AMERICAN JOURNAL OF INDUSTRIAL MEDICINE 53:976–983 (2010)

HIV and Sexually Transmitted Disease Risk Among Male Hispanic/Latino Migrant Farmworkers in the Southeast: Findings From a Pilot CBPR Study

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Background *Little is known about the HIV and sexually transmitted disease (STD) risk behaviors of Hispanic/Latino farmworkers. This study was designed to describe risk factors for HIV and STD infection, explore personal characteristics associated with condom use, and evaluate the feasibility of collecting self-report and biomarker data from farmworkers.*

Methods *Self-report and biomarker data were collected from a sample of male farmworkers living in 29 camps in North Carolina during the 2008 growing season.*

Results *Over half of the 100 male workers, mean age 37.1 (range 19–68) years, reported binge drinking during the past 12 months. Forty percent of those who reported having had sex during the past 3 months indicated that they were under the influence of alcohol. Knowledge of HIV and STD transmission and prevention was low. Among the 25 workers who reported having had sex during the past 3 months, 16 and 2 reported using a condom consistently during vaginal and anal sex, respectively, and nearly 1 out of 6 workers reported paying a woman to have sex. Two workers tested positive for syphilis.*

Conclusions *Farmworkers in this sample demonstrated significant HIV and STD risks; however, when exploring potential bivariate associations with consistent condom use no statistically significant associations were identified perhaps due to the small sample size. Because it was feasible to collect self-report and biomarker data related to HIV and STDs from Hispanic/Latino farmworkers, research needed to further explore risks and develop interventions to reduce disease exposure and transmission among this vulnerable population.* Am. J. Ind. Med. 53:976–983, 2010. © *2010 Wiley-Liss, Inc.*

KEY WORDS: HIV; farmworker; Hispanic/Latino; sexually transmitted disease; CBPR

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Contract grant sponsor: The National Institute of Environmental Health Sciences and Wake Forest University School of Medicine Venture Fund; Contract grant numbers: R01-ES008739, R01-ES12358.

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Accepted 4 December 2009
DOI 10.1002/ajim.20807. Published online 14 July 2010 in Wiley Online Library (wileyonlinelibrary.com).

INTRODUCTION

Over two million farmworkers labor in the United States (US) each year. States with the highest number of farmworkers include California, Texas, Washington, Florida, Oregon, and North Carolina. These farmworkers are overwhelmingly Hispanic/Latino, with most being natives of Mexico [Carroll et al., 2005]. Farmworkers experience severe health and social problems and are at greater risk than the general US population because of poverty, poor housing, malnutrition, and difficult working conditions [Villarejo, 2003; Arcury and Quandt, 2007].

Farmworkers in the US are disproportionately affected by the intersecting epidemics of HIV and sexually transmitted diseases (STDs). HIV prevalence has been reported between 2.6% [Centers for Disease Control and Prevention (CDC), 1988] and 13% [Jones et al., 1991] among farmworkers in the eastern US, whereas within the general US population, the HIV prevalence is estimated to be 0.6% [CDC, 2008a]. Although studies documenting HIV infection rates among farmworkers are limited and tend to be outdated, studies have documented that behavioral factors place farmworkers at high risk for HIV. Lifetime use of condoms among farmworkers has been identified as low while sex with multiple partners, partners with histories of STD infection, and commercial sex workers have been identified as relatively common [Jones et al., 1991; Organista et al., 1996, 1997; McVea, 1997; Aranda-Naranjo and Gaskins, 1998; Inciardi et al., 1999; Ford et al., 2001; Fernandez et al., 2004; Sanchez et al., 2004; Rhodes, 2009].

Data describing current STD infection rates among farmworkers in the US are also extremely limited [Rhodes, 2009]; however, STD infection rates among non-farmworker samples of Hispanics/Latinos provide some insight into the STD burden borne by farmworkers given that most farmworkers in the US are Hispanic/Latino. Rates for STDs are frequently two to four times higher among Hispanics/Latinos than among whites [CDC, 2008b]. For example, in 2007 the prevalence of chlamydia was three times higher for Hispanics/Latinos than Whites (477.0 and 153.1 per 100,000, respectively) [CDC, 2008b]. Similarly, a study in Decatur, Alabama, found a 5% positive syphilis rate within a door-to-door convenience sample of predominantly Hispanic/Latino men [Paz-Bailey et al., 2004]. Moreover, although the rates of syphilis are declining within some vulnerable populations, including African Americans, rates continue to increase rapidly among US Hispanics/Latinos each year [CDC, 2008b].

Alcohol and illicit drug use are linked to HIV and STD risk across ethnic/racial groups [O'Leary and Hatzenbuehler, 2009]. Data on alcohol and illicit drug use among farmworkers are limited; in the most recent report, Grzywacz et al. [2007] reported that nearly one-quarter of farmworkers completely abstain from alcohol, whereas another one-quarter engage in frequent heavy drinking or drinking five or more alcoholic beverages two or more times per month. Over one-third of farmworkers (39%) may be alcohol-dependent, but little is known about how alcohol use or use of illicit drugs affect HIV and STD incidence among farmworkers [Organista et al., 2004].

Data documenting farmworker knowledge of HIV and STD transmission and prevention are also limited. Research has found low rates of knowledge among immigrant Hispanics/Latinos in general [Knipper et al., 2007; Rhodes et al., 2007] and among farmworkers specifically [Fitzgerald et al., 2003; Brammeier et al., 2008].

In addition to being among the states with the largest numbers of farmworkers, North Carolina has high rates of AIDS and STDs. As examples, North Carolina ranks tenth in the nation in reported cases of AIDS and sixth for reported cases of gonorrhea [CDC, 2008a,b]. Although the incidence of HIV in other regions of the country has either remained relatively constant or decreased in recent years, it has increased in the southern US [CDC, 2008a; Southern State Directors Work Group, 2008; Rhodes et al., 2009]. About 36% of the US population lives in the South, but the region has 40% of all people living with AIDS and 46% of newly identified cases.

Using data from a community-based participatory research (CBPR) project, the first goal of this pilot study was to describe risk factors for HIV and STD infection in a sample of male Hispanic/Latino migrant farmworkers living in eastern North Carolina. These risk factors include alcohol and illicit drug use, HIV and STD infection knowledge, and sexual risk behaviors. The second goal was to explore associations between personal characteristics and condom use. The final goal was to evaluate the feasibility of Hispanic/Latino farmworkers to provide self-report and biomarker data related to HIV and STDs.

MATERIALS AND METHODS

Data used in this analysis were collected in 2008 as a part of an ongoing CBPR study conducted in eastern North Carolina. Community partners included North Carolina Farmworkers Project based in Benson, Green County Health Care, Inc., operating out of Snow Hill, and Columbus County Community Health Center located in Whiteville, North Carolina. Data collection focused on 11 eastern North Carolina counties that have large migrant and seasonal farmworker populations and are served by the community partner agencies.

Sampling and Recruitment

Participants were selected from a sample of 287 farmworkers who participated in a 2007 study of pesticide exposure [Arcury et al., 2009]. Farmworker camps in which

data collection was completed in 2007 were visited in random order, and all farmworkers present in these camps who enrolled in 2007 were asked to participate. After 29 camps had been visited, the target sample of 120 had been reached and recruitment stopped.

Data Collection

Data were collected from June through September 2008, by three teams of trained data collectors. Data collection teams included both male and female interviewers who were fluent Spanish speakers, and one certified phlebotomist. At least one member of each team completed the North Carolina HIV Counseling, Testing and Referral Training held by Whetstone Consultations (www.Whetstoneconsultations.com). This training focused on correct methods of pretest counseling for, and disseminating results of, HIV and other infectious disease tests.

Data collection included two components. First, participants completed an interviewer-administered questionnaire, which was used to overcome challenges associated with low literacy among farmworkers. The questionnaire, which was administered in Spanish, contained 57 items and took about 15 min to complete. The response categories for each item used binary, categorical, or Likert-scale responses. The second component was a venous blood sample, which was subsequently tested by rapid plasma reagin (RPR) for syphilis antibodies.

The questionnaire was developed in English and translated by an experienced translator who was a native Spanish speaker familiar with Mexican Spanish. Validated Spanish language versions of scales were used where available. The translated questionnaire was reviewed by four fluent Spanish speakers familiar with farm work, and then pretested with 17 Spanish-speaking farmworkers and revised as needed. The questionnaire included items assessing basic personal characteristics (e.g., age, education, years in agriculture); alcohol and drug use; HIV, STD, and hepatitis B knowledge; sexual behavior and condom use; and exchanging sex for money, drugs, alcohol, or shelter.

Blood samples tested by RPR were transported to a clinical laboratory affiliated with Wake Forest University Baptist Medical Center. Participants were given an incentive valued at $45 when they completed both the interview and the blood draw. The Wake Forest University Health Sciences Institutional Review Board approved the study protocol. Signed informed consent was obtained from all participants.

Measures

Personal characteristics such as age, country of origin, educational attainment, and current living arrangement (i.e., house, barracks, or trailer) were assessed. Current marital status was measured by the item: ''What is your current marital status?'' Response options included: ''Married/living as married''; ''Separated or divorced''; ''Widowed''; and ''Single or never been married.'' Whether the participant was accompanied or unaccompanied was measured by the item: ''Is your spouse or partner here with you in the camp?'' Response options were yes/no. Whether the participant came to the US with a H2A visa was assessed.

Acculturation was measured with a 12-item scale that assessed participants' language and socialization preferences (e.g., ''I speak English''; ''I speak Spanish''; ''I associate with Anglos''; ''My thinking is done is Spanish'') with response options ranging from ''Not at all'' (1) to ''Almost always/Extremely often'' (5) [Cuellar et al., 1995]. The scale had good internal reliability using Cronbach's coefficient alpha ($\alpha = 0.80$).

Alcohol use was measured using items from a previous farmworker survey of alcohol use [Grzywacz et al., 2007], tapping both frequency and quantity of alcohol consumption in the previous 3 months. Responses to items were used to construct variables reflecting the frequency of alcohol use, as well as incidence of binge drinking (i.e., $\geq$5 drinks in a single drinking occasion) and heavy episodic use of alcohol. Having had sex while under the influence of alcohol during the past 3 months was assessed by the item: ''During the past 3 months, how often were you under the influence of alcohol when you had sex?'' Response options were: ''Never,'' ''Rarely,'' ''Sometimes,'' ''Almost always,'' ''Always,'' and ''I have not had sex in the past 3 months.'' Lifetime and past 3-month history of illicit drug use was also assessed, including marijuana, heroin, cocaine, and crack. Injecting drugs not prescribed by a medical doctor and sharing needles or other equipment used to inject drugs were assessed.

Knowledge of HIV transmission and prevention was assessed with a set of 11 true–false items that have been used successfully with immigrant Hispanic/Latino populations [Knipper et al., 2007]. Sample items included, ''A person will not get HIV if she or he is taking antibiotics,'' and ''A person can have HIV/AIDS for a long time without knowing it.'' The HIV knowledge variable was constructed by summing correct responses, with higher values indicating greater knowledge.

Knowledge of STDs was assessed with a set of nine true–false items that has been used successfully with immigrant Hispanic/Latino populations [Knipper et al., 2007]. Sample items included, ''These diseases can be prevented by cleaning the genitals after sex,'' and ''These diseases can be prevented by eating healthy foods.'' The STD knowledge variable was constructed by summing correct responses, with higher values indicating greater knowledge.

Knowledge of hepatitis B was assessed through the summation of correct responses to five items. Correct answers were scored on a scale that ranged from 0 to 5. This abbreviated scale was based on a longer measure that has been used previously [Rhodes and DiClemente, 2003].

Sample items included, ''Do you think a person can get hepatitis B from sex?'' and ''Do you think that a person can have hepatitis B and not know it?''

HIV and STD sexual behaviors also were measured. Questions regarding sexual behavior included gender of sexual partners, type of sexual activity (vaginal, oral, and anal), and condom use during past 3 months and most recent intercourse. Exchanging money, shelter, alcohol, or drugs for sex within the past 3 months was assessed.

Statistical Analyses

Frequencies and percentages were used to describe discrete variables; and means, standard deviations, and ranges were used to univariately describe demographic characteristics, alcohol use, and illicit drug use, and sexual risks of the participants. Bivariate analyses were performed to explore potential associations between consistent condom use during the past 3 months and independent variables (e.g., demographics including education, relationship status, acculturation, and current living arrangement; alcohol and illicit drug use frequency; binge drinking; heavy episodic use of alcohol; knowledge of HIV and STD transmission and prevention; and exchanging money for sex). The relationship of condom use with discrete variables was tested using the Fisher's exact test and continuous variables were tested with *t*-tests. All analyses were performed using SAS version 9.2 (Cary, NC).

RESULTS

Participant Characteristics

Of the 123 farmworkers approached, 113 agreed to participate in the study for a 92% participation rate. Thirteen of these were women and were excluded from these analyses because of their small number. Of the 100 male farmworkers who participated, mean age (±SD) was 37.1 (±9.3; range 19–68) years; all participants reported being originally from Mexico (Table I). Nearly half (n = 45) reported educational attainment of 6 grades or fewer. Exactly 93% of the participants reported being married or living as married, and of these 90% reported being unaccompanied (n = 84).

TABLE I. Selected Demographic Characteristics of the Sample of Male Hispanic/Latino Migrant Farmworkers (N = 100)

Characteristic	Mean or n, as appropriate	% or SD and range, as appropriate
Age in years	37.1	±9.3; range 19–68
From Mexico	100	100.0
Highest level of education completed		
No school	4	4.0
≤Grade 6	41	41.0
Grades 7–11	49	49.0
Grade 12 or above	6	6.0
Relationship status		
Married or living as married	93	93.0
Separated or divorced	2	2.0
Single or never married	5	5.0
Unaccompanied	84	84.0
Has H2A visa	86	86.0
Acculturation	1.5	±0.4; range 1.0–3.0
Current living arrangement		
House	38	38.0
Barracks	22	22.0
Trailer	40	40.0

Risk Factors

Alcohol use

Nearly 10% of the sample reported drinking alcohol every day or nearly every day, while a quarter reported drinking alcohol one to four times per week (Table II). Although 32% of farmworkers reported drinking at least once per week, the majority of farmworkers in this sample reported drinking alcohol two to three times or less per month. Binge drinking was substantial in this sample, with nearly 58% reported binge drinking during the past year. Nearly one-fifth of the sample reported binge drinking one or more times each week, and over one-third reported binge drinking at least monthly. About 40% of the sample reported consuming three or more drinks on a typical drinking occasion during the past 3 months. Forty percent of those who reported engaging in sex during the past 3 months reported being under the influence of alcohol at least once while engaging in sex during the past 3 months.

Illicit drug use

Fifteen participants (15.0%) reported lifetime histories any type of illicit drug use; 12 reported using marijuana; and 4 reported using cocaine. Of these users, one participant reported using both marijuana and cocaine. None reported ever injecting drugs that were not prescribed by a provider or having sex while under the influence of illicit drugs during the past 3 months. One participant reported ever sharing needles or equipment for injecting drugs.

HIV and STD infection knowledge

Participants had mean knowledge of HIV and STD transmission and prevention, and knowledge of hepatitis B scores of 8.1, 6.1, and 1.7, respectively (Table III). The HIV knowledge and prevention item that was most frequently

TABLE II. Alcohol Use and Illicit Drug Use Reported by Male Hispanic/Latino Migrant Farmworkers in Eastern North Carolina, 2008

Alcohol and illicit drug use	n	%
Alcohol use		
Alcohol use during past 3 months		
Every day or nearly every day	8	8.0
1–4 times per week	24	24.0
2–3 times per month	16	16.0
About once per month	17	17.0
Less than once per month	5	5.0
Did not drink in past 3 months	30	30.0
Binge drinking during past year		
Every day	2	2.0
3–4 times per week	4	4.0
1–2 times per week	12	12.0
2–3 times per month	12	12.0
About once a month	12	12.0
5–10 times per year	7	7.0
1–4 times per year	9	9.0
Did not binge drink during past year	42	42.0
Typical number of drinks when drinking during past 3 months		
5 or more	22	22.0
4	6	7.0
3	11	11.0
2	12	12.0
1	18	18.0
Less than1	1	1.0
Did not drink in past 3 months	30	30.0
Sex while under the influence of alcohol (of 25 who reported sex) during past 3 months	10	40.0
Illicit drug use	15	16.0
Illicit drug use, ever used		
Marijuana	12	12.0
Cocaine	4	4.0
Heroin	0	
Crack	0	
Ever injected drugs not prescribed by provider	0	
Ever shared needles or equipment for injecting drugs	1	1.0
Sex while under the influence of marijuana, cocaine, heroin, or crack during past 3 months	0	

TABLE III. HIV and STD Infectious Disease Knowledge of Male Hispanic/Latino Migrant Farmworkers in Eastern North Carolina, 2008

HIV and STD infectious disease knowledge	Mean	SD and range
Knowledge of HIV transmission and prevention	8.1	±1.5; range 0–11
Knowledge of STD transmission and prevention	6.1	±1.7; range 0–9
Knowledge of hepatitis B	1.7	±1.6; range 0–5

answered incorrectly by participants was, ''Coughing and sneezing do NOT spread HIV.'' Over 60% indicated that this statement was false (50.5%) or that they did not know whether it was true or false (11%). In terms of STD knowledge and prevention, the item that was most commonly answered incorrectly was, ''These diseases can be prevented by choosing partners carefully'' with over 80% of the participants reporting that this was true. Finally, over 55% of the participants in this sample reported never having heard of hepatitis B.

Sexual behaviors

Twenty-five of the farmworkers reported having sex in the past 3 months. About two-thirds of those who reported having had vaginal sex during the past 3 months reported consistent condom use. Three participants reported having anal sex with women during the past 3 months, and of these, two reported consistent condom use.

Sixteen percent of the sample reported having paid a woman to have sex during the past 3 months. None of the participants reported oral or anal sex with another man during the past 3 months.

RPR Syphilis Antibodies

Two participants tested positive for syphilis. These two cases were not for the same farmworker camp.

Associations of Personal Characteristics With Condom Use

When exploring potential associations with consistent condom use, no statistically significant associations were identified at $P \leq 0.05$. We tested for potential associations between consistent condom use during vaginal or anal sex with a woman during the past 3 months and demographics including education, relationship status, acculturation, and current living arrangement; alcohol and illicit drug use frequency; binge drinking; heavy episodic use of alcohol; knowledge of HIV and STD transmission and prevention; and exchanging money for sex.

DISCUSSION

Given the disproportionate HIV and STD burden borne by Hispanics/Latinos living in the US, a need exists to increase our understanding of the epidemic within vulnerable subcommunities, particularly farmworkers. Exposure and transmission of HIV and STDs is particularly salient for farmworkers who are highly mobile as they may unknowingly transmit disease in multiple states and across national borders. This pilot study provided preliminary demographic and behavioral information related to HIV and STD risk

within a group of Hispanic/Latino men, for whom few data are currently available. Future studies must explore risk among farmworkers using a larger sample. Importantly, this study also illustrates that it is possible to identify and successfully recruit farmworkers and collect both sensitive self-report and biomarker data from this population that tends to be socially, economically, and politically marginalized and often considered ''hard to reach.'' About 92% of those farmworkers approached agreed to participate in this study.

Several findings from this pilot study deserve highlighting. Alcohol use is not well understood among Hispanic/Latino communities. Although alcohol use among immigrant Hispanics/Latinos is often assumed to be high, a recent review indicated that Hispanic/Latino men may not be more likely to use alcohol, it may be that they drink heavily when they do drink [Worby and Organista, 2007]. Within this sample of male Hispanic/Latino farmworkers, we found that less than 10% reported drinking every day or nearly every day. The majority of the participants reported drinking one time or fewer per month during the past 3 months. Binge drinking (defined as drinking five or more drinks in a single drinking occasion) was more common, however, with nearly one-third of the sample reporting binge drinking at least twice a month over the past year. This type of drinking pattern has been referred to as ''fiesta drinking,'' or drinking occasionally during events and celebrations, including holidays, and birthday and family celebrations [Worby and Organista, 2007]. Furthermore, drinking may correspond to paydays or to weekends when men have time and transportation to travel to stores to buy alcohol. The observed level of binge drinking in this study (30%) is comparable to that reported in an earlier study of farmworkers (27%) [Grzywacz et al., 2007]. However, more systematic research is needed to accurately measure, document, and understand alcohol use among farmworkers.

Of those who reported sex during the past 3 months, a substantial proportion indicated that they had had sex while under the influence of alcohol. This finding is particularly important because alcohol use may impair the judgment of an individual about initiating sex [Cook and Clark, 2005]. Within some populations, alcohol use behavior has been found to be associated with indiscriminate forms of sexual behavior or risk taking (e.g., having multiple partners or engaging in ''casual'' sexual intercourse) but not with actively protective behaviors such as condom use [Cooper, 2002; Rhodes and Hergenrather, 2002; Rhodes et al., 2006]. The relationship between alcohol use and sexual risk behavior requires further exploration given that the decision to engage in sex may be affected by alcohol use but the use of protective behaviors during sexual intercourse may not be. More research is needed to untangle the associations between substance use and risk behavior (e.g., multiple partners) versus prevention behaviors (e.g., condom use). Furthermore, these associations may differ by population subgroup.

This sample of farmworkers had low levels of knowledge in terms of HIV, STD, and hepatitis B transmission and prevention. Although knowledge does not imply behavior change, an awareness of the health issue and an understanding of the consequences and the associated preventive actions are important, well-established antecedents necessary for subsequent intervention messages to be placed in context. Efforts to increase farmworker knowledge of HIV may be an important step in the prevention of disease exposure and transmission.

About two-thirds of the sample (16 of 25) reported using condoms consistently during vaginal sex within the past 3 months. However, this study did not assess whether condoms, when used, had been used correctly. Condom use errors are common among sexually active adults [McAuliffe et al., 2007; Rose et al., 2009]. Common examples of condom misuse include storing condoms in wallets, using sharp instruments to open condom packages, applying condoms after sex has begun, not using a new condom when switching from one form of sex to another, and removing condoms before sex is concluded. Thus, although over half of the participants who reported having had sex during the past 3 months reported using condoms consistently, some proportion of these participants may have used them incorrectly, increasing their risk of infection.

Use of commercial sex workers among immigrant Hispanic/Latino men in the Southeast, and in North Carolina specifically, has not been well documented quantitatively. However, reported rates of use of female commercial sex workers range from about 28% among urban migrant Hispanic/Latino men during the past 12 months [Parrado et al., 2004] to 32% among rural unaccompanied Latino men during the past 3 months [Knipper et al., 2007] and 45% among recently arrived male Latino farmworkers during the past year [North Carolina Farmworker Health Program, 2000]. Although, nearly one out of six workers ($n = 16$) in this sample reported paying a woman to have sex, among the men who reported having had sex during the past 3 months, 64% reported having paid money to a woman to have sex. Future studies and intervention efforts should explore the potential of working with and mobilizing commercial sex workers to increase consistent and correct condom use among farmworkers. However, access to commercial sex workers may be difficult as some commercial sex workers work alone. Some sex workers are part of brothels and are moved from rural community to rural community after short stays of 2 weeks or less, and some sex workers migrant much like some migrant farmworkers [North Carolina Farmworker Health Program, 2000; Parrado et al., 2004; Vissman et al., 2009].

Besides working with commercial sex workers, efforts to intervene on the use of commercial sex workers may include offering a wider range of entertainment options for farmworkers such as longer public library hours; English

classes; parks, sports fields and other recreational options; church activities; or immigration policies that allow families to travel together or improved infrastructure such as stronger communication opportunities for unaccompanied men. Thus, men might be less likely to try to fill their social needs through having sex or engaging in other risk behaviors (e.g., alcohol use) that may contribute to sexual risk.

Finally, we found two cases of syphilis, representing 2% of the sample. This case number is considerably higher than the general US population which in 2007 had 3.8 cases per 100,000 [CDC, 2008b]. The high rate of syphilis in this small sample reinforces the need for more focused research and intervention in this vulnerable population.

Limitations

Although this study provides valuable information about a specific group of Hispanic/Latino farmworkers living within 29 farmworker camps, the degree to which of these findings can be generalized to other groups of Hispanic/Latino farmworkers is unknown. It does, however, provide initial data about a group assumed to be at increased risk for a variety of health issues, particularly STDs and HIV, and about whom little is currently known.

This study did not assess whether condoms, when used, had been used correctly. Thus, although over half of this sample reported using condoms consistently during the past 3 months, some proportion of these users may have used them incorrectly. Further research is needed to explore condom use skills and errors within this community.

The observations of this study are based on cross-sectional data, and additional analyses using a prospective-cohort design are needed to evaluate the significance of these findings over time. Finally, the study size was limited and further studies are needed to better explore bivariate and multivariable associations using a larger sample. However, this study provided key information pertaining to the feasibility of recruiting farmworkers and collecting both sensitive self-report and biomarker data from them in the field.

Conclusions

This study provides pilot data on the risk behaviors of male Hispanic/Latino farmworkers. Currently, little is known about the rates of behavioral factors that might affect STD and HIV transmission within this community. Further research will be needed to support these findings and to determine how they might be integrated into prevention efforts.

The southeastern US, particularly North Carolina, is experiencing disproportionate rates of STD and HIV infection. Research is needed to gain a greater understanding of the complex factors affecting STD and HIV risk among Hispanic/Latino farmworkers in the US Southeast, as well as to determine how best to prevent exposure and transmission within this vulnerable and often neglected population.

ACKNOWLEDGMENTS

This work was supported by the National Institute of Environmental Health Sciences and Wake Forest University School of Medicine Venture Fund (grant numbers: R01-ES008739 and R01-ES12358).

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