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The Social and Environmental Context of Cross-border Drug Use in Mexico: Findings from a Mixed Methods Study of Young IDUs Living in San Diego, CA

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Abstract

We report the results of qualitative (n=19) and quantitative (n=545) interviews with young injection drug users (IDUs) in San Diego, California, USA about their experiences using drugs in Tijuana, Mexico, and associated risks for HIV infection. Young IDUs who have ever traveled to Mexico (n=365) used a variety of injection (54%) and non-injection (30%) drugs there, and appear to be heavier users than those who have never traveled to Mexico. Sociocultural themes influencing drug use in Mexico included: interactions amongst the purpose of travel, drug preference, and route of administration; familiarity with the border region; evolving relationships with the US and Mexican drug markets; and the experience of crossing the US/Mexico border. Interventions for IDUs in border regions need to be sensitive to the ethnicity, familiarity with the border region, and life history of participants, as well as differences in national policies that could influence drug use and risk for HIV on both sides of the border.

Keywords

US/Mexico border; cross border drug use; injection drug use; HIV; hepatitis C virus; mixed methods

Introduction

San Diego, California, USA and Tijuana, Baja California, Mexico, form a large urban center along the Western US/Mexico border, characterized by significant cross-border mobility (HDR|HLB Decision Economics Inc., 2006). These two cities are also situated along a major North American drug trafficking route (Bucardo et al., 2005), and Tijuana and other border cities in Northern Mexico are experiencing a growing HIV epidemic that is closely

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Author Contributions:
KW conducted the qualitative interviews, designed the analytic strategy, conducted the qualitative analysis, and prepared the draft manuscript. MM conducted the qualitative analysis, assisted with the interpretation of results, and assisted with the preparation of the manuscript. SS contributed to the design of the study, conceptualization of the analysis, and interpretation of results. JC-M coordinated the collection of the quantitative and qualitative data. MLZ and TV contributed to the interpretation of the results. ET provided supervision of the CDC contract and provided substantive feedback on the manuscript. RG conceived of and supervised the implementation of the study and contributed to the interpretation of results and drafting of the manuscript. All authors provided substantive input on the final manuscript and approve of the final manuscript for publication.

associated with drug use (Strathdee & Magis-Rodriguez, 2008). The Mexican state of Baja California, where Tijuana is located, is believed to have the largest number of injection drug users (IDUs) of any Mexican state (Strathdee & Magis-Rodriguez, 2008) and also has the second highest cumulative AIDS incidence among Mexico's 32 states (CENSIDA, 2010). San Diego has the third highest AIDS case rate in California, and local officials estimate that there may be as many as 25,000 to 28,000 IDUs in San Diego County (City of San Diego, 2010).

In border communities such as the San Diego/Tijuana metropolitan area, risk for HIV and other infectious diseases such as hepatitis C virus (HCV) and tuberculosis (TB) among IDUs must be understood in the context of a confluence of dynamic ecological factors, such as population mobility (and its effects on cultural and social norms), and changing drug and border enforcement policies. Cross-border mobility – whether voluntary (e.g., for work or tourism) or forced (e.g., via deportation or trafficking), temporary or permanent – influences individuals' exposure to social, political, and physical factors that can influence health. Mobile populations are at increased risk for adverse health outcomes, including HIV (Apostolopoulos & Sonmez, 2007), and this is particularly true among drug users (Paschane & Fisher, 2000; Rachlis et al., 2007). Mobility's influence on the risk for infectious diseases likely operates, at least in part, through its effects on the environment. Mobility disrupts both the physical and social environment, as individuals enter into new communities and form relationships with new individuals who may differ in their disease prevalence, social norms regarding risk behavior (Hawkins, Latkin, Mandel, & Oziemkowska, 1999; Latkin, Forman, Knowlton, & Sherman, 2003), or access to prevention resources (e.g., sterile injection supplies) and information (Soskolne & Shtarkshall, 2002; Wohlfeiler, 2000).

To date, relatively little is known about cross-border drug use among US-based IDUs. There is some indication that young IDUs who inject drugs in Mexico may be more likely to report distributive syringe sharing and may be more likely to be involved in the transportation of drugs (Volkmann et al., 2012). There are also data suggesting that Mexico-based IDUs interact with US-based drug users – 48% of a sample of IDUs living in Tijuana, Mexico report having ever injected with someone from the US (Wagner et al., 2010). However, little is known about the motivations for and barriers to cross-border drug use, the social context of cross-border drug use, or when and where drug use episodes occur. In 2010, we undertook an exploratory mixed methods analysis to investigate the social and environmental context of cross-border drug use among a sample of young adult IDUs living in San Diego, California, USA. We sought to understand the individual, social, physical, and policy-level factors that influence drug use behavior of San Diegan IDUs who used drugs in Mexico, and to explore the possible implications for HIV risk.

Methods

Design and Sample

Quantitative and qualitative data were collected simultaneously, as part of a larger study of IDUs in San Diego, California, USA designed to provide preliminary data to inform the development of a national surveillance system for HCV infection. This cross-sectional study recruited 545 18–40 year old active IDUs for a risk assessment interview and serologic testing for HCV and HIV infection to describe the prevalence and correlates of these infections in San Diego. Quantitative data were collected from May 2009 to July 2010. The quantitative survey was administered via Audio Computer-Assisted Self Interview (ACASI) technology. Participants read the questions and entered their responses directly into a laptop computer. Participants with reading difficulties could also listen to the questions via headphones. A staff member was available to provide assistance upon request but did not watch participants enter their responses.

From March to June 2010, 19 qualitative interview participants were selected from the larger quantitative study based on their responses to four questions in the ACASI survey, which asked whether they had used injection and non-injection drugs in Mexico, both in their lifetime (i.e., ever) and in the past 6 months. The ACASI instrument was programmed to alert study staff if a participant responded affirmatively to any of the four questions so that the study staff members could identify eligible individuals immediately following the quantitative interview. At the end of the study visit, the staff member invited the participant into the qualitative study and he/she was scheduled to return another day to provide informed consent and conduct the qualitative interview. Qualitative interviews were conducted in English by the first author using a semi-structured interview guide. We originally aimed to enroll approximately 20 participants in the qualitative interviews, but achieved conceptual saturation and stopped recruitment after 19 interviews. All interviews were digitally recorded and transcribed in their entirety. The University of California San Diego Institutional Review Board approved all study procedures. Participants received $25 as remuneration for the quantitative interviews and $10 as remuneration for the qualitative interviews.

Measures

The quantitative survey assessed the following domains: sociodemographics (e.g., age, gender, country of birth, race/ethnicity, sources of income, language preference, history of incarceration); drug use (lifetime and past 3 months); travel to Mexico (lifetime and past 6 months); and drug use in Mexico (lifetime and past 6 months).

The semi-structured qualitative interview explored the following domains: border crossing behavior (including need for citizenship documentation); social and physical context of drug use in Mexico; perceptions of drug quality and price, perceptions of violence, safety and laws in Mexico; and social and drug-using relationships in Mexico.

Analysis

Quantitative analysis consisted of calculating descriptive statistics and measures of central tendency for all variables of interest. Comparisons between participants who had and had not ever traveled to Mexico were made using t-tests, the Chi-square test statistic or Fisher's Exact Test when expected cell frequencies were less than 5.

Qualitative analysis drew on techniques of Grounded Theory (Strauss & Corbin, 1997) and Situational Analysis (Clarke, 2003) and was conducted by the first and second authors using the ATLAS.ti software program to organize and code transcripts. In keeping with Situational Analysis methods (Clarke, 2003), the focus of the analysis was the *situation* under study – i.e., episodes of drug use in Mexico – and the coding scheme included codes for both human (e.g., members of the drug using network) and non-human (e.g., the border crossing, the setting of drug use) elements. In a series of iterative steps, the analysts read the transcripts independently and applied the codes to segments of text, refining the codebook and writing memos to describe emergent themes. Disagreements were resolved through discussion between the two analysts. The analysts then created a series of "situational maps" in which the themes were arranged to graphically represent the associations between the themes, and additional memos were written to describe those associations. Finally, the coded segments of text were output and reviewed, and a final round of coding and memoing identified relevant quotations and sources of variation within the themes.

Quantitative and qualitative data were combined in the final stage of analysis, in which quantitative data were reviewed to discover whether themes identified in the qualitative data could be expanded through comparisons of items measured by the quantitative survey.

Characteristics of the overall quantitative survey are presented to provide a broader picture of the sample composition, while qualitative findings provide illustration and context for the descriptive statistics.

Results

Demographic and Drug Use Characteristics

There were 545 participants in the quantitative survey who provided data for the question regarding their history of drug use in Mexico and were included in this analysis. Participants were mostly male (71%) and had an average age of 29 years (Table 1). A minority (27%) was Hispanic; 76% of the non-Hispanic participants identified as white. Though not sampled to be demographically representative, the sub-sample of qualitative interview participants (n=19) was somewhat similar – predominantly White (89%) and male (63%), with an average age of 31 years (data not shown), though only 2 (11%) were Hispanic.

In the quantitative survey, 365 (67%) participants described ever traveling to Mexico (Table 1). There were no statistically significant differences between those who had ever traveled to Mexico and those who had not based on ethnicity, though participants born outside the US or Mexico were less likely to report ever traveling to Mexico. A minority of participants reported speaking Spanish, although those who had ever traveled to Mexico were significantly more likely to do so (28% vs. 8%; $p<0.0001$). Participants who had ever traveled to Mexico were also significantly more likely to report having friends or family who live in Mexico.

Experiences Crossing the Border

Of the 19 participants who underwent qualitative interviews, just over half (58%) said they had used drugs in Mexico in the previous 6 months. These participants varied widely in their frequency of reported travel to Mexico, ranging from once to over 100 times in the past 6 months. The quantitative survey data reflect similar trends: slightly less than half (41%) of those who had ever traveled to Mexico had been there in the past 6 months. Among those who had traveled to Mexico in the past 6 months, the average number of visits was 3 (Interquartile range [IQR]: 2–15; range 1–300); most visited Tijuana.

Though recent changes in US border enforcement have made it mandatory for US citizens to present a valid US passport to return to the US, at the time the law was not uniformly enforced and only two qualitative interview participants said they carried a passport; most described presenting various other forms of identification, including birth certificates, drivers licenses, or other documents:

> “[To cross, I used] my ID and my social security card. I guess you’re supposed to have your passport, but I didn’t know that. I just had my ID. I mean, I look white, I’m [a] young, white girl and they don’t really question.” [23-year-old non-Hispanic white female]

The citizenship documentation requirement did not appear to serve as a deterrent or barrier to traveling to Mexico. Despite the fact that some participants reported transporting drugs across the border into the US, few described experiencing immigration problems upon their return. Those who crossed more frequently expressed more confidence in their ability to successfully navigate the border crossing. Participants described conflicting theories about the documentation requirement. Some, particularly those with outstanding warrants, said that they do not carry passports because it could expose them to more screening or attention from law enforcement. Others said that having a passport would facilitate their re-entry into

the US and minimize their chances of being sent for more intensive screening at the border crossing.

Familiarity with the Border Region

Qualitative findings suggest that participants' familiarity with the San Diego/Tijuana border region influenced their risk perceptions and comfort traveling to Mexico. Participants who were native to San Diego, or who had lived there for a considerable amount of time, appeared to be more comfortable traveling to Mexico, and often described it as part of their community:

> "[Going to Tijuana is] like going to Clairemont or going downtown or going to Chula Vista [neighborhoods in or around San Diego]. It's part of San Diego. I don't think about it like a whole other country, because it's just a wall, it's just a fence." [22-year-old non-Hispanic white male]

This participant described how his familiarity with the border region influences his own risk perceptions, while also cautioning less familiar individuals against such travel:

> "I usually drive across [the border] because I grew up surfing down in Mexico a lot, and so I'm really comfortable with it. But that's because I know where I'm going. I wouldn't tell anybody else to go down there that hasn't been down there, like just to drive down, because it's very dangerous if you go down the wrong road. If you don't know how to talk to the people…you can end up in really bad situations." [35-year-old non-Hispanic white male]

This feeling of greater comfort appeared to be associated with San Diego natives' histories of growing up in close proximity to Tijuana, which they frequently visited in their late teens or early twenties due to the lower minimum drinking age in Mexico (18 in Mexico vs. 21 in the United States) and availability of alcohol and drugs:

> "We used to go a lot. When I was younger and we were new to the drug scene. When I first started using. What pulled me down there was that I could be 18 and go down there and drink legally. It's a little bit more out in the open as far as, if you were looking for drugs, you can basically ask a couple people and then they push you in a direction. As opposed to being downtown San Diego trying to ask somebody and get robbed, you know? Down there it's a little bit different…. we could always connect with whatever we wanted down there" [27-year-old non-Hispanic white male]

As they grew older and reached the legal drinking age in the US, some participants described a decrease in their travel to Tijuana.

Participants who arrived in San Diego more recently, on the other hand, were more likely to describe Mexico as someplace exotic or foreign. For some, this exotic nature was associated with increased risk perceptions. For others, it generated interest in visiting Mexico. On the day she arrived in San Diego from New York, this participant's husband (who had lived in California six years prior and who had recently returned) suggested they go to Tijuana to visit the bars and clubs and spend the night:

> "I [had just] arrived in California. He had been here for just a bit. I came and wanted to go to Mexico. He had mentioned things to do when I got here in California. I was like, 'Yeah, I wanna go to Mexico, Tijuana, that sounds cool!'" [29-year-old non-Hispanic white female]

Drug Type, Purpose of Travel, Setting, and Route of Administration

In terms of drug use, quantitative interview participants who had ever traveled to Mexico appeared to be heavier users than those who had never traveled to Mexico (Table 1). They were significantly more likely to have ever injected heroin, speedballs (i.e., heroin and cocaine), goofballs or "Mexican speedballs" (i.e., heroin and methamphetamine), and prescription pills. They were also more likely to report injecting at least once daily. Participants who ever traveled to Mexico were also significantly more likely to report lifetime use of several non-injection drugs, including marijuana, cocaine, crack, heroin, prescription drugs, ecstasy, hallucinogens, ketamine, poppers (amyl nitrates), and rohypnol. Among those who had ever traveled to Mexico, just over half (54%) said they had ever used non-injection drugs in Mexico, while 30% reported ever injecting drugs in Mexico (Table 2). Table 3 shows that among those who had traveled to Mexico in the past 6 months, similar proportions had used non-injection or injection drugs there, and they reported using a wide variety of drugs administered via various routes.

In qualitative interviews, participants described two primary reasons for drug-related travel to Mexico: 1) to party in the bars/clubs, an activity from which drug use naturally evolved; and 2) expressly to purchase drugs. The purpose of travel (to party versus to buy) appeared to be related to the types of drugs used, the route of administration, and the social context of use or using group.

When describing traveling to Mexico to party, participants said that they visited bars, clubs, or cantinas where they usually ate, drank alcohol and hung out with friends, almost exclusively with friends also from San Diego. Drug buying and use naturally evolved from these partying trips, but wasn't the sole purpose:

> "We go down there to eat and then one thing leads to another. Usually, you know, the drug use…we're gonna do [it] anyhow, so that's a daily occurrence anyhow. Whether we're in Mexico or the United States, you know, it's just gonna happen" [39-year-old Asian male]

Partying trips were most frequently characterized by the use of alcohol and non-injection use of stimulants such as methamphetamine or, less commonly, cocaine, ecstasy, or prescription pills. Using drugs with Mexican residents was rare, though a few participants did report non-injection methamphetamine use with Mexican residents (usually with a dealer or "runner" who was facilitating the drug purchase). When these events occurred, they were usually described as concurrent use in the same setting (e.g., a café or hotel room), but did not involve sharing drug paraphernalia (e.g., pipes or straws).

While travel for the purpose of partying was frequent, fewer participants reported travel to Mexico expressly for the purpose of buying drugs. In the quantitative survey, just over half of participants who had ever traveled to Mexico reported buying drugs there (Table 2). Reasons for buying drugs in Mexico included: drugs are cheaper (68%), easier to get (42%), of better quality (25%), or of better selection (10%). Almost one-third said they bought drugs in Mexico because they were already there and wanted drugs, while 7% said that they bought drugs in Mexico because they don't know where to buy them in San Diego. In qualitative interviews, participants described Tijuana as having a drug market that is highly visible, easily accessible, and provides more affordable drugs of higher or at least similar (but more consistent) quality:

> "I mean, I do know a lot of people that go down there to [buy drugs], just 'cause it's so easy. It's insane how easy it is to get it down there." [24-year-old non-Hispanic white female]

> "[The heroin] was cheaper…It was better…It was stronger" [39-year-old non-Hispanic white male]

Some participants initially traveled to Mexico to purchase or use drugs because they did not have reliable connections to drug dealers in San Diego, and they found it easier to buy drugs in Mexico without having a regular dealer there:

> "I went down there and copped [bought drugs] and came back across the border. That was when I just got out here and I really didn't know, you know, who's who. I really hadn't met any solid source. So that's why I went over there. I just knew it was really easy to get drugs." [39-year-old Asian male]

As they developed more connections to the US drug market, they described less need to travel to Mexico to purchase drugs:

> "I just switched to doing different drugs and it was easier, I found connects [dealers] here and I didn't need to go all the way down to Mexico anymore" [23-year-old non-Hispanic white female]

Participants who traveled to Mexico solely to purchase drugs generally described traveling and using alone (rather than in a group), more frequently said they were seeking heroin (rather than stimulants), and often described using just enough of the drugs to "get well" (i.e., alleviate withdrawal symptoms) before returning to San Diego. These occasions were more frequently characterized by heroin injection (rather than use via non-injection routes) and the injections usually happened in a semi-private location such as the back room of a café or cantina where the drugs were purchased. Sharing of drug injection equipment was rare, though two participants described buying and injecting with a syringe that had the drug solution already prepared and pre-filled in the syringe, an event that was exclusively reported to occur in cafés. As with party-related travel, reports of drug use with Mexican residents were rare. A few participants said they bought drugs in Mexico in large quantities intended for resale in San Diego, which is possibly reflected in the finding from the quantitative survey that just about one-quarter of those who had ever traveled to Mexico received any income from selling drugs.

Discussion

Cross-border drug use among San Diegan IDUs is a dynamic social phenomenon, influenced by a host of individual, social, and environmental factors. In this study, we identified several social and environmental themes that appear to interact to influence drug use in Mexico and the resulting risk for HIV and other infectious diseases. These include the interrelated nature of the purpose of travel, drug preference, route of administration, and drug use setting; participants' familiarity with the border region and their evolving relationships with the US and Mexican drug markets; and the experience of crossing the US/Mexico border and beliefs regarding the need for citizenship documentation.

Behavioral settings are important determinants of risk for HIV infection (Latkin et al., 1994), and social networks, behavioral settings, and social norms can intersect to influence risk behavior (Halkitis, Green, & Mourgues, 2005). In the quantitative survey, we found that participants used a wide variety of injection and non-injection drugs in Mexico, and that participants who had ever traveled to Mexico appeared to be heavier users. In our qualitative interviews, we identified differences in purpose of travel and the social and environmental setting of drug use in Mexico based on type of drug used. Trips to Mexico expressly to purchase drugs were usually focused on heroin and were more likely to involve injecting while in Mexico. Though uncommon, these reports also included descriptions of purchasing syringes pre-filled with drug solution - a phenomenon that could indirectly lead to HIV

transmission between drug-using networks if the syringes were previously used by the dealer or other IDUs. Though reports of sharing syringes with IDUs in Mexico were uncommon in the qualitative interviews, in a preliminary analysis of data from a subsample participants in the quantitative survey we found that those who had ever injected in Mexico were more likely to report a lifetime history of distributive (though not receptive) syringe sharing (Molitor, Truax, Ruiz, & Sun, 1998. These factors could serve to heighten risk for HIV infection and warrant further study.

In contrast, trips to Mexico to party often involved the use of alcohol and stimulants such as methamphetamine or (less frequently) cocaine, usually involved sniffing or smoking the drugs, and often occurred in the context of a group of San Diego-based drug users who were partying at the clubs or bars. Use of stimulants such as methamphetamine has been associated with increased HIV risk behavior in heterosexuals and men who have sex with men (Volkmann et. al. 2012; Semple, Patterson, & Grant, 2002; Shoptaw & Reback, 2007) and, coupled with the social environment in the clubs, could lead to disinhibition that could further increase the risk for HIV and STIs, both through drug use and sex.

These findings have important implications for intervention efforts that extend beyond the immediate geographical region and may apply to other areas where drug-related travel is common. Ecologically-informed interventions may need to include prevention messages that are tailored not only by drug type (e.g., stimulant versus heroin use), but also by venue (e.g., café versus club) and social setting (e.g., group versus alone). Importantly, participants in both qualitative and quantitative interviews frequently reported using a variety of different drugs. Interventions that include messages about the risk for drug overdose involved in injecting alone and mixing drugs – particularly opioids with other depressants (including alcohol) or stimulants – and training in the recognition and appropriate response to drug overdose appears to be a critical unmet need.

IDUs who grew up in San Diego or who had lived there for a long time were much more familiar with the area and frequently believed that Tijuana is an extension of the San Diego community, which appeared to increase comfort with cross-border travel and drug use, particularly among those who traveled to Tijuana to take advantage of the lower minimum drinking age. This suggests that interventions designed to reduce risk behavior among drug users in a binational context, particularly those that focus on changing behavior through targeting social norms, may need to be attentive to the ethnicity, degree of familiarity with the border region, and life history of participants, as well as differences in national-level policies.

The international border and the policies regulating cross-border travel also influence drug use behavior among IDUs in the region. Few participants in the qualitative interviews described problems crossing the border, even though only two said that they carried a passport. Although US legislation passed in 2007 requires passports for land entry from Mexico to the US, it has not been uniformly enforced, which is reflected in participants' reports. The travel described in this study largely occurred prior to the scale-up of these new requirements; therefore, it is unknown whether these participants would have an equally problem-free experience now. It is notable that so few of these predominantly non-Hispanic white participants experienced problems, particularly because some also described transporting drugs back across the border. These experiences contrast with those described by HIV-positive Latina/os living in the border region, who describe crossing from Mexico to the US as highly stressful and unpredictable (Zúñiga et al., 2006). Because our qualitative findings largely reflect the experience of non-Hispanic whites, future studies should examine this issue in samples that more fully represent the experience of Hispanics of Mexican origin.

In 2009, in an effort to reallocate scarce law enforcement resources towards high-level offenders, Mexican legislation decriminalized the possession of small amounts of cocaine, heroin, methamphetamine, marijuana, and other drugs for personal use (Consejo Nacional contra las Addiciones, 2010). The law was enacted federally in August 2010 and was approved in the state of Baja California in October 2010. One potential unintended consequence of this law that has been identified by critics of decriminalization in other areas (Vastag, 2009) is that it may draw drug users into Mexico to purchase and use drugs if they perceive a decrease in legal consequences, thereby resulting in an increase in "drug tourism". Drug tourism, like "sex tourism," could theoretically increase risk for HIV and other infectious diseases both for the tourists and their drug and/or sex partners at home, effectively "bridging" high and low risk groups (Morris, Podhisita, Wawer, & Handcock, 1996; Rachlis et al., 2007). Among the young, mostly non-Hispanic white IDUs in this study, most described few social or drug using connections with Mexican residents. However, if Mexican nationals feel safer possessing drugs due to this recent legislative change, it could further increase availability and lower drug prices in Mexico, motivating more US-based IDUs to cross the border for drugs. Longitudinal research will be needed to document the evolution of cross-border drug use among San Diegan IDUs as knowledge of the law diffuses through IDU social networks and as local communities in Mexico continue to scale up their implementation of the law.

Limitations

Our data were collected during a single time period, providing a snapshot of participants' attitudes and behaviors; longitudinal studies will be needed to observe how those attitudes and behaviors change over time. Our investigation was exploratory in nature, designed to describe the situation under study – more research will be needed to establish the reliability and validity of our findings among other drug-using populations in the border region. While the mixed methods nature of this analysis helps to broaden the generalizability of our qualitative findings, our sample was small, restricted in age, limited to one geographic region, and, importantly, of primarily non-Hispanic white ethnicity. Therefore, findings may not generalize to other border communities or other samples of IDUs including older or more ethnically diverse individuals. Finally, our findings may be subject to social desirability bias. While the quantitative data were collected using ACASI, which has been found to minimize such biases (Des Jarlais et al., 1999), the threat still exists and is present in the qualitative reports as well.

Conclusion

Our findings reveal a complex and dynamic phenomenon of cross-border drug use, influenced by social, structural, and political factors. A considerable proportion of young IDUs in San Diego report traveling to Mexico, and many have used drugs while there. Their perceptions of Mexico's drug market as highly visible and easily accessible likely contribute to that phenomenon, as well as perceptions of border cities such as Tijuana as party destinations for young adults from the US. Several avenues for investigation remain. The impact of recent drug decriminalization efforts in this bi-national context, as well as the effects of highly publicized drug-related violence, are likely to evolve over time. Research will be needed to investigate the effects of these changes on residents of both sides of the border. Risk reduction interventions for IDUs who engage in cross-border drug use will need to be tailored to the social and physical setting of drug use, including the cultural factors, social norms, and policies on both sides of the border. Further, such interventions should be sensitive to both the real and perceived effects of law enforcement, both in terms of drug laws and border enforcement.

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Table 1

Demographic characteristics of young San Diegan IDUs, by history of travel to Mexico (n=545)

	Ever traveled to Mexico (n=365)		Never traveled to Mexico (n=180)		
	n	%	n	%	p-value
Age (mean; SD)	28.7 (5.9)		28.6 (6.4)		0.87
Sex					
Male	260	71.2	129	71.7	0.19
Female	104	28.5	48	26.7	
Transgender	1	0.3	3	1.7	
Country of Birth					
US	355	97.3	168	93.3	0.05*
Mexico	3	0.8	2	1.1	
Other	7	1.9	10	5.6	
Hispanic (versus non-Hispanic)	108	29.6	41	22.8	0.09
Speak Spanish	102	28.0	14	7.7	<0.0001
Have friends/family in Mexico	165	45.3	13	7.2	<0.0001
Ever jail or prison or juvenile detention (n=544)	282	77.5	137	76.1	0.72
Receive any income from selling drugs (n=542)	93	25.5	33	18.6	0.08
Ever injected: (n=540)					
Heroin	267	73.6	107	60.5	0.002
Meth	217	59.8	104	58.8	0.82
Speedball	162	44.6	60	33.9	0.02
Cocaine	130	35.8	57	52.8	0.41
Goofball	115	31.7	37	20.9	0.009
Amphetamine	62	17.1	38	21.5	0.22
Crack	32	8.8	17	9.6	0.76
Prescription pills	20	5.5	3	1.7	0.04
Drug most often injected in past 3 months (n=519)					
Heroin	193	55.3	82	48.2	0.16
Methamphetamine/Amphetamine	116	33.2	71	41.8	
Other (cocaine, crack, drug combinations, other)	40	11.5	17	10.0	

	Ever traveled to Mexico (n=365)		Never traveled to Mexico (n=180)		
	n	%	n	%	p-value
Ever use of non-injection drugs (n=543)					
Marijuana	293	80.7	121	67.2	0.0005
Methamphetamine	267	73.6	119	66.1	0.07
Cocaine	255	70.3	95	25.8	<0.0001
Crack	188	51.8	67	37.2	0.001
Heroin	233	64.2	83	46.1	<0.0001
Prescription drugs	230	63.4	78	43.3	<0.0001
Ecstasy	221	60.9	89	49.4	0.01
Hallucinogens	185	51.0	68	37.8	0.004
Amphetamine	153	42.2	62	34.4	0.08
Ketamine	116	32.0	40	22.2	0.02
GHB	98	27.0	36	20.0	0.08
PCP	70	19.3	24	13.3	0.08
Poppers	62	17.1	18	10.0	0.03
Rohypnol	44	12.1	11	6.1	0.03
Viagra or similar	36	9.9	14	7.8	0.42
Ever in drug treatment (not incl AA)	231	63.6	98	54.4	0.04

*Fisher's Exact Test

Table 2

Drug use and reasons for buying drugs in Mexico among young San Diegan IDUs who report ever traveling to Mexico (n=365)

	N	%
Ever used non-injection drugs in Mexico (n=364)	196	53.9
Ever inject drugs in Mexico (n=363)	110	30.3
Ever bought drugs in Mexico (n=362)	200	55.3
Why bought drugs in Mexico? (n=199)		
Cheaper	136	68.3
Easier to get	84	42.2
Already there and wanted drugs	58	29.2
Better quality	50	25.1
Better choice of drugs	20	10.1
Don’t know where to buy in San Diego	14	7.0
Other	9	4.5

Table 3

Travel and drug use behavior of young San Diegan IDUs who report traveling to Mexico at least once in the past 6 months (n=148)

	N	%
Median number of times traveled to Mexico in past 6mo	3 (IQR*: 2–15; range: 1–300)	
Mexican cities visited in past 6 mo (n=149)		
Tijuana	139	93.3
Rosarito	26	17.5
Ensenada	18	12.1
Tecate	12	8.1
Mexico City	9	6.0
Puerto Nuevo	7	4.7
Used non-injection drugs in Mexico past 6mo	85	57.4
Injected drugs in Mexico in past 6mo	61	41.2
Drugs used in Mexico in past 6mo (n=141)		
Marijuana	46	32.6
Heroin		
Smoked	28	19.9
Snorted	9	6.4
Injected	46	32.6
Powder cocaine		
Smoked	6	4.3
Snorted	15	10.6
Injected	10	7.1
Crack		
Smoked	5	3.6
Snorted	4	2.8
Injected	1	0.7
Meth		
Smoked	28	19.9
Snorted	19	13.5
Injected	17	12.1
Heroin and cocaine (injected)	11	7.8
Meth and cocaine (injected)	1	0.7
Meth and heroin (injected)	6	4.3
Inhalants	2	1.4
Tranquilizers		
Swallowed	18	12.8
Injected	3	2.1
Barbiturates		
Swallowed	7	5.0
Injected	1	0.7

* IQR = Interquartile range