA: 81.4% EA: 69.2% ESP: 60.0%	*ESP from GAF* Range: 7.7–85.2% Mean: 35.1% Median: 31.3%
San Francisco	2/5	Street corner by bars; club; LGBTQ youth center	AA: 70.1% EA: 59.8% ESP: 45.4%	*ESP from GAF* Range: 8.5–46.7% Mean: 26.2 Median: 17.9
Population of focus: drug users (male and female)				
Puerto Rico	8/8	Street alley; plaza; club; street corner	AA: 81.9% EA: 55.6% ESP: 49.2%	*ESP from GAF* Range: 32.9–90.9% Mean: 51.3 Median: 54.1

GAF geographic area of focus

[a]Two sites received approval from the protocol team to conduct BVIs in more than five locations due to changes in the feasibility or security of an original congregation venue. The Puerto Rico site conducted BVIs at eight locations to assess venues for IV drug users and non-IV drug users of both genders

the male-focused sites were within their geographic area of focus. For the site targeting drug users, 100% of the venues fell within the geographic area of focus.

Brief Venue Interviews: Eligible Study Participants

As detailed in Table 2, eligible acceptors ranged from 34% to 95%. The percent of ESPs (i.e., the percent of approached eligible youth who would be willing to participate in a 1-h study) ranged from 25% to 88%, with two thirds of the sites finding at least 50% of youth who were ESPs across all venues selected.

On average, female sites had higher numbers of approached accepters (81%), eligible accepters (68%), and ESPs (62%) than did male sites. Across all venues where BVIs were conducted, three female sites reached 75% or more youth who were ESP compared to one male site. The drug user site found nearly 50% of youth who were ESPs across both IV-drug user and non-IV drug user venues.

With the exception of two sites (New York and Los Angeles), all sites identified two or more venues where at least one quarter of the youth were ESPs *and* from the high-risk neighborhoods. For six female sites, the proportion was much higher, with well over half of the ESPs from the high-risk neighborhoods across two or more venues. Four of the six male sites found at least one venue where one third or more of the ESPs were from the high-risk neighborhoods.

Venue Selection Process

Generally, male sites were able to rely on fewer steps in the process than were female sites to identify a potential venue for conducting BVIs. Both male and female sites used results from interviews with HIV + youth to some extent to find venues. Male sites used this step as an initial starting point in generating ideas of possible venues; female sites more frequently cited the in-depth interviews with community organizations as a useful starting point. Female sites more frequently reported using youth input to identify and confirm venue ideas

Across the sites, the most crucial steps in the process were discussion with community partners (85%), venue previews, including discussion with outreach workers (57%), and discussions with community youth (via focus groups, CABs, etc.; 50%). For the drug user site, discussions with key informants was one of the most critical steps overall.

DISCUSSION

Venue-based sampling has clear advantages over more traditional approaches for finding harder-to-reach populations. Yet, questions remain about how venues are effectively identified and linked to specific populations of people residing in known areas of high risk. Our paper attempts to shed light on these questions by assessing how the process enabled 15 urban research sites to find viable venues for a subpopulation of youth within a select gender.

In general, the venue identification process guided sites in selecting venues where youth were accessible (one of every two people approached was willing to participate), where the majority of youth met study criteria (the number of "eligible accepters" was 50% or greater for 12 sites), and where at least one third of the youth approached were ultimately eligible study participants (with the exception of two sites).

The type of venues selected differed for male sites and female sites. While clubs were a common 'hang out' venue for YMSM, young women tended to congregate at

locales that were geographically close to home, fulfilled a basic need, and would often, secondarily, embrace the venue as a source of social connectedness.

Our findings clearly revealed that young male study subjects were identified at venues outside of their residential areas, whereas young women were identified at venues within their residential area. Developing geographic boundaries to better focus the research efforts around a high-risk neighborhood did not preclude sites from finding appropriate venues, even for sites targeting harder to reach populations. Sites found eligible study participants who were from the high-risk neighborhoods even if the venue fell outside of the geographic boundaries. The noted exceptions (New York and Los Angeles) may be explained by the densely populated and geographically larger area of focus that these sites were targeting in comparison with other sites. In other words, the highly dispersed and large number of YMSM venues in these metropolitan areas made it challenging to find ESPs who were also from the geographic area of focus.

We acknowledge several limitations of this study, including our inability to test if the venue identification process expanded the scope of venues considered. We also note that the results cannot be generalized to a broader population of young men and women beyond those involved with this study. Other limitations of the study include those related to BVI data collection. Participants were approached because they "appeared to be" of the targeted gender and age range. While best guesses were made, it is likely that potential participants were missed. Among those who were approached and agreed to answer the questions, some had difficulty defining their area of residence (e.g., they were not sure of their ZIP code). To minimize errors in the future, researchers should supply youth with a detailed street map overlaid with ZIP code and neighborhood boundaries. Our assessment of ESPs from the high-risk neighborhoods was imperfect because a site's geographic area of focus may have contained a portion of one or more ZIP codes, making it impossible to know if youth were from the portion within or outside of the defined geographic area

In practice, organizations targeting young women may find it necessary and beneficial to invest more time and resources finding venues with eligible women, since the best venues may not be typical social venues. The female-focused venues may be less apt to change as quickly as the socially oriented venues for men. In contrast, venues targeting young men, specifically YMSM, can more easily be found; however, it may be wise to save resources for later in the process to engage in additional steps (i.e., oversampling) that help to identify more men who represent the target population *and* are from the identified high-risk neighborhoods. Understanding the distinct types and locations of venues for these subpopulations of males vs. females in relation to their place of residence will assist in better targeting HIV prevention efforts.

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