Prevalence, patterns and predictors of substance use among Latino migrant men in a new receiving community

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ABSTRACT

Background: The purpose of this study was to evaluate the prevalence, patterns and predictors (individual, social, cultural, and environmental) of illicit drug use and binge drinking in a cohort of Latino migrant men (LMM) in a new receiving community.
Methods: A cohort of LMM in New Orleans ($n = 125$) was assembled in 2007 using respondent driven sampling and interviewed quarterly for 18 months regarding past month substance use and other potential covariates. Baseline frequencies were weighted using RDSAT and longitudinal analyses included generalized estimating equations (GEE) and the Cochran–Armitage test for trends.
Results: At baseline, substance use behaviors were: drug use 15.0% (range 7.3–25.0%) and binge drinking 58.3% (range 43.6–74.6%). All three of these behaviors decreased over follow-up ($P < 0.01$). Baseline alcohol dependence and drug problem were 11.8% (range 5.6–24.3%) and 0.08% (range 0.00–2.7%) and both remained the same over time. Baseline rate of chlamydia was 9% (range 0.00–22.4%); all men tested negative for gonorrhea, HIV, and syphilis. For both binge drinking and drug use, having sex with a female sex worker was associated with increased risk, whereas belonging to a club or organization was associated with less risk. Additional factors associated with increased drug use were: having a friend in New Orleans upon arrival, symptoms of depression, and working in construction. An additional factor associated with less binge drinking was having family in New Orleans upon arrival.
Conclusion: Among LMM, substance use is influenced by social and environmental factors. Interventions increase community connectedness may help decrease usage.

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1. Introduction

There are over 7.7 million undocumented Latino migrants in the United States and 68% are men (Worby and Organista, 2007). Migration, particularly for undocumented persons, creates numerous stressors such as social, cultural and linguistic isolation, separation from family and other support systems, gender ratio imbalance, lack of non-alcohol-centered recreational activities, discrimination, housing issues, physical ailments from manual labor, wage theft and uncertain employment (Duke et al., 2010; Finch et al., 2003; Organista, 2007; Watson et al., 1985; Watson, 1997). Substance use has been identified as a coping mechanism used by Latino migrant men (LMM) to mitigate the depression, anxiety and boredom that

are associated with these stressors (Alaniz, 2002; Hernandez et al., 2009; Hersch et al., 2002; Kim-Godwin and Bechtel, 2004; Rachlis et al., 2007; Weatherby et al., 1999). Substance use, particularly alcohol, has been associated with myriad health issues including injury (Steinhorst et al., 2006) and HIV infection (Varela-Ramirez et al., 2005), as well as social problems such as intimate partner violence and incarceration (Kim-Godwin and Fox, 2009).

Wide ranges of drug use among LMM have been reported in the literature: crack (1.6–60%), marijuana (16.6–48.3%) and heroin (less than 1–7.3%; Inciardi et al., 1999; Kissinger et al., 2008; Organista and Kubo, 2005; Valdez et al., 2009). The amount of injection drug use (IDU) among LMM varies in the literature from less than 1% to 28% (Denner et al., 2005; Inciardi et al., 1999; Organista and Kubo, 2005). The prevalence of alcohol use, however, appears to be more consistently high. The prevalence of alcohol consumption in any quantity has been estimated to be greater than 77–90% among Latinos in migrant worker communities (Inciardi et al., 1999; Valdez et al., 2009) and 20–52% report binge drinking in the last month (Rhodes et al., 2010; Watson et al., 1985; Watson, 1997).
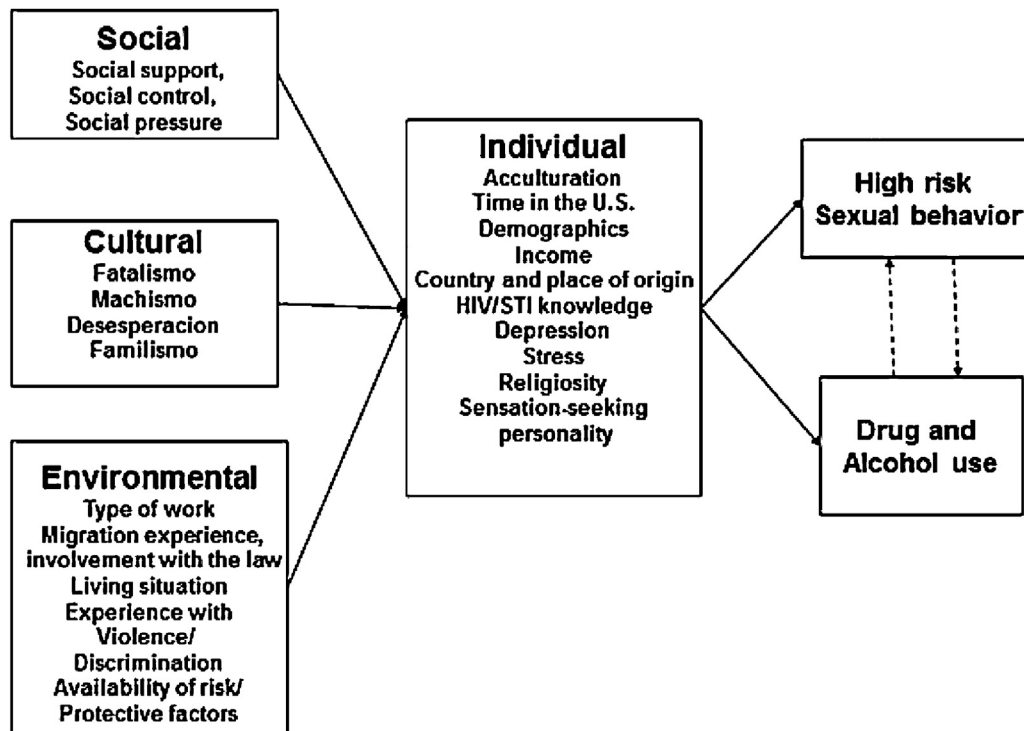
Fig. 1. Theoretical framework.

Examing the patterns of substance use can help inform intervention development. Most studies suggest that drug use is initiated in the U.S., while binge drinking, a more socially sanctioned behavior, is carried over from the country of origin (Alaniz, 2002; Borges et al., 2009; Davis and Winters, 2002; Hernández et al., 2004; Magis-Rodriguez et al., 2009; Mills et al., 2012; Persichino and Ibarra, 2012; Valdez et al., 2009; Worby and Organista, 2013). These studies suggest that the environment in the U.S. may play a role in increased substance use. Wider availability and acceptability of drug use in the U.S., particularly in urban areas, compared to sending countries could be a factor in this increased use (Center for Disease Control and Prevention, 2013; Magis-Rodriguez et al., 2009). While several individual level risk factors for substance use have been identified including young age, multiple sex partners or sex with female sex workers (Hernández et al., 2004; Hernandez et al., 2009; Rachlis et al., 2007; Weatherby et al., 1999), environmental and social factors have been less well examined and are the focus of this study.

1.1. Individual, social, cultural and environmental influences on substance use in new receiving communities

Stressors that migrants are not accustomed to can be magnified in new receiving communities and the appropriate infrastructure may not be available to accommodate migrants particular needs. New receiving communities are increasingly becoming desirable migration destinations for finding new opportunities for employment. In the last decade, Latino migration to the U.S. has changed from more traditional destinations such as Florida and New York, which saw a 200% decrease in immigration unauthorized migrants to areas like Louisiana and Oklahoma which saw a 240% increase (Passel and Cohen, 2011).

Until 2005, Louisiana was among the least common destinations for undocumented Latino migrants (Passell, 2006). This changed substantially after Hurricane Katrina devastated metropolitan New Orleans in August of 2005 after which many LMM came to work in

reconstruction, comprising nearly half of the construction workforce (Donato and Hakimzadeh, 2006; Fletcher et al., 2006; Fussell, 2009) and resulting in a 77% increase in Latinos to the area (Passell, 2006). Like other new receiving communities, post-disaster New Orleans had little infrastructure to support the cultural, legal and linguistic challenges that are often available in more traditional receiving communities. And like other new receiving communities, migrants in New Orleans were predominantly male, young, recent arrivals to the U.S., and traveling unaccompanied by women (Kissinger et al., 2008; Kochhar et al., 2005; Painter, 2008), thus lacking both the social support and social structure of those migrating to more traditional destinations.

We posit that: behavior is a confluence of social, cultural and contextual factors that exist within environments and these factors interplay with individual factors that will influence substance use. We base this model on Bronfenbrenner's Ecological Theory and Sweat and Denison's model of HIV causation (Fig. 1; Sweat and Denison, 1995).

The purpose of this study, therefore, was to examine the evolution of substance use over an 18 month period among a group of Latino migrant men in a new receiving community and to determine which individual, contextual, and environmental factors were associated with substance use. We hypothesized that: (1) migration of any sort is disruptive to social ties and support and may place a man at higher risk for substance use and (2) that factors that increase social order (such has having family in the home and belonging to club/organizations) would be protective (Denner et al., 2005; Rachlis et al., 2008; Stein et al., 2008).

2. Methods

2.1. Respondent driven sampling recruitment

A cohort of 125 male Latino migrant workers was developed using respondent-driven sampling (RDS) between October 2007 and December 2007. Methods have been described elsewhere (Kissinger et al., 2011), but briefly, eight initial recruits ("seeds"), who lived in the metropolitan New Orleans area and who represented the nationalities targeted were recruited and given three coupons to distribute to