

# Loneliness as a Sexual Risk Factor for Male Mexican Migrant Workers

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HIV/AIDS risk among migrant workers is often examined through individual determinants with limited consideration of social context. We used data from systematic ethnographic observations, structured interviews (n=50), and life history interviews (n=10) to examine the relationship between loneliness and HIV/AIDS risk for recently arrived (within the last 3 years) male Mexican migrant workers in New York City. Higher levels of loneliness were strongly associated with frequency of sexual risk behavior ( $r=0.64$ ;  $P=.008$ ). From our ethnographic observations, we found that loneliness was a dominant element in workers' migration experience and that 2 different kinds of social spaces served as supportive environments for dealing with loneliness: bars or dance clubs and Catholic churches. Loneliness should be addressed as a critical factor in reducing HIV/AIDS risk among Mexican male migrant workers. (*Am J Public Health*. 2009; 99:802–810. doi:10.2105/AJPH.2007.122283)

Male Mexican migrant workers in the United States are particularly vulnerable to HIV infection. Although currently no surveillance mechanisms accurately measure the epidemiology of HIV/AIDS for Latino male migrant workers,<sup>1,2</sup> such men typically have extremely low-income backgrounds and low levels of formal education (factors well-known in the research literature to increase the likelihood of HIV infection).<sup>3,4</sup>

Male Mexican migrant workers in the United States are at high risk of contracting HIV compared with their counterparts who remain in Mexico.<sup>5</sup> Studies suggest that Mexican migrant workers have low perceptions of HIV/AIDS risk, have high levels of stigma associated with talking about sexual activity or about HIV/AIDS, demonstrate a general lack of knowledge on how to use condoms properly, and use condoms inconsistently, both with sexual partners in the United States and with their wives and partners in Mexico.<sup>5–11</sup> Furthermore, Organista et al. found in their study of Mexican migrant workers that 82% of the single men and 27% of the married men in their sample reported multiple sexual partners during the previous year. Although condom use in their sample was strongly predicted by carrying condoms, more than two thirds of their sample never, or almost never, carried condoms.<sup>12</sup>

Mexican migrant workers in cities such as New York live in a context of extreme social inequality that facilitates HIV/AIDS risk.<sup>13</sup> This inequality is facilitated by their lack of legal rights, largely undocumented status, racial discrimination by members of other ethnic groups, limited access to health care or appropriate sexually transmitted disease prevention and early treatment services, and class discrimination.<sup>8,14–17</sup>

Recent data suggest that among recently arrived Mexican migrant workers (within the last 3 years), having sexual intercourse in the “new” social context seems to be associated with coping with the initial loneliness of the labor migration experience.<sup>8,13,18,19</sup> To extend this earlier work on loneliness as a sexual risk factor, we conducted an ethnographic study to qualitatively and quantitatively examine the association between loneliness and sexual risk among Mexican migrant men in New York City. We sought to describe the contextual factors that shape the experiences of loneliness and HIV sexual risk behavior for men in the study.

## METHODS

We conducted a 2-year ethnographic study of Mexican migrant workers in New York City (2005–2007). Our main data collection methods were structured interviews, life

history interviews, and ethnographic observations.

## Sample

Mexican migrant workers in New York City are an understudied population in one of the AIDS epicenters nationwide. Close to one third of Mexicans in New York City lived in households that were under the federal poverty level in 2000—more than double the poverty level in the city overall.<sup>25</sup> Mexicans also had the highest rate of population growth of all the major racial and ethnic groups in New York City in the 1990s.<sup>20</sup> The number of Mexican New York City residents counted by the US Census more than tripled, from 61 772 in 1990 to 186 872 in 2000. Census data likely reflect a substantial undercount of the total number of Mexicans living in New York City because of undocumented immigrants' fear of deportation.<sup>20</sup> Thus, Mexicans have grown to constitute the third largest Latino group in New York City, after Puerto Ricans and Dominicans.

## Recruitment

We recruited 50 men for the structured interviews and 10 men for the life history interviews. The 10 men who gave life history interviews were randomly selected from the men who participated in the structured interviews. Men for the study were recruited through the ethnographic fieldwork component of the study and from 2 non-AIDS prevention community-based organizations. To participate in the study, the men had to: (1) be aged 16 years or older, (2) have been born and raised in Mexico, (3) have arrived from Mexico within the past 3 years, (4) be married or living with a steady female partner in Mexico, (5) have a wife or steady female partner who stayed in Mexico that they stay in communication with, and (6) be able to provide informed consent. Men who migrated with their wives or steady female partners were not included in this study because we wanted to focus on the men who were potentially at

highest behavioral risk for HIV. We followed oral consent procedures, and we obtained a waiver of parental authorization for those aged 16 or 17 years. The structured and life history interviews were conducted in Spanish and they took place in a location selected by the participants. Table 1 describes the sample characteristics of study participants. Our sample was consistent with the age trends of Mexicans in New York, who tend to be young and mostly from the state of Puebla, Mexico.<sup>20</sup>

### Structured Interviews

Structured interviews consisted of closed-ended questions regarding men's demographics, migration history, ideologies of masculinity and sexuality, occupational history, alcohol and drug use, HIV/AIDS risk perceptions, and workers' rights. The instrument used for the structured interviews was adapted from a previous study with Mexican migrant workers in Atlanta, GA; it was first tested with a small group of men and modified to incorporate the language that male Mexican workers in New York use when referring to sexual themes.<sup>7</sup> Data from the instrument were entered into a data management program (ACCESS, Microsoft Corp, Redmond, WA). After the data were entered, a second research assistant reviewed each entry to detect errors. Data were imported into SPSS version 14.0 (SPSS Inc, Chicago, IL) for statistical analyses.

The primary constructs for this study were loneliness (the main independent variable) and sexual risk (the dependent variable).

**Loneliness.** We measured men's loneliness with 3 items of the University of California, Los Angeles (UCLA), Loneliness Scale<sup>21,22</sup>: (1) How often do you feel left out?, (2) How often do you feel that people are around you but not with you?, and (3) How often do you feel alone? The items were scored with a 5-point Likert-type response format: 1=never to 5=always. The overall  $\alpha$  for the scale was 0.80. As a result, a composite indicator was created. The scale ranged from 15, which was the highest level of loneliness, to 5, which was the lowest level of loneliness (mean=8.11; SD=2.93).

**Sexual risk variables.** We measured proportion of condom use during vaginal or anal intercourse with "new" girlfriends (women with whom they had sexual or emotional relationships but did not exchange money or drugs for

**TABLE 1—Sample Background Characteristics of Mexican Male Migrant Workers (N = 50) in New York, New York: 2005–2007**

Characteristic	%
Age, y	
16–29	64.7
30–46	35.3
Education	
Junior high school or less	79.2
High school	18.8
More than high school	2.0
Place of residence in Mexico	
Puebla State	44.0
Mexico State	22.0
Mexico, DF (country's capital)	14.0
States of Hidalgo, Tabasco, Chiapas, Jalisco, Guadalajara, Oaxaca, Tlaxcala, Veracruz, or Guerrero	20.0
Places to stay during first week of arrival	
Relatives	41.7
Friends	35.4
No place to stay—sleeping outside	22.9
Work in Mexico	
Farming	25.0
Construction	20.8
Selling goods	29.2
Nonprofessional services (clerks, mechanics, electricians)	18.8
Restaurant	4.2
Part-time jobs with no specific skills	2.0
Current work in New York	
Farming	0
Construction	16.7
Selling goods	0
Nonprofessional services	14.6
Restaurant (e.g., food delivery, cleaners, cooks, and salad makers)	52.0
Part-time jobs with no specific skills	16.7
Reproduction	
No children	52.1
1 or more children	47.9
Birthplace	
City	54.2
Town	37.5
Farm	8.3
Companion crossing US–Mexico border	
Alone	43.8
Relatives (not wives or girlfriends)	35.4
Friends or acquaintances	20.8
Typology of sexual partners since arrival	
New girlfriends only	42.0
Female sex workers only	12.0
Other men only	4.0
Both new girlfriends and sex workers	16.0

Continued

TABLE 1—Continued

Both new girlfriends and men	2.0
Both female sex workers and men	0
All the above types	2.0
None	22.0
Strategies to deal with sexual urges (not mutually exclusive)	
Self-masturbation	63.6
Thinking about other things	27.3
Running or jogging	18.3
Taking cold showers	18.2
Relaxing to calm myself down	9.1
Playing video games	9.1
Watching pornographic films	9.1
Going to church and praying	9.1
Waiting until getting a wet dream	9.1

sexual intercourse), with female sex workers (women to whom the men gave money or drugs in exchange for sexual intercourse), and during anal intercourse (insertive and receptive) with other men, to assess behavioral sexual HIV/AIDS risk since arrival in New York City.

### Life History Interviews

Life history interviews were open-ended, semistructured interviews in which research participants were asked to discuss their personal history and sexual history from right before leaving Mexico to their current living situation in New York City.<sup>23</sup> During the interviews, the interviewer used a series of probes and guiding questions to facilitate the development of the interview. Each interview lasted between 90 and 120 minutes. After each life history was completed, the audiotapes were transcribed in the language in which the interview was conducted. These narratives were entered in the management text data software, ATLAS.ti (Scientific Software Development, Berlin, Germany).

### Ethnographic Observations

Informed by the life history interviews, we conducted detailed ethnographic observations of the places where Mexican men socialize in the 5 neighborhoods that have the largest concentrations of Mexicans in New York. Scholars of masculinity have pointed out that the vast majority of men in Latin America and Latino men in the United States

compartmentalize their social lives among 3 types of spaces: home, work, and the street (i.e., the public sphere).<sup>24</sup> We focused on the street and, to a lesser extent, on the workplace as spaces where men find their potential sexual partners.

The literature on sexual networks and sex markets points toward institutional spaces (such as work, school, and church), familial spaces, and recreational spaces where individuals in urban cities meet their sexual partners.<sup>25</sup> Given the fragmentation in the familial structure of recently arrived Mexican migrant workers, we decided to focus this study on institutional and recreational spaces. Therefore, we observed the following types of social spaces: street corners, barber shops, cantinas, soccer fields, basketball courts, recreational parks, food stands, restaurants, and churches. This list of spaces emerges from listings of key informants of all the places that Mexican men visit when they are not working and when they are not in their sleeping residences.

After completing the initial map of the specific places where men socialize, we identified which of these spaces were frequented mostly or exclusively by Mexican men. This was not a difficult task given the familiarity of both our ethnographers with differences in Spanish accents and the confirmatory questions of ethnic origin used during the mapping exercise to assess potential research participants. These questions were: (1) When was the last time you went to Mexico?; (2) From which part of Mexico are you from?; or (3) Are you from Mexico? With this information we identified

specific Mexican male-centered social spaces to conduct in-depth ethnographic fieldwork.

We developed a detailed schedule to conduct systematic observations at different times of the day and the week. We conducted field visits in every location at least twice daily. Two thirds of the observations were made during the busiest times at these locations and the remaining third were made during low-traffic hours. Observations in each location were conducted by 2 independent ethnographers, who wrote down and audiotaped observations immediately after leaving the observation site.

During each ethnographic observation the ethnographers collected and classified information into 4 major categories: traits, activities, patterns, and codes. Traits are the characteristics of the social scenarios and social actors in Mexican male-centered social spaces. Activities are the types of activities that take place in these social spaces. Patterns are the configurations of the social dynamics of subgroups and individuals that take place between actors of the selected social scenarios. Codes are the nonverbal and verbal codes and symbols used in the social interactions within these social spaces. The expected outcome of the ethnographic observations was to generate a description of the social-situational contexts where the men seek potential sexual partners.

### Data Analysis

Our analytical plan focused on examining the relation between 3 dependent sexual risk variables and loneliness. Given the sample size of this study, we decided to use descriptive statistics and partial Pearson correlations to examine statistical associations. We set the  $\alpha$  level at 0.05 and used the Bonferroni correction method to reduce the probability of type I error because we conducted multiple statistical tests.<sup>26</sup>

We conducted a semantic analysis of the narratives from life history interviews and field notes for this analysis to examine how codes (the terms, symbols, and meanings that individuals use to refer to issues raised by the study<sup>27</sup>) link with broader themes within the research participant's narrative account. The focus was the migrant Mexican men's social scene in New York City. The analytical questions for this analysis were: (1) What role did sexuality play in men's daily socialization?; (2) How did the

migration experience contribute to the experience of loneliness?; and (3) How did men cope with loneliness and other aspects of the migration experience?

These analytical tasks served as the general structure for a codebook of meanings, which was developed before data collection and was used to catalog the data in semantic open codes. This primary level of coding by topic was done as soon as the field notes and interviews were transcribed and transferred into ATLAS.ti. A second level of coding (which identified different meanings within each question) was conducted in 3 steps: (1) half of the life history interviews and a quarter of the field notes were coded collectively by a group of 3 data analysts to determine emerging meanings according to the previously mentioned analytical tasks; (2) from this coding exercise a semantic matrix was developed by the data analysts; and (3) using the semantic matrix, data analysts coded the remaining life history interviews and field notes. Once the semantic codes were applied to the narrative data, the primary data analyst generated a report that answered the general analytical tasks. Each of the analytical questions was discussed to assess the accuracy of the report and to generate interpretations regarding the semantic codes of the data. Our analysis focused on 3 codes: descriptions of migration trajectory to New York City, meanings of loneliness, and social spaces for coping with loneliness. All statistical findings were adjusted for age differences.

## RESULTS

José (a pseudonym), 26, grew up in a small town in the outskirts of Puebla. José was working at 2 jobs (cutting cilantro into small bunches for packing and shipping and working in a textile sawing company in the afternoons and Saturdays) when he decided to come to the United States. He hoped to buy a truck and save enough money to build a house for his wife and children, so he contacted a friend of his, Armando, who had recently left for New York. Through a coyote (person or group of people who bring Mexicans across the border for money), José flew to Tijuana and, in the trunk of a White American woman's car with a man lying next to him and a woman lying on top of him, he crossed the border.

José has had many jobs since coming to New York. At the time of the first interview he was working in a restaurant where he started in food delivery but now prepares salads. José's migration trajectory was common among the participants in this study. Friends (like Armando in José's experience) often help newcomers find jobs and housing. These forms of material support were not present for all the men in the study. Although it is expected that loneliness would be a common experience at arrival, men tended to feel lonely even after living here for a more than a year.

In terms of loneliness, 25.6% reported low levels of loneliness (scores less than 7), 39.1% reported moderate levels of loneliness (scores between 7 and 9), and 35.3% reported high levels of loneliness (scores 10 and higher). We found that 83.3% of the men reported missing their lifestyle and families in Mexico on a daily basis, and 29.1% did not have anyone to talk to about missing their families. After we adjusted for age differences, we found that as the level of loneliness increased, the average number of female sexual partners reported since arrival decreased ( $r=-0.41$ ;  $P=.005$ ). Although loneliness was a potential reason for seeking partners (once partners were found, loneliness was reduced), it is also likely that loneliness was the consequence of not being able to find partners. Our research design did not allow us to examine the directionality of this association.

### Loneliness, Sexual Intercourse, and Risk

Approximately three quarters of the study participants had been sexually active with various types of partners since arriving in New York City. The majority of the men did not have anal intercourse. Condom use during vaginal intercourse varied by type of partner. Of those who had "new" girlfriends in New York ( $n=29$ ), 3.4% did not have (vaginal or anal) sexual intercourse with their new girlfriends. Fifty-six percent of those with new girlfriends always used condoms with their new girlfriends, and 81.3% of those who had intercourse with female sex workers always used condoms with the sex workers. Notably, men saw sexual encounters with female sex workers as more than a trade of money for sexual release; 68.8% of those who had intercourse with female sex workers had conversations

with these women that extended beyond introductions, and they reported enjoying talking to them before and after their sexual encounters. Finally, all 4 men who had sexual intercourse with other men were receptive and insertive at least once without a condom since arrival to New York City. Two of the 4 had engaged in sexual intercourse with other men before arrival.

Levels of loneliness seemed to play a role in influencing men's likelihood of condom use. As level of loneliness increased, the proportion of unprotected vaginal intercourse with new girlfriends increased ( $r=0.64$ ;  $P=.008$ ). Differences in age or education were not statistically associated with the number of new girlfriends or female sex workers reported by the men or with any sexual risk indicators in the study. Differences in loneliness levels did not predict the number of encounters with female sex workers. We did not examine the statistical associations between loneliness and sexual intercourse with men, because of the low number of men who reported sexual encounters with other men.

High levels of loneliness were associated with lower self-perceived quality of "sex life" in New York City ( $r=-0.48$ ;  $P=.001$ ) and lower perceived quality of "love life" ( $r=-0.54$ ;  $P=.001$ ). Finally, in our sample, men who engaged in unprotected sexual intercourse with new girlfriends also were likely to practice unprotected sexual intercourse with female sex workers ( $r=-0.76$ ;  $P=.01$ ).

### Dealing With Loneliness

Drinking alcohol, hanging out with friends, and going to church were typical mechanisms for dealing with loneliness. At the contextual level, emotional support to cope with the experience of loneliness seemed to be provided from the spaces where men socialize. Five social spaces were consistently reported by the men: street corners, bars, soccer fields, dance clubs, and Catholic churches. Many of the men expressed how frequently they missed having someone to talk to when they feel alone. José expressed that in the bars, street corners, and soccer fields:

Everyone jokes around, you know . . . but, most of us are here alone, by ourselves. Nobody wants to talk about sad things or how your family is in Mexico.

As expressed in José's account, it was difficult for the men in the study to talk to other men about missing their families in Mexico. None of the men were able to articulate any reason for this difficulty. Reporting not having anyone to talk to when missing family in Mexico was associated with higher levels of loneliness ( $r = -0.31$ ;  $P = .03$ ), and higher frequency of unprotected sexual intercourse with new girlfriends ( $r = -0.44$ ;  $P = .02$ ). An account from Mario (another pseudonym), aged 35 years, illustrates 1 of 2 predominant patterns men in the study followed in dealing with loneliness through sexual intercourse and sexual relations with new partners. Mario used to go to the same taqueria (restaurant) once or twice a week, where he met Isabel (pseudonym; waitress, unmarried, mid-20s), who became his girlfriend. Mario said:

I didn't have anybody to make me eat, to take care of me . . . and Isabel did. It felt good to be taken care of. I decided to ask her out with no hope because I was at least 10 years older than she was. I bought her *regalitos* [little gifts] and flowers here and there. We spoke about her family and mine back in Mexico, about our histories. . . . Finally she said yes.

They broke off the relationship after 4 months of living together. The reasons had to do with diminishing attraction and keeping the "secrecy of the affair." Mario expressed that he wanted to protect their families from any *chismes* (gossip) that may result and hurt their relatives and his wife and children.

Mario and Isabel used condoms inconsistently, and at one point they thought that Isabel had become pregnant, but it was a false alarm. Having temporary new girlfriends like Isabel was one of the predominant ways that men expressed feeling that they were "not by themselves" and helped them to deal with pressures from work. Men met these types of partners (new girlfriends) in English classes, larger-community religious events (not in church), and restaurants, but usually not through relatives. The men in the study often avoided meeting potential female partners through relatives or friends because all of them were married in Mexico and wanted to avoid gossip reaching their families in Mexico.

A second pattern that we observed was that men visited sex workers as a way of "not being alone." Carlos (another pseudonym), 25, told us the story of how, when he arrived home

from his work in the kitchen of a restaurant very late at night, he would go to a female sex worker to "be with someone and have fun." He said:

Where I live there is a lot of *boricua* [Puerto Rican] woman. So the first time I was walking from work, it was like 2 in the morning, and these *boricua* girls were in the street, and each of them would ask me: "*Mexico nos vas a cenar? Qué no quieres?* [Mexico, you don't want to eat dinner? Don't you want some?]." So I said, "I already eat." Dumb fuck, I did not get it; what an idiot I was. [ . . . ] The next day I went with one *boricua* behind the building, against the wall, she bended and I did it from behind.

Carlos reported having sexual intercourse with approximately 20 different female sex workers on repeated occasions since he arrived 2 years ago, ranging in price from US\$20 to US\$45 per sexual act. "We are friends . . . they call me Mexico this, Mexico that," Carlos said. According to him, all his first times were without a condom:

They will pull out a condom to put it on me. "*Mexico qué pasa pontelo* [What's up, Mexico; let me put on the condom?]" and I would say "no, it is not the same." I had never used a condom for sex.

Carlos expressed that he really disliked being by himself and that the *boricua* women from his neighborhood kept him company in the late hours of the night. The Mexican women from the table dance club (this group is described in the following section) are the second group of women that Carlos talked to on a frequent basis but he reported that he had never had sexual intercourse with any of them. Carlos' ways of dealing with loneliness through sexual intercourse with sex workers was a second pattern found in the qualitative data in this study. Coping with loneliness through interactions with new girlfriends or with female sex workers were not mutually exclusive, but further research is needed to examine the transitions between these 2 kinds of relationships. Future research should examine the role of race and ethnicity in shaping sexual partnerships for migrant male workers.

### Spaces for Coping With Loneliness

Although it may seem contradictory at first, both the dance clubs and Catholic churches served as supportive environments for the men in the study. The dance clubs that we observed were not strip clubs or brothels. A specific club, *La Garza*, is an illustrative case

study. The signs on the outside of the *La Garza* club provided an accurate depiction of the differences between strip clubs or brothels and this type of social space. These signs said in both English and Spanish:

Every day . . . 69 beautiful dancers; Monday – Mexican nights tequilazo; Tuesday – all dancers in sexy babydolls; Wednesday – bikini nights; Thursday – sexy dancer nurses; Saturday – all dancers in micro-miniskirts; Sunday – school girls night; Happy Hour from 4 to 10pm, \$3 beers and house drinks; no caps or hats, no sneakers, no jeans; decent place to dance; we are looking for dancers.

The doormen (each of them approximately 6-feet, 7-inches tall, medium frame, Latinos) for the club were very strict in implementing the rules of the space. In our observations we never found more than 40 dancers on the dance floor (contrary to the club's advertisement of 69 dancers). *La Garza* was a 1-floor club with bathrooms in the basement, a 20-foot-long bar, 1 large-screen TV, 1 pool table that can only be used by VIPs (very important patrons), a dance floor in the center of the club, and 3 small seating sections around the dance floor. There is no entrance fee. Each dance costs \$4 but clients can get a private dancer for \$40 per hour. Most of the dancing consisted of Latin American music (e.g., salsa, cumbia).

Except for the dancing during reggaeton songs, there seemed to be no dancing pattern among patrons and dancers: some couples danced physically close whereas others did not; some danced fast, others slow. However, reggaeton songs were danced almost the same across patrons; men were pressed against the columns or standing by the walls by the women dancers who would thrust their backs and buttocks against the men's penis area (this is also known as grinding). Reggaeton was probably the most erotic dance in the club, and, yet, the most common behavior among men in the club was drinking and watching women dance, with other men, by themselves, or with other women. The men who attended *La Garza* can be divided into 3 main groups: (1) those that went mostly to dance with women, (2) those that mostly spoke and flirted with women and rarely danced, and (3) those that went to drink and watch, but rarely danced or spoke with the female dancers.

José was a member of the second group. These men paid women to speak with them for

the duration of a single song (approximately 3 minutes but most often they started their conversation in the middle of the previous song). They expressed that they had a better chance of getting together with any of the women by talking with them rather than by dancing and grinding. One of the men claimed to have had sexual intercourse with women from *La Garza* in his life history interview. He referred to them as *todas son putas finas* (they are all fine whores). Except for this person, none of the men who participated in the study reported having sexual intercourse with female dancers from the dance club. Men like José, not recruited from the dance clubs, talked about their experiences in places like *La Garza* as a way of being able to talk to women without the “complications” of doing it at work or in the neighborhood. As expressed by research participants, these complications included the difficulty of initiating a conversation with a strange woman, the need to avoid sexual harassment in the workplace, and prohibitions on men being able to talk to clients in many of the restaurant establishments in which they worked.

The third group of men in the dance club, those who mostly watched and drank but did not dance, seemed to represent the financially poorest or most self-conscious men in the study. Luis was the participant with the highest level of financial difficulties among our participants. Luis gave out flyers on street corners for a clinic and got clients into this clinic from the shelter where he often slept. Part of his income came from buying social security numbers from Puerto Ricans (who are born US citizens) in the shelter and selling them to people who needed them to access medical and social services. Luis had been in New York for a year at the time of our interview. When he went to the dance club, he rarely danced with the women because he had limited money available to spend on entertainment activities.

The support that places like *La Garza* provided was in the form of male bonding, nationalistic identity, and a way of dealing with daily stressors. It also provided an environment safe from crime (given its high security measures). During the summer of 2006 we were able to observe clear episodes of male bonding, when dancing with women became secondary

to collective Mexican national pride. This occurred during the *Federation Internationale de Football Association* (Soccer International Federation) World Cup games. Men were drinking, laughing together, yelling, engaging in brief celebratory hugs, patting each other's shoulders, talking to each other, and discussing breaking news, scandals, and soccer games. Even when there were no games, men would talk to each other about work, mostly complaining, and, in some instances, making points about the Mexican economy. One of the men, Victor, said to one of our researchers how “planting a square of marijuana in your backyard in Mexico for selling it to the Americans is way more lucrative than coming here [New York] to work but it is too corrupt and dangerous and puts your family in danger.” Perspectives like this were shared among many men and can be interpreted as a way of legitimizing their work in the United States as “hardworking and decent” (as Carlos expressed it). The men's camaraderie in the table dance club was considered meaningful to the men in the study as a way of “having fun and connecting with your people” (Mario).

As with the dance club, Catholic services served as spaces for men in the study to connect with Mexico and people from their towns and cities, and particularly with male friends who were single and had gotten married or who had brought their families to New York.

In the lives of some of the men, particularly those who were the poorest in the study, the Catholic church had played a meaningful role in offering material support (in the form of shelter, food, access to information regarding migrant services, and job opportunities) as well as emotional support: “feeling part of something larger than you,” as one of the men commented. The men in our study frequently attended 1 of 3 Catholic churches in Queens, 1 in East Harlem, or 1 in Brooklyn. Across these 5 sites, the services that had substantively large numbers of Mexicans attending were on Sundays at 9:30 AM. All these churches offer at least 2 religious services in Spanish on weekdays (e.g., *Adoración y Milagros* [Adoration and Miracles]). These services often have very low attendance and most of the men in our study did not attend them. The strolls to church on Sunday

mornings and the events after the service were considered by the men in the study as ways of getting to know other Mexicans in New York, whether they were long-time residents or recent migrant workers.

This environment also provided informational support about job opportunities and solutions to minor challenges. Men said that *el ambiente de familia* (the family environment) that attending services provided them made them feel as if they were part of a community and, yet, many of them expressed being wary of the high level of gossip that enabled news to easily travel back to Mexico “through church channels” (phone calls from Mexicans in New York to their relatives in Mexico). One of the major obstacles to attending religious services for men in the study was time conflicts with their job schedules, as the restaurant industry (where most of the men work) often operates on Sundays.

Among the several differences between Catholic churches and places like *La Garza*, the most relevant for this analysis was the consequential HIV/AIDS risk associated with participation in either of these spaces. None of the participants reported meeting “new” girlfriends, 1-night stands, or sex workers through church.

Alcohol consumption often operated as a social lubricant, with greater relevance in the eroticized environment of the dance club. The amount of alcohol consumed in places like *La Garza* set the stage for subsequent HIV/AIDS risk behavior ranging from seeking sex workers in the streets around the club to having sexual intercourse while drunk; 37.6% of the men reported drinking daily. Half of the men in the study reported that they tended not to use condoms during sexual intercourse if they had been drinking (53.8%). During times that men in the sample drank before sexual intercourse, only 32.0% used condoms consistently.

Alcohol use among the men was also associated with their loneliness and living conditions. The lower the number of people they knew in New York from their own town in Mexico, the higher the frequency of alcohol use ( $r=-0.317$ ;  $P=.03$ ). The higher the frequency of calling relatives in Mexico, the lower the alcohol use reported ( $r=-0.447$ ;  $P=.003$ ). Furthermore, the higher the number of new

girlfriends since arrival to New York City, the higher the frequency of drinking before sexual intercourse ( $r=0.345$ ;  $P=.02$ ). Drinking before sexual intercourse was also associated with high frequency of unprotected intercourse with new girlfriends ( $r=0.61$ ;  $P=.02$ ). Finally, self-reported desire to have sexual intercourse after drinking was also associated with high levels of loneliness ( $r=0.355$ ;  $P=.02$ ).

In the qualitative narratives, men reported having regular erections but with a feeling of “numbness” in their penises while drunk, problems in keeping erections while drunk, or avoiding using condoms for fear of losing the erection.

## DISCUSSION

This exploratory study drew a small, non-probability, nonrepresentative sample of men who had regular female partners or wives in Mexico. Thus, we inferred that loneliness is likely to be higher among this group than among those who migrated with their wives or female partners. Conversely, those who migrated with their partners are theoretically at less risk of HIV/AIDS risk behavior,<sup>28</sup> but this deserves further empirical examination. As such, the findings from this study must be taken with caution in attempting to generalize to the wider population of Mexican migrant workers.

The loneliness scale was the primary quantitative measure for this analysis. We originally included the 8 items of the UCLA Loneliness Scale in the initial test of the instrument and afterward decided to eliminate items that were difficult to understand for our pilot participants. Our factor analysis finding (not presented here) provided support to the 3 items we selected. However, a full examination of a comprehensive measure of loneliness among migrant Mexican workers is needed.

Our findings suggest that sexual risk is associated with high levels of loneliness. Men who reported higher levels of loneliness also reported lower numbers of sexual partners (probably the reason for their loneliness) but reported having significantly riskier sexual intercourse with those partners than those men who reported lower levels of loneliness. We identified 3 paths for connecting loneliness to

sexual risk. First, individuals who were lonely but did not want to feel lonely probably saw sexual intercourse as a way to feel close to someone. Ejaculating inside another person has been demonstrated to be a common behavior to show closeness.<sup>29</sup>

The second potential path is indifference. Indifference regarding health risk has been associated with poor mental health<sup>30</sup> and leads to health risk behaviors (including unprotected sexual intercourse) primarily because of a lack of intentionality to protect one’s health.<sup>31</sup> Loneliness has been shown to increase individuals’ indifference.<sup>30</sup> Thus, in this specific study, sexual risk may have resulted from loneliness-driven indifference regarding the men’s health.

The most relevant path in our study is that loneliness leads men to seek out contexts in which they can socialize with other men—such as the dancing place or the street corner—and when combined with alcohol, there is a high likelihood that they will also engage in sexual intercourse (either with women or with men) in these contexts. Further research is needed to investigate access to social spaces that promote healthy behavior for migrant workers, particularly whether the availability of these spaces could address their social needs and, thus, reduce their likelihood of health risk behavior.

The association between loneliness and sexual risk behavior found here is consistent with previous studies’ demonstration of this association in other populations. In the area of HIV/AIDS research, loneliness has been investigated as an outcome of becoming aware of HIV infection, as a factor mediating opportunistic infections among HIV-positive men, and as a factor leading to sexual risk behavior.<sup>29–35</sup> Torres and Gore-Felton found that loneliness was associated with sexual risk behavior among men who have sexual intercourse with men, and that this relation was mediated by the influence of substance use.<sup>36</sup>

Loneliness is a common human experience.<sup>22</sup> It also represents a problem for specific sectors of the population who are going through life-changing processes, including adolescents, individuals suffering from stigmatizing illness (HIV/AIDS, lung cancer), and immigrants.<sup>32–34,36,37</sup> Our study documents how the workers’ migration experience was

characterized by loneliness, which is consistent with other studies on migration.<sup>7,9,16,19,36,38,40</sup> The men’s experiences of loneliness started at the moment of crossing the border—almost half of the men in the study crossed the border alone. Beyond the fact that the men in the study had access to limited material resources, the isolating social conditions of migrant work created a context of institutionalized loneliness among these men. As stated in their life histories, they were often surrounded by other people, but felt alone.

Loneliness is socially produced. Beyond the act of physically migrating to a new location only to occupy a lower position in the hierarchy of the local workforce (e.g., many men said that they do jobs that no one wants to do), these men experience a lack of power in other aspects of their lives. Mexicans are a “minority” within the larger Latino ethnic minorities in New York, compared with many locations in the south and west where they are the dominant ethnic minority. Mexican men, as a new immigrant group, suffer from constant prejudice and discrimination not only from non-Latinos but also from more established Latino migrant groups, creating an additional layer of isolation from community-level systems of social support.<sup>41</sup>

We identified 2 key social spaces for men to counteract loneliness: dance clubs and Catholic churches. Dance clubs serve as a source of entertainment, camaraderie, and national identification, as well as a way to get close to women and to experience hetero-erotic interactions. However, the men consumed high levels of alcohol, and it has been demonstrated in the literature and in this study that alcohol use is associated with unprotected sexual behavior, particularly among migrant workers.<sup>42</sup>

Through a different mechanism, active participation in Catholic churches may lead to sexual risk among the men in the study. Active participation in Catholic religious services and social activities offered a buffer to deal with loneliness. While Roman Catholic doctrine bans both extramarital sexual intercourse and condom use, the majority of the men in the study were having extramarital sexual intercourse (because their wives were in Mexico). Attachment to the belief of not using condoms increases the likelihood that men would refuse to use

condoms because of their religious convictions and could mediate any positive effects church participation had on loneliness and sexual risk among these men. The difficulty for this analysis is that, because we did not measure religiosity or spirituality, we cannot determine whether there was an association between these 2 constructs.

Scholars of Latino migration have documented that migrant communities have local informal and formal resources and mechanisms to provide support to new immigrants.<sup>8,9,16,38,43,44</sup> Yet, 35% of our sample reported high levels of loneliness, which suggests that they may not be accessing those resources in the Mexican communities in New York. The reasons and barriers for not accessing those local community resources remains a question for further research.

Although our findings need to be replicated with larger samples, loneliness is potentially a key-mediating factor between contextual factors and individual risk behavior for recent migrant workers. We must consider the possible contributions of including loneliness reduction as part of health promotion programming for male Mexican migrant workers. ■

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### Contributors

M. Muñoz-Laboy and J.S. Hirsch originated the study. M. Muñoz-Laboy supervised the study and led the writing. A. Quispe-Lazaro assisted with the study and analysis.

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This study was approved by the Columbia University Medical Center (AAAB6847) and received a Federal Certificate of Confidentiality (CC-HD-0621).

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