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Original article

Newly Homeless Youth STD Testing Patterns Over Time

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Abstract:

Purpose: To use the Behavioral Model for Vulnerable Populations to examine the predisposing and need characteristics of newly homeless youth that are associated with sexually transmitted disease (STD) testing over time.

Methods: A longitudinal cohort of newly homeless youth from Los Angeles County (n = 261; ages 12–20 years) were followed for 24 months. Youth were interviewed at baseline, 3, 6, 12, 18, and 24 months, and asked about their background, housing situation, emotional distress (using the Brief-Symptom Inventory), substance use, sexual risk behaviors, and their STD testing rates. We modeled our longitudinal data using logistic random effects models.

Results: Characteristics of homeless youth that were associated with STD testing in our multivariate model included time in study (odds ratio [OR] 1.3, 95% confidence interval [CI] 1.1–1.6), age at baseline (OR 1.2, 95% CI 1.1–1.4), being African-American (OR 2.7, 95% CI 1.4–5.3), being from a mixed race/ethnic group (OR 2.8, 95% CI 1.3–5.8), self-identifying as a gay/bisexual male (OR 2.9, 95% CI 1.2–6.9), self-identifying as a heterosexual female (OR 2.2, 95% CI 1.3–3.7), using amphetamines (OR 1.7, 95% CI 1.1–2.6), and history of having gotten someone/becoming pregnant (OR 2.3, 95% CI 1.4–3.9). Youth who lived in an apartment were less likely to have received an STD test than youth who lived in other types of housing (OR .4, 95% CI .2–.9). Sexual risk behaviors such as inconsistent condom use (OR 1.0, 95% CI .6–1.4) and number of sexual partners over past 3 months (OR 1.1, 95% CI 1.0–1.1) were not predictive of STD testing over time.

Conclusions: A need exists for interventions to target young newly homeless youth who engage in high-risk sexual behaviors to increase their STD testing rates and thereby decrease their risk for HIV infection.

Keywords: Homeless youth; Sexual behaviors; STD testing

Homeless adolescents represent one of the nation's most vulnerable populations [1]. In one study, it was found that 7.6% of U.S. adolescents had experienced a homeless episode over the previous 12 months: had spent at least one night in a shelter, a public place, abandoned building, outside, or with a stranger [1]. A substantial number of homeless youth engage in high-risk sexual behaviors [2,3] and substance use [4] that place them at high risk for sexually transmitted diseases (STDs) and human immunodeficiency virus (HIV) [5,6]. In addition, adolescent girls appear to be at greater physiological susceptibility to HIV infection than older women [7]. Thus, social, behavioral, and biological factors increase the vulnerability of homeless adolescents for STD and HIV infection.

The high prevalence of STDs among homeless youth is of special concern because STDs increase the likelihood of HIV transmission: youth who become infected with an STD

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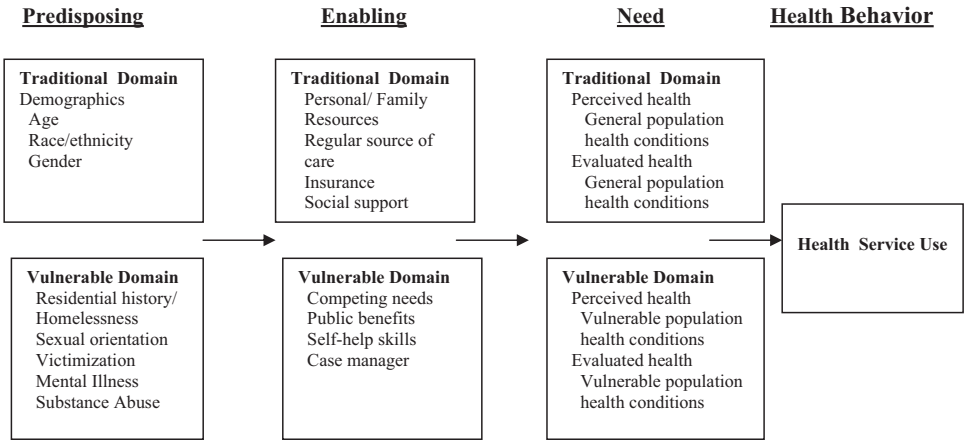

Figure 1. The behavioral model for vulnerable populations. Adapted with permission from Gelberg L, Anderson RM, Leake B. The behavioral model for vulnerable population: application to medical care use and outcomes for homeless people. Health Serv Res 2000;34(6):1276–302.

are at high risk for acquiring HIV, or if already infected with HIV, are at higher risk of transmitting the infection to others [8,9]. Early STD detection is an effective HIV prevention strategy [10].

Several studies to date have examined the association between sexual risk behaviors and HIV testing in adults and have found those at highest risk to be more likely to seek HIV testing [11,12]. Studies examining this association among high-risk youth [13] and chronically homeless youth [14] have also found certain high-risk characteristics to be associated with HIV testing: older age, self-identifying as gay/bisexual, history of STDs, five or more years of sexual activity, injection drug use. However, to date no studies have yet been conducted on newly homeless youth (NHY). In particular, there is an absence of longitudinal studies. Longitudinal studies that examine the association between evaluated need (sexual risk) and STD testing among NHY are needed. Such studies would provide useful information for the development of STD and HIV prevention programs for the NHY population. Early interventions on NHY may deter sexual risk.

Therefore, the purpose of our study is to describe the patterns of STD testing among a cohort of NHY who were followed over 24 months. We will use the *Expanded Behavioral Model for Vulnerable Populations* [15] in examining the factors associated with STD testing, over time. According to this model, certain predisposing, enabling, and need factors are related to health service use, as shown on Figure 1. According to this model, need is the primary determinant of receipt of acute nondiscretionary services, even for vulnerable populations. However, to date most of the studies using this model have focused on adults and not adolescents. A need exists to test the Behavioral Model for Vulnerable Populations with the adolescent population, especially homeless ones.

For this study, we are particularly interested in examining the association between predisposing (age, race/ethnicity, gender, sexual orientation, residential history/homelessness, mental illness, substance use) and need factors (sexual risk) with STD testing, over time. We hypothesize that sexual risk behaviors will not be associated with STD testing over time. Because many STDs are asymptomatic, NHY may not understand the need for regular STD testing based on sexual risk behaviors.

Methods

Participants

The homeless youth in this study reflect the entire cohort of youth from a longitudinal study that examines youths' pathways into and out of chronic homelessness. To be included in the longitudinal study, youth had to meet the following criteria: 1) age ranging from 12–20 years; 2) had spent more than one night away from home without the parent's or guardian's permission if under 17 or had been told to leave; 3) had been away from home for six months or less. Informed consent was obtained from all participants, including emancipated minors and those 18 years and older. For participants who were minor en locus parentis, consent was obtained from a member of the outreach (recruitment) team who was present, and assent was obtained from the minor. Participants were recruited over an 18-month period from 2001–02 using structured face-to-face interviews. Each youth was paid $20 to participate in the initial one-hour baseline interview and this amount increased by $5 on subsequent assessments for a total of $40 at the 24-month follow-up.

Procedures

Interviewers were sent out in pairs to predetermined sites, including shelters, drop-in centers, and street hangouts, that covered the entire geographic region of Los Angeles County to screen and recruit homeless adolescents.