

# Meeting a Binational Research Challenge: Substance Abuse Among Transnational Mexican Farmworkers in the United States

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**ABSTRACT:** *To help in understanding the manner in which community, individual, and other factors in the United States and Mexico contribute to drug use among transnational migrants, this paper introduces a binational social ecology model of substance abuse in this population. We draw on our 2 NIH-funded ethnographic studies—1 on problem drinking and the other on drug abuse—among transnational Mexican workers in the mushroom industry of southeastern Pennsylvania. Our model demonstrates that major reasons for substance abuse among transnational migrants include nontraditional living arrangements in labor camps and overcrowded apartments, the absence of kin and community deterrents to drug use, social isolation, the presence of drug use and binge drinking subcultures, the availability of drugs, family history of drugs, previous drug use or witnessing of drug use in Mexico, and drug use norms and drug availability in Mexico. It suggests the need for US and Mexican researchers to collaborate in binational teams and address factors on both sides of the border. Our binational social ecology model, together with our research recommendations, will assist alcohol and drug researchers to discover how community and individual factors in both the United States and abroad fit and interact beyond mere association and provide a more comprehensive research approach to substance abuse research among transnational migrants.*

**T**ransnational migration poses a challenge to conventional research paradigms on substance abuse. Transnational migrants have a substance use subculture of their own—one that transcends places and national boundaries and cannot be examined and understood using conventional research approaches. Drug use norms, practices, and behaviors in more than 1 country contribute to this drug subculture. Through their migratory practices, transnational migrants also contribute to the existence and the spread of substance abuse in US work sites and home communities in their

country of origin. We propose a new paradigm for examining drug abuse among transnational Mexican farmworkers working in the United States. Toward this end, we will first demonstrate a general dearth of research on this subject among migrant farmworkers from Mexico. Second, we will briefly discuss our substance abuse research among transnational Mexican farmworkers in southeastern Pennsylvania and how it suggests that individual and community factors on both sides of the US-Mexico border contribute to substance abuse in US worksites and in the Mexican homeland. Our third and last objective is 2-fold: (1) to present a binational social ecology model of substance abuse among transnational migrants that will give us a comprehensive view of the problem; and (2) to make research recommendations that will be useful in carrying out binational research. This research, we will suggest, should include US and Mexican researchers working in teams on both sides of the border.

**Drug Abuse Research and Transnational Migrants.** The vast majority of the 2.5 million seasonal farmworkers employed in the United States are transnational migrants, mainly from Mexico's Central Plateau Region (Note 1). An undetermined number of day laborers in US cities who work in agriculture temporarily also make up the ranks of the farmworkers. A major National Institute on Drug Abuse (NIDA) research monograph, "Rural Substance Abuse: State of Knowledge and Issues," demonstrates the urgent need for substance use research among farmworker migrants.<sup>1</sup> Beatty<sup>2</sup> and Watson et al<sup>3</sup> in particular document the grave dearth of drug use research among this population in the face of growing anecdotal evidence that it is becoming a health problem

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for the workers, their families, and their communities. Much of this evidence is based on reports from migrant health practitioners and nongovernmental health organizations on both sides of the border. The scarcity is also reflected in reviews of epidemiology in general and among US Latinos, such as those by Chavez and Swaim<sup>4</sup> and Organista and Balls Organista.<sup>5</sup> Since the publication of these reviews, the number of drug studies on migrants, transnational or otherwise, has not increased. In our comprehensive literature review on problem drinking among transnational Mexican migrants,<sup>6</sup> we found that the research on substance use primarily addresses non-farmworker Mexican Americans, and to a lesser extent, Mexican immigrants.<sup>7</sup> Transnational migrant drug use has not been examined in-depth, in part because the migrants are largely a “hidden” and cautious population, as a result of their social and geographical isolation and their migration status in the United States. Additionally, their drug use tends to be a clandestine activity.

The limited drug research on migrant farmworkers centers on the relationship between drug use and HIV infection rates. Studies, such as those by the National Commission to Prevent Infant Mortality (NCPIM),<sup>8</sup> Weatherby and colleagues,<sup>9</sup> and Giocochea-Balbona and Grief,<sup>10</sup> examine the degree to which alcohol and other drug use place the migrants at risk of contracting HIV and other venereal diseases. The studies found significant drug use among migrant farmworkers in their samples. NCPIM, for example, reported that: “Anecdotal sources document considerable use of chemical substances among farmworkers, particularly young adult males, stemming from loneliness, unemployment, poverty associated with being a hired farmworker and living in a labor camp.”<sup>8</sup>

The studies were conducted on the East Coast and their samples included the United States-based, Caribbean, Mexican (an undetermined number of transnational workers from Mexico), and Central American farmworkers. The highly seasonal nature of agriculture in the East and its heavy use of migrant labor may explain the geographical concentration of the HIV and related drug research in the farmworker population of this region.

These studies do not examine the nature of drug use among transnational farmworkers and seldom differentiate transnational migrants from their immigrant (ie, living in the United States permanently) and US domestic migrant counterparts. Little data are gathered on poly-drug use, consumption quantities, frequency of use and patterns, and the causes behind drug use. However, the studies do reveal that migrant farmworkers are using drugs other than alcohol, and they point at situational factors as the primary causes.

For example, Weatherby and colleagues<sup>9,11</sup> found that Mexican drug users in Florida tend to be solo men without their families and other social support systems. These men reside in labor camps and other housing units in relative isolation from local communities with few recreational activities to relieve the stresses of their living and working conditions. Others, such as Inciardi and colleagues,<sup>12</sup> made similar observations in Delaware about the possible relationship between situational factors and drug use. They found that loneliness, sadness, and depression, brought about by social isolation, set the conditions for substance use. Hovey and Magana<sup>13</sup> and the contributors in Mishra et al<sup>14</sup> also concluded that solo undocumented workers were more prone to use and abuse alcohol and other drugs and were at a higher risk for HIV and other health ailments. These studies reveal that the migrant drug users share some demographic characteristics, such as age and marital status, which may also be contributing factors. However, there are no discussions of predisposing factors or drug norms in their home communities (eg, drug use or witness of drug use in Mexico or in US urban areas, family history of drug use, hometown norms regarding drug use).

**Transnational Migrant Substance Abuse Research in Southeastern Pennsylvania.** Our 2 ethnographic studies are increasing our understanding of substance abuse among foreign workers in rural regions of our country. One of our studies was on problem drinking, defined as binge drinking associated with negative behaviors (eg, infractions of the law and work problems), conducted from 2000-2002,<sup>6</sup> and the other examines drug use, started in 2004 and scheduled for completion in 2007 (Note 2). The objectives of the studies were 2-fold: (1) to describe the association between situational factors (eg, living arrangements, peer pressure, and social isolation) and problem drinking and drug abuse; and (2) to explore the role of background/individual (eg, demographic background and educational level) and predisposing factors (eg, previous alcohol and drug use and witness of drug use in Mexico or in US urban areas) to substance abuse. The research protocols in the 2 studies were similar. The 2 included a community ethnography, based on observations and informal interviews with key informants, 2 focus groups, and 12 case studies based on ethnographic interviews. The key informants and case studies were selected to represent the type of migrant housing in the region (ie, structure type, number of residents, and distance from local communities).

Our research examines substance use and abuse among the estimated 5,000 Mexican migrants employed

as harvesters in the mushroom industry of southeastern Pennsylvania. They are males in their 20s, 30s, and 40s who mainly live in employer-owned, farmworker housing compounds. Anywhere from 6 to 42 men can reside in the housing units in these compounds. Unlike farm labor camps in other parts of the country, such as California or Michigan, the residents are not transient. Instead, they share a living unit for months, if not years, and often are from the same hometown in Mexico.

We discovered that not all of the transnational migrants drink heavily—some are occasional or recreational drinkers, while others abstain altogether. In any given weekend, however, up to 80% of the men binge drink in the 15 housing units in our alcohol sample. Binge drinking is not solely the consequence of situational (eg, living arrangements, peer pressure, and social isolation) and background factors, as originally thought; however, these factors made them susceptible to this type of drinking. Instead, a number of other factors, such as family history of drinking, drinking norms in their home communities in Mexico, previous drinking in Mexico, and the presence of a binge drinking subculture in their residence and work place, also contribute to binge drinking.

In regard to drug use, we are discovering that marijuana, cocaine, crack, and amphetamines are readily available in the labor camps and work sites. Drugs are consumed in different combinations, but alcohol, marijuana, cocaine, and crack are the most common. Amphetamines are not combined with others, including with alcohol, given that they are used primarily as a work enhancement substance.

Drugs are used in the 12 labor camps in our sample, and in some camps, the smaller ones comprised of younger workers, our estimates place the percentage of drug users at 50% or higher. The majority of the drug users are single and young, in their late teens, 20s and 30s. There are different types of drug users among them: experimental drug users, occasional drug users, recreational drug users, specific purpose drug users, chronic drug users, and ex-drug users. Nearly all of our migrant key informant ( $n = 24$ ) and our case study ( $n = 6$ ) samples were exposed to and started to use drugs in the United States, but not necessarily in Pennsylvania (some migrants have lived and worked in other states). Some tried drugs for the first time in Mexico, in communities where drugs were available and a drug-using subculture existed, albeit hidden. However, all of them, regardless of where they started using drugs, became regular users in the United States. Recreationally, drugs (marijuana and cocaine) are combined with drinking, and follow the drinking schedule, from Friday afternoon through Sunday evening. Drug-using migrants, according to our

interviews, especially regular users, continue to use drugs when they return to their homeland, but according to their accounts, not in the same amounts or as frequently. Our findings indicate that the reasons for drug use among the regular users are similar to the reasons for problem drinking found in our alcohol study. Nontraditional living arrangements (ie, labor camps and overcrowded apartment units), the absence of kin and community deterrents to drug use, social isolation, the presence of drug use and binge drinking subcultures, the availability of drugs, family history of drugs, previous drug use or witnessing of drug use in Mexico, and drug use norms and drug availability in Mexico are among the major reasons.

Research in other regions reveals that the alcohol and drug abuse among transnational Mexican migrants in southern Pennsylvania and in their home base in Mexico is not an isolated case. Mishra and colleagues,<sup>14</sup> Weatherby and colleagues,<sup>9,11</sup> and Watson and colleagues<sup>3</sup> discovered substance abuse in transnational Mexican migrant populations in California, Delaware, Florida, and other states. Additionally, their Mexican counterparts, such as Wagner et al,<sup>15</sup> have found drug use in rural Mexican communities outside of Guanajuato. Drug use, the Mexican researchers argue, is high in communities undergoing rapid social and cultural change resulting in an increasing loss of social cohesion.

#### **Binational Social Ecology Model and Research Suggestions.**

Our research in southeastern Pennsylvania and observations in Mexico verify the relevance and importance of a broader view in understanding the complexities behind migrant drug use. They show transnational migration influences living arrangements and working conditions in the United States that contribute to peer group identification and social relationships, and that, together with other predisposing factors, lead to substance use. Transnational migration also increases the migrants' exposure to drug use on both sides of the border. Additionally, through their cyclical migration, migrants are changing the social environments in both countries and introducing new drug behaviors and practices or altering existing drug using cultures. Traditional family and community institutions in Mexico are being altered significantly, and the changes in cultural norms and attitudes toward drugs are resulting in drug use.

Specifically, drawing on our migration perspective, we are proposing a social ecological framework to guide binational substance research. The proposed model is comprised of the following factors: migration

status, community factors in the United States and Mexico, and individual factors.

The migration status of transnational workers refers to their status as authorized or unauthorized temporary foreign laborers in the United States and their migration practices. "Migrant status," we argue, places them at high risk for substance abuse. Unlike their US domestic counterparts, who are away from their communities for months or migrate with their families, transnational migrants are away from their homes for years because of the costs and, in the case of unauthorized or undocumented workers, the risks associated with crossing the United States-Mexico border without proper inspection. Additionally, these workers are not permitted to enter the country with their spouses or children, unless their family members are permanent residents, or green (now pink in color) cardholders (Note 3). Entering the country without proper border inspection and authorization is not an option for their family members, given the high smuggler costs and the perils in crossing the border clandestinely. Consequently, the workers live with other solo men like themselves, away from family- and community-based deterrents to heavy drinking and drug use, described elsewhere<sup>16</sup> as community norms against alcohol abuse, the presence of kin-based authority figures, and a familial support base.

Migration practice refers to the number of border crossings, duration away from their home communities, and their destinations in the United States. It also includes migration history: that is, the age when the worker began to migrate, destinations in the United States, and the employment undertaken.

Community factors in the United States are living arrangements, peer pressure, social isolation, drug availability, proximity to bars and other drug using sites, and the presence of a drug subculture in surrounding communities. Living arrangements refer to farmworker housing (eg, barracks or dormitory, freestanding cottages or house trailers, or apartment units) and the number of occupants and their relationship to one another. Peer pressure refers to encouragement from housing mates, co-workers, and friends to use drugs, often by making them available. It includes belittling (eg, calling a person names, making jokes about a person, questioning a person's manhood) or not acknowledging or talking to the nonuser (eg, walking away from him and not letting a person join in social activities). Social isolation is little contact with local kin, if any in the area, or close friends from their home communities in Mexico, and the lack or absence of social activity in the form of formal or informal recreational interaction with others outside of the living quarters (ie, kicking a soccer ball around, visiting the

gym, attending a church function other than worship services).

Presence of a drug subculture is the existence of a group of drug users with established drug use practices and patterns. Drug norms are rules on how, with whom, when, and where in the community drugs are consumed. Drug availability is the presence of drugs for sale and consumption in local communities. Proximity to bars and other drug using sites basically refers to the distance between place of residence and locales where drugs are used. The closer to these establishment and locales, the greater the access to drugs and drug use opportunities.

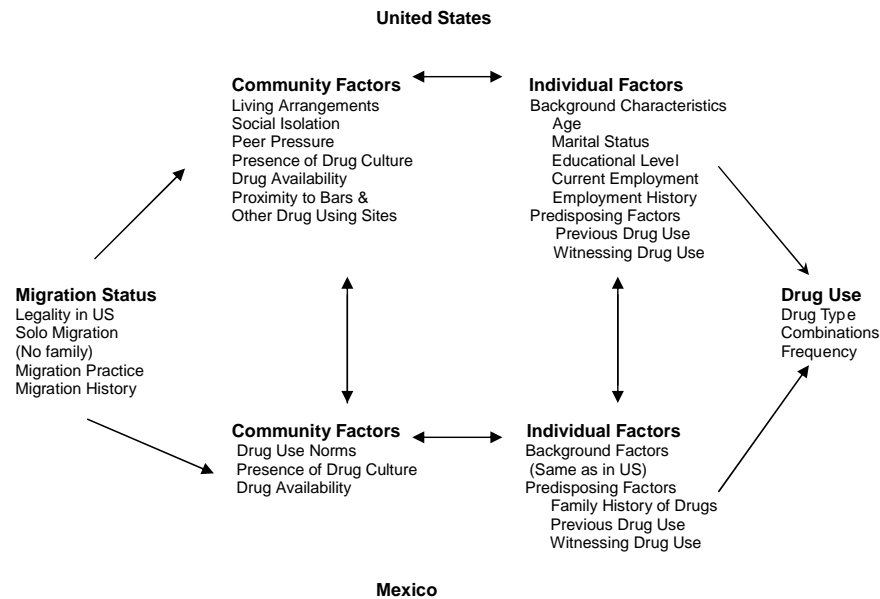
Community factors in Mexico are community norms regarding drug use, presence of a drug subculture, and drug availability. Hometown community norms regarding drug use refer to local knowledge and understanding of drug use, cultural beliefs surrounding drug use, and sanctions or the lack of sanctions against drug use. Presence of a drug subculture was described earlier. In some communities, although drug use is not condoned, it is tolerated as long as it does not lead to problems; whereas in other communities there is zero tolerance. Presence of a drug culture and drug availability were discussed earlier.

Individual factors are background characteristics (ie, age, marital status, educational level, current employment, and employment history) and predisposing factors in both the United States and Mexico, such as family history of alcohol and drug use, previous drug use, and the witnessing of drug use. Previous alcohol and drug use refers to any type of drinking or drug consumption, experimental or otherwise. Being around and observing individuals or groups in Mexico and/or the United States who drink or use drugs habitually or sporadically is witnessing drug use. Witnessing drug activity in particular, we suspect, places the nonuser in a position where he may be a target of peer pressure to use drugs. Family history of alcohol and drug use refers to kin who have consumed alcohol or drugs or who have had problems with drinking or drug use. Individuals with this family history are more susceptible to substance abuse.

Our model suggests that transnational migrants are at risk for drug use because of contributing factors on both sides of the US-Mexico border (Figure). This set of factors has been identified in our research and other farmworker drug research as significant in drug use. Specifically, as a result of their migrant status, these migrants find themselves in fraternal living situations in Pennsylvania that make them susceptible to peer pressure to use alcohol and drugs, in some cases under social isolation that often contributes to substance use. Proximity to bars and other locales in the state, where



**Figure. Binational Social Ecology Model.**



drugs are available, is a related living arrangement risk factor for drug use. Other community factors, both in Pennsylvania and Mexico, such as the presence of a drug culture, drug use norms, and drug availability, also expose them to drugs and drug users. Additionally, individual factors identified in the proposed model, such as background characteristics of the migrants (ie, age, marital status, educational level, current employment and employment history) and predisposing factors (ie, family history of drugs, previous drug use, particularly as experimental users, and the witnessing of drug use), interact with the community factors and together contribute to substance abuse among the transnational migrants.

Additionally, as the model shows, community factors in Mexico and the United States as well as the predisposing factors in the 2 countries are connected. The transnational migrants serve as conduits between communities in Mexico and the United States, linking community drug use practices and norms across the borders. That is, they introduce practices and norms found in one country to the other. Individual factors of the migrants, particularly predisposing factors, are also directly related. Their background characteristics expose them to predisposing risks in both countries.

The following 3 research recommendations should be considered when implementing the binational social ecology model:

First, above all, transnational Mexican migrants must be considered a population at risk for substance abuse and given research priority. For too long the health needs of this population have been overlooked in studies, often because its members are not identified and distinguished from others in research samples. Farmworkers, for example, are differentiated between migrants and nonmigrants (local farmworkers) but the migrants are not distinguished according to their migrant status and national origin.

Second, the factors identified in the binational social ecology model should be considered in research projects addressing substance abuse among the transnational migrant populations. Substance abuse, as argued, has contributing factors on both sides of the United States-Mexico border. Substance abuse among this population is a highly complex problem with contributing factors in both the United States and Mexico. These factors should not be examined independently from each other, but need to be considered together.

Third, true binational collaboration is needed. Too often, with the exception of a couple of projects, researchers on both sides of the border conduct their studies independently of each other. Mexican and US researchers need to collaborate and develop binational studies. US researchers, in a true partnership with their Mexican counterparts, should conduct studies in the hometowns of the migrants, and Mexican and US

scholars should do the same at the work sites of the migrants and in the labor camps and communities that house them in the United States.

**Conclusion.** The few studies on substance abuse and farmworkers do not include the growing transnational Mexican migrant labor force in the United States. Consequently, little is known about the nature and extent of substance abuse among these migrants. Closely related and missing altogether are needed research approaches in examining substance abuse among transnational migrants—a population that resides and works in one country on a temporary or seasonal basis and lives permanently in another. Our ethnographic research reveals that drug abuse among a transnational Mexican labor force is a binational problem with contributing factors on both sides of the United States-Mexico border. These factors must be considered if we are to understand substance abuse in this farmworker population and to develop effective prevention and intervention programs.

We recommend a binational social ecology model on drug use among transnational Mexican migrants—one that will guide research. Our model, premised on a social ecology framework, will assist us to discover how community and individual factors in Pennsylvania and Guanajuato, and possibly others to be discovered through research, fit together and interact beyond mere association. Social ecology models have been used by a number of researchers (eg, Bell et al,<sup>17</sup> Carlson,<sup>18</sup> and Stevens<sup>19</sup>) to examine drug use among minority groups, albeit not transnational migrants, in a more comprehensive fashion. Basically, these models go beyond the individual drug user and his way of interacting socially with different actors, and focus on his social environment, which includes communities, institutions, and government agencies, and how the social environment affects drug use behavior. In our research, we expand the social environment of the transnational migrants beyond the United States to include 2 locales or social environments linked by labor migration: 1 in Mexico, where the migrant lives permanently, and the other in Pennsylvania, where he works seasonally.

Additionally, as we argued, future research must be binational in scope and collaborative in approach. Ideally, teams of US and Mexican researchers, social scientists and clinicians, working together, should examine substance abuse among the migrant population as well as its social costs to US and Mexican communities. This recommendation falls well within the bilateral mission of the Bi-National Drug Demand Reduction Conference and the US-Mexico Bi-National Commission held in Mexico City in 2001.<sup>20</sup> The

commission, it must be noted, was established to explore efforts of bilateral collaboration and to develop action plans for cooperation in 6 health priority areas, among them, “substance abuse and migrant health issues.”

## Notes

1. The Central Plateau Region is a basin within the Cordilleran highlands in central Mexico. Increasing population pressure and a fragile land-tenure system in this region have stimulated a massive migration to Mexican cities, the United States, and recently Canada. The “core-sending states” in this vast area are Durango, Jalisco, Michoacan, Guanajuato, San Luis Potosi, Zacatecas, Tamaulipas, and Nuevo Leon. Peasants from these 8 states have migrated and immigrated to the United States since the turn of the century.
2. The 2 studies are: “Problem Drinking among Migrant Mexican Farmworkers,” National Institute Alcohol Abuse and Alcoholism, Grant # 1R03 AA12659-01 and “Drug Use among Migrant Mexican Farmworkers,” National Institute of Drug Abuse, Grant # R03 DA17915.
3. Permanent resident is a judicial immigrant status that grants a foreigner permission to immigrate to the United States. Until recently, the Immigration & Naturalization Service (INS), now the Bureau of Citizenship and Immigration Services of the US Department of Homeland Security, reviews applications and grants permanent resident visas. Permanent residents are allowed to live in the United States and are granted the same rights as US citizens, except for the right to vote in government elections, hold government office, and participate in certain government programs. Permanent residency is granted to the individual and does not include his immediate family, unless he sponsors and submits applications for each immediate family member. Family members, however, must meet basic requirements, such as be in good health and be financially soluble.
4. Another legal avenue for foreign workers to enter the United States legally to work is the H2A Labor Certification Program. This program allows workers to enter the country on a temporary basis to work for an agricultural industry suffering a labor shortage. Their family members, including immediate family, are not included in the program. During the research period, there were no H2A workers in the mushroom industry of southeastern Pennsylvania.

## Conflict of Interest Statement:

The first-person plural is used in this article. The use of this voice is more than a writing style. It is also adopted to acknowledge the teamwork behind the research project. Besides the author and the field researchers, Dr. Edward Gondolf, the Research Director at the Mid-Atlantic Addiction Training Institute (MAATI), was instrumental in designing the grant applications for the 2 studies addressed in this article: “Problem Drinking among Migrant Mexican Farmworkers,” National Institute Alcohol Abuse and Alcoholism, Grant # 1R03 AA12659-01 and “Drug Use among Migrant Mexican Farmworkers,” National Institute of Drug Abuse, Grant # R03 DA17915. He also assisted in the data analysis.

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