

# Wanting and Getting Help for Substance Problems on Both Sides of the US-Mexico Border

Lynn Wallisch<sup>1</sup> · Sarah E. Zemore<sup>2</sup> · Cheryl J. Cherpitel<sup>2</sup> · Guilherme Borges<sup>3</sup>

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**Abstract** The US-Mexico border presents potential cultural and logistic barriers to obtaining substance abuse treatment. We compare the prevalence and correlates of wanting and getting help between border and non-border residents in both the US and Mexico. Data come from the 2011 to 2012 US-Mexico Study on Alcohol and Related Conditions which surveyed 3214 border and 1582 non-border residents in the US and Mexico. Multivariate logistic regressions estimate the effect of border residence on desire for and receipt of help. In both countries, border substance users were about half as likely as nonborder substance users to have wanted or obtained any kind of help, independent of predisposing, need and enabling factors, including migration status. Among those desiring help, however, about half had obtained it, both on and off the border in both countries. While substantial proportions of those who need help do not get it either on or off the

border, lower motivation for treatment may be more important than access in explaining border/non-border differences. Future research should investigate whether there are border-specific barriers to wanting help, and how to minimize them.

**Keywords** Substance abuse treatment · Border · Hispanic · Mexican

## Introduction

Despite substantial evidence of the effectiveness and benefits of substance use disorder treatment for individuals as well as for public health [1–5], most people who need treatment do not obtain any formal or informal help. Major US, Mexican and international surveys have shown rates of under 20 % for obtaining treatment or even wanting but not getting it [6–11], and rates are, on average, lower in Mexico/Latin America than in the US [5, 12].

Findings about the treatment gap for US Hispanics specifically are mixed, although most show lower rates of treatment-seeking as compared to non-Hispanic whites [13–20]. Yet, Hispanics may have a greater need for treatment, as they are more likely than non-Hispanic whites to experience negative consequences of alcohol and drug use, including abuse and dependence [21–23], intimate partner violence [24], arrests for DUI [25], alcohol-related injury [26], liver cirrhosis [27, 28], and alcohol-related mortality [29, 30].

Mexican-Americans living along the US-Mexico border, especially young adults, have been found to experience higher rates of substance-related problems as compared to Mexican-Americans elsewhere [31–35]. However, treatment-seeking may present particular challenges in the border

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✉ Lynn Wallisch  
lynn.wallisch@austin.utexas.edu

Sarah E. Zemore  
szemore@arg.org

Cheryl J. Cherpitel  
ccherpitel@arg.org

Guilherme Borges  
guibor@imp.edu.mx

<sup>1</sup> Addiction Research Institute, The University of Texas at Austin, 1717 W. 6th Street, Suite 335, Austin, TX 78703, USA

<sup>2</sup> Alcohol Research Group, 6475 Christie Avenue, Suite 400, Emeryville, CA 94608, USA

<sup>3</sup> Instituto Nacional de Psiquiatría, Universidad Autónoma Metropolitana, Calzada México Xochimilco, No. 101, Col. San Lorenzo Huipulco, C.P. 14370 Mexico, DF, Mexico

area, due to low availability of services, low health literacy and education levels, language and acculturation diversity, high poverty, low insurance rates and high numbers of undocumented immigrants [36–38]. In addition, drug trafficking and associated violence, especially that directed at drug treatment centers [39, 40], may reduce the likelihood of border residents to obtain or even consider treatment.

The Mexican side of the border may also have unique characteristics that could affect treatment-seeking there, although the unique “meaning” of border residence may differ between countries. For example, prevalence of alcohol and drug use in the northern Mexican regions is twice as high as elsewhere in Mexico [41], in contrast to the US side, where prevalence of alcohol and drug use is similar or lower than elsewhere in the US [32, 33, 35]. Moreover, the Mexican northern states are relatively affluent, with lower unemployment compared to other parts of Mexico, while poverty and unemployment levels on the US side are among the highest in the country [42–44]. Although treatment access and availability cannot be directly compared between the two countries, Maxwell et al. [45] documented ten times as many treatment admissions in US border states than in Mexican border states, for similar border population sizes, as well as differences in the primary problem (methamphetamine and alcohol on the US side and heroin on the Mexican side).

In light of the potential for border residents to experience more adverse substance use outcomes and more challenges to obtaining treatment, understanding the desire for and receipt of help, and factors associated with those outcomes, is important in developing more targeted strategies for decreasing the treatment gap that may be particularly large on the border. The substantial interactions and movement of people across the border [44], and the potential to cross the border for health care [46], make it also important to examine similarities and differences in the relationship of border residence to treatment-seeking on both sides.

The present study is the first, to our knowledge, to be able to describe treatment-seeking among border and non-border residents in both the US and Mexico, using data collected with the same sampling strategy, instrument and timeframe. We address the following questions: (1) are there differences between border and non-border residents in each country in the percentage who have wanted help and who have received it; and (2) are border/non-border differences explained by other factors affecting help-seeking, including demographic characteristics, severity of need, and factors enabling or impeding help-seeking, especially those most salient on the border (insecurity, drug-dealing, migration)? Given the environmental challenges of border residence described above for the US side, and the drug-related violence on the Mexican side, we hypothesize that receipt of help for those who want it will

be lower among border residents as compared to non-border residents. We expect, however, that this difference will be attenuated after controlling for the border-related and other factors potentially affecting help-seeking.

## Methods

### Participants and Data Collection

Data come from the 2011 to 2012 US-Mexico Study on Alcohol and Related Conditions (UMSARC), the first large-scale survey of alcohol and drug use conducted simultaneously in “sister city” pairs on both sides of the US-Mexico border, and in a comparison non-border city on each side. Household face-to-face interviews of about 45 min were conducted in English or Spanish with Mexican-origin adults aged 18–65 by the Public Policy Institute at Texas A&M University on the US side and the National Institute of Psychiatry on the Mexican side. A multistage area-probability sampling design with stratification by city was used to select census block groups and randomly select respondents within them.

On the US side, the border sample consisted of respondents from the Texas border metropolitan areas of Laredo ( $n = 751$ ) and McAllen/Brownsville ( $n = 814$ ); the non-border sample consisted of respondents from the metropolitan area of San Antonio ( $n = 771$ ). Together, the US samples reflected a combined cooperation rate of 84.0 % and a response rate of 53.1 %. Parallel sampling was carried out in Mexico on respondents living in the respective border sister cities of Nuevo Laredo ( $n = 828$ ) and Reynosa/Matamoros ( $n = 821$ ) and in the non-border metropolitan area of Monterrey ( $n = 811$ ), reflecting a combined cooperation rate of 71.4 % and a response rate of 63.3 %. Cooperation rates include in the denominator only households in which an eligible respondent was confirmed to reside, while response rates include in the denominator all households estimated to contain eligible respondents [47]. The research protocol was approved by IRBs from the Alcohol Research Group-Public Health Institute in the US and the National Institute of Psychiatry in Mexico. A more detailed description of the sampling, fieldwork and instrument for the UMSARC survey can be found in Cherpitel et al. [34].

### Measures

#### *Desire for Help and Receipt of Help*

The primary dependent variables were wanting and getting help for substance problems, as identified by a “yes” response to the following questions: Have you ever had a

problem with your alcohol or drug use for which you thought about getting help? and Have you ever gone to anyone—a physician, AA, a treatment agency, anyone at all—for a problem related in any way to your drinking or drug use? Only individuals who had ever used alcohol or drugs were asked these questions, so the analysis sample was limited to lifetime substance users. Furthermore, the question about receipt of help was asked only of those who had considered it. For those who had obtained help, follow-up questions were asked about where they had received it and whether for an alcohol or drug problem.

### *Border Residence*

The main explanatory variable of interest was border residence versus non-border residence in each country. Border residents were those living in Laredo and McAllen/Brownsville on the US side or Nuevo Laredo and Reynosa/Matamoros on the Mexican side, and non-border residents were those living in San Antonio in the US or Monterrey in Mexico. The non-border sites chosen as a comparison represented large cities close to but not in the border area; since they may have differed in some demographic characteristics (e.g. percentage foreign-born or migration status), such characteristics are controlled for in the analyses.

### *Other Factors*

We group other factors potentially affecting treatment-seeking into *predisposing* factors, such as demographic characteristics; *need* factors, such as severity of alcohol and drug problems; and *enabling* factors, such as the logistical aspects of obtaining care, a typology first suggested by Andersen and Newman [48] and which has been widely used since then as a conceptual framework in which to understand factors that facilitate or impede health care utilization [49, 50].

### *Predisposing Factors*

*Gender* male versus female; *age* 18–29 versus 30+; and *educational level* less than high school, high school graduate, and some college/college graduate.

### *Need Factors*

*Lifetime Alcohol Use Disorder* Severity of DSM-5 alcohol use disorder (AUD), coded as no problem (0–1 symptoms), mild (2–3), moderate (4–5), and severe (6+) [51].

*Drug Use and Problems* Due to the survey's focus on alcohol, full criteria for a DSM-5 diagnosis of drug use

disorder were not assessed; however, two representative symptoms were asked: Were there times in your life when you were often under the influence of drugs in situations where you could get hurt, for example when riding a bicycle, driving, operating a machine, or anything else? and Were there times when you tried to stop or cut down on drug use and found that you were not able to do so? Drug use/problems was coded here as No drug use, Use of illicit drugs but no problems, and Drug-related problems.

### *Enabling Factors*

*Employment Status* Working full- or part-time, unemployed, and not in labor market, which includes homemaker, student, retired, or disabled.

*Health Insurance Status* None, Public insurance (e.g. Medicaid or Medicare in the US, Social Security, Ministry of Health or Seguro Popular in Mexico), or Private/other insurance.

*Border-Salient Factors* The border has been called an area of “turmoil, chaos and lawlessness” [52]; while this is an exaggerated characterization, it might be expected that drug trafficking, human smuggling and immigration enforcement would contribute to an environment of insecurity, which might deter treatment-seeking; additionally, migration experience is more prevalent among border populations. Since these factors have not been well-studied in relation to treatment-seeking, our reasons for including them are described below.

*Experience of Neighborhood Insecurity* Respondents were asked ten questions regarding their perceived security, violent victimization and exposure to crime, including feelings of safety walking alone in their neighborhood in the daytime and after dark; experience of theft or break-into their home or car; having been mugged or physically attacked; hearing gunshots; seeing someone get beaten up, stabbed, or shot. These questions were adapted from items in the British General Household Survey [53] and the NIMH Community Violence Project [54]. For the present survey, the events were summed and dichotomized as 0–2 events (low insecurity) versus 3–10 events (high insecurity). Neighborhood insecurity and violence may make access to care more difficult [55].

*Drug-Dealing Environment* A “yes” response to one of the following three events: having seen drug deals or seen violence related to drug dealing or gang warfare in the past year, or having been approached to buy an illegal drug in the past month. After controlling for the environment of

insecurity described above, which is expected to impede treatment-seeking, a drug-dealing environment may work in the opposite way, by motivating individuals to distance themselves from the drug scene by addressing their own substance use.

*Nativity and Migration* For US residents, whether the respondent had been born in Mexico; for Mexican residents, whether they had any personal or family migration experience to the US, including having previously lived in the US for work or study, or having a relative living in the US. Foreign-born individuals in the US may have less knowledge of how to access treatment, or be reluctant to do so if they are undocumented [56, 57]. In Mexico, return migrants from the US and family members of migrants are at higher risk for substance use disorders than those with no migrant in their family, and their exposure to US norms and use patterns may also affect how they search for and treat their disorders [41, 58].

## Analysis

Cross-tabulations describe sample characteristics and the percentage that wanted and got help, by border/non-border residence, in both countries. Multivariate logistic regression analyses test the hypothesis that, once other factors related to help-seeking are controlled, the effect of border residence on wanting and getting help will be attenuated. For each country, we examine two models, one predicting desire for help and the other predicting receipt of help. In the first model, the negative condition is not wanting help, while in the second model, the negative condition is not receiving help, but also includes not wanting it, since the question about receipt was only asked of those who wanted it. While the models therefore overlap somewhat, it is expected that the salience of factors will vary, with enabling factors more likely to come into play in predicting receipt of help than desire for it.

Data from each site were weighted to reflect the multi-stage clustered sampling design and then adjusted to match census marginal distributions of education and the combined gender by age distribution (see [34] for further details of the survey methodology). To adjust for design effects inherent in multistage clustered sampling, SAS survey commands were used for model parameter estimation. This generally results in a more conservative estimate of the significance of differences as compared to statistics assuming random samples.

## Results

### Sample Characteristics: Predisposing, Need and Enabling Factors

Table 1 presents frequency distributions of the sample characteristics expected to be related to wanting and getting help, for border compared to non-border residents within each country who had used alcohol or drugs in their lifetime.

There was no gender or age difference between border and non-border residents in either country. On the US side, border residents were less likely to have used drugs, but had similar levels of lifetime AUD as non-border residents. In the US also, border residents were more likely than non-border residents to be working, to be uninsured, and to have been born in Mexico. On the Mexican side, border residents were less likely than non-border residents to have an AUD (though similar levels of drug use), had lower educational levels, were more likely to be working, were more likely to have had migration experience to the US, and were less likely to report feelings of environmental insecurity.

### Percentages Who Wanted and Got Help On and Off the Border

Table 2 shows the percentages of border and non-border residents who wanted help and who had gotten help.

Among lifetime alcohol or drug users, border residents in both countries were about half as likely as non-border residents to have wanted help or to have received it. This disparity was also true, although the magnitude of difference was less, when limited to those with an AUD or symptoms of drug use disorder. However, once desire for help was established, there was no difference between border and non-border individuals in the proportion (about half) who had actually obtained help. Although we use the broad term “help” to reflect the question wording, 2/3 of those who did get help, both on and off the border in both countries, had obtained it from a formal drug or alcohol treatment program (not shown). There was no border/non-border difference in either country in whether help was obtained for alcohol versus drugs.

### Factors Associated with Wanting and Getting Help

Tables 3 and 4 show the results of logistic regressions conducted to test the hypothesis that other factors related to help-seeking would mediate the effect of border residence.

**Table 1** US-Mexico Study on Alcohol and Related Conditions (UMSARC): characteristics of border and non-border lifetime alcohol or drug users in each country (N = 3513)

	US non-border N = 658	US border N = 1289	MX non-border N = 486	MX border N = 1080
<b>Predisposing factors</b>				
Gender (male)	54.1	52.7	63.3	60.3
<b>Age</b>				
18–29	30.7	29.9	30.4	32.6
30–49	44.9	49.4	49.7	52.1
50+	24.4	20.7	19.9	15.3
<b>Education</b>				
Less than high school	32.7	33.2	59.9	71.8***
High school graduate	22.2	19.0	10.0	16.6
Some college/college graduate	45.1	47.9	30.1	11.6
<b>Need factors</b>				
<b>Alcohol use disorder (lifetime)</b>				
None	57.4	62.5 <sup>+</sup>	75.0	83.0**
Mild	20.2	18.5	12.7	9.7
Moderate	12.1	8.3	6.0	3.6
Severe	10.2	10.7	6.2	3.6
<b>Drug use/problems (lifetime)</b>				
No drug use	46.8	59.2***	88.1	86.6
Illicit drug use/no problems <sup>a</sup>	33.1	25.0	9.7	9.2
Drug-related problems <sup>b</sup>	20.1	15.8	2.2	4.2
<b>Enabling factors</b>				
<b>Employment</b>				
Working FT/PT	61.8	71.1**	66.5	72.4*
Unemployed <sup>c</sup> 13.4	9.7	7.7	3.6	
Not in labor force <sup>d</sup>	24.7	19.2	25.8	24.0
<b>Health insurance</b>				
None	47.7	59.0**	8.6	9.0
Public	12.1	8.5	73.3	79.5
Private/other	40.1	32.5	18.2	11.5
<b>Border-salient</b>				
Neighborhood insecurity	19.4	16.4	46.7	32.2**
Drug environment	28.1	30.4	40.0	38.1
Born abroad (US respondents)	25.2	34.4**		
Migrant experience (MX respondents) <sup>e</sup>			6.4	15.2***

In percentages (data are weighted)

\*  $p \leq .05$  for difference between border and non-border within each country;  $p$  values determined by Rao–Scott Chi square test

\*\*  $p \leq .01$

\*\*\*  $p \leq .001$

<sup>+</sup>  $p \leq .10$

<sup>a</sup> Used illicit drugs but did not report either of the two drug-related problems asked about

<sup>b</sup> Reported one or both of the drug-related problems asked about

<sup>c</sup> Includes looking for work or not looking

<sup>d</sup> Includes homemaker, student, retired, or disabled

<sup>e</sup> Personal or family-member history of migration to the US

**Table 2** US-Mexico Study on Alcohol and Related Conditions (UMSARC): desire for and receipt of help among border and non-border lifetime alcohol or drug users in each country (N = 3513)

	US non-border N = 658	US border N = 1289	MX non-border N = 486	MX border N = 1080
All lifetime alcohol or drug users				
Wanted help	13.8	7.7***	6.9	2.7**
Received help	7.6	4.6**	3.4	1.3**
If wanted help	(93)	(109)	(31)	(34)
Received help	55.3	59.7	50.0	47.2
	N = 306	N = 542	N = 123	N = 203
If had a lifetime alcohol or drug problem				
Wanted help	27.2	17.8**	19.7	12.3 <sup>+</sup>
Received help	15.2	10.4 <sup>+</sup>	10.2	5.3 <sup>+</sup>
If wanted help	(88)	(101)	(23)	(31)
Received help	55.9	58.4	51.7	43.0

In percentages (data are weighted)

\*\*  $p \leq .01$  for difference between border and non-border  $p$  within each country;  $p$  values determined by Rao–Scott Chi square test

\*\*\*  $p \leq .001$

<sup>+</sup>  $p \leq .10$

*In the United States*

Border residents’ lower *desire* for help remained robust after controlling for individual characteristics, need, and enabling factors. The factors predicting wanting help, in addition to border residence, included male gender, older age, unemployment, having an AUD at any level (mild to severe, although odds increased with severity) and having drug-related problems. Education beyond high school reduced desire for help, as compared to having less than a high school diploma.

Border residents’ lower *receipt* of help also remained robust after controlling for other factors. These factors included, again, male gender, older age, and need (alcohol and drug problems). They also included the border-salient factors of neighborhood insecurity (trend,  $p = .06$ ) and being born in Mexico, both of which reduced the likelihood of receiving help, and a drug-dealing environment, which increased the likelihood of getting help. Additionally, as compared to having no insurance, health insurance from a public source predicted getting help, but private insurance was associated with not getting help.

*In Mexico*

Because of the relatively small number of individuals in Mexico who wanted or got help, associations with predictive factors were harder to discern, and findings should be interpreted with caution, due to high variance. Nevertheless, a few findings stood out. As was true in the US,

wanting help remained lower on the border even after other factors were accounted for, although receiving help was no longer significantly related to border residence once other factors were controlled.

AUD predicted both desire for and receipt of help, while illicit drug use and drug problems (the latter only a trend,  $p = .08$ ) predicted wanting help but did not predict getting it. Individuals with migration experience were more likely to want help, but not any more likely to obtain it. Finally, having any kind of insurance was associated with wanting help, although not with receiving it; since over 90 % of Mexican respondents reported being insured, this variable may be less meaningful in predicting treatment-seeking in Mexico.

**Discussion**

Like most studies of treatment prevalence, the present study found overall low rates of wanting or getting help for those who may need it, and particularly lower rates on the border compared to the non-border sites in both countries. A potentially important finding of this study is that lower rates of border help-seeking are largely a result of lower desire for help rather than lower rates of receiving it, if it was desired. This is contrary to our expectation that border residents would experience more challenges related to obtaining treatment, and suggests that reasons for differences in motivation may be an important area for further exploration.

**Table 3** US-Mexico Study on Alcohol and Related Conditions (UMSARC): factors associated with wanting and receiving help among respondents who ever used alcohol or drugs—United States

	Wanted help N = 1912		Received help N = 1912	
	OR	95 % CI	OR	95 % CI
<b>Bivariate odds ratios</b>				
Border residence	0.50	(0.37–0.67)***	0.56	(0.39–0.80)**
<b>Adjusted odds ratios</b>				
Border residence	0.44	(0.30–0.63)***	0.63	(0.41–0.97)*
Gender (male)	1.67	(1.04–2.67)*	1.94	(1.01–3.71)*
Age (30+ vs 18–29)	1.58	(1.01–2.48)*	2.28	(1.49–3.48)***
<b>Education</b>				
Less than high school (ref.)	–		–	
High school graduate	0.79	(0.50–1.25)	0.91	(0.50–1.65)
Some college/college graduate	0.63	(0.40–0.98)*	0.68	(0.40–1.15)
<b>Employment</b>				
Working FT/PT (ref.)	–		–	
Unemployed	1.90	(1.08–3.35)*	1.34	(0.79–2.25)
Not in labor force	1.21	(0.76–1.92)	1.33	(0.79–2.27)
<b>Health insurance</b>				
None (ref.)	–		–	
Public	1.09	(0.51–2.33)	1.98	(1.00–3.89)*
Private/other	0.92	(0.60–1.41)	0.46	(0.28–0.73)**
<b>Alcohol use disorder (lifetime)</b>				
None (ref.)	–		–	
Mild	2.06	(1.14–3.71)*	2.08	(0.88–4.92) <sup>+</sup>
Moderate	3.70	(1.92–7.10)***	4.15	(1.56–11.01)**
Severe	15.50	(8.32–28.88)***	8.54	(3.47–21.04)***
<b>Drug use/problems (lifetime)</b>				
No drug use (ref.)	–		–	
Illicit drug use/no problems	1.17	(0.67–2.05)	1.01	(0.46–2.20)
Drug-related problems	3.39	(1.90–6.06)***	3.32	(1.49–7.40)**
Neighborhood insecurity	1.00	(0.66–1.52)	0.62	(0.38–1.01) <sup>+</sup>
Drug environment	1.34	(0.87–2.07)	2.08	(1.25–3.45)**
Born abroad	1.01	(0.58–1.75)	0.40	(0.22–0.75)**
Number responding “yes”	201		118	

\*  $p \leq .05$ \*\*  $p \leq .01$ \*\*\*  $p \leq .001$ <sup>+</sup>  $p \leq .10$ 

While our hypothesis that the predisposing, need and enabling factors would explain or attenuate the border effect was not supported, the effect of those factors was largely consistent with other studies showing that male gender, older age, unemployment, lower education, and severity of need are associated with higher likelihood of obtaining treatment in Mexican and Mexican-American populations [6, 7, 9, 19, 20, 57, 59].

Insurance status showed a somewhat unexpected association with help-seeking on the US side. Although, consistent with other studies [60, 61], public insurance (Medicaid,

Medicare) predicted getting help as compared to not having insurance, having private insurance paradoxically decreased receipt of help. It is possible that those completely without insurance may be more likely to avail themselves of publicly-funded services or cost-free modalities, such as AA or faith-based treatment, while those with private insurance may fear a co-pay, or disclosure of their substance abuse, if their insurance is work-based.

Finally, the border-specific enabling factors were also associated to some degree with receiving help. Experiencing insecurity marginally reduced the likelihood of



**Table 4** US-Mexico Study on Alcohol and Related Conditions (UMSARC): factors associated with wanting and receiving help among respondents who ever used alcohol or drugs—Mexico

	Wanted help N = 1508		Received help N = 1508	
	OR	95 % CI	OR	95 % CI
<b>Bivariate odds ratios</b>				
Border residence	0.40	(0.24–0.69)***	0.41	(0.21–0.80)**
<b>Adjusted odds ratios</b>				
Border residence	0.41	(0.21–0.82)**	0.51	(0.22–1.19)
Gender (male)	1.27	(0.60–2.712)	2.38	(0.55–10.34)
Age (30+ vs 18–29)	1.26	(0.63–2.49)	1.39	(0.56–3.44)
<b>Education</b>				
Less than high school (ref.)	–		–	
High school graduate	0.54	(0.19–1.54)	1.14	(0.39–3.32)
Some college/college graduate	0.68	(0.29–1.64)	0.43	(0.13–1.42)
<b>Employment</b>				
Working FT/PT (ref.)	–		–	
Unemployed	2.17	(0.71–6.67)	1.70	(0.36–8.93)
Not in labor force	1.45	(0.68–3.09)	2.10	(0.79–5.56)
<b>Health insurance</b>				
None (ref.)	–		–	
Public	4.89	(1.15–20.70)*	2.07	(0.49–8.75)
Private/other	2.75	(0.60–12.52)	2.51	(0.51–12.41)
<b>Alcohol use disorder (lifetime)</b>				
None (ref.)	–		–	
Mild	5.61	(2.34–13.46)***	6.29	(1.88–20.98)**
Moderate	7.80	(2.98–20.42)***	23.05	(6.19–85.84)***
Severe	24.75	(9.31–65.78)***	39.51	(9.93–157.15)***
<b>Drug use/problems (lifetime)</b>				
No drug use (ref.)		–		–
Illicit drug use/no problems	2.24	(1.13–4.43)*	1.42	(0.56–3.65)
Drug-related problems	3.40	(0.86–13.46) <sup>+</sup>	0.65	(0.15–2.72)
Neighborhood insecurity	0.85	(0.40–1.81)	0.99	(0.42–2.36)
Drug environment	1.04	(0.51–2.10)	0.79	(0.35–1.77)
Migration experience	2.00	(1.13–3.50)*	1.62	(0.75–3.51)
Number responding “yes”	61		32	

\*  $p \leq .05$

\*\*  $p \leq .01$

\*\*\*  $p \leq .001$

<sup>+</sup>  $p \leq .10$

obtaining help, and only on the US side, although we had anticipated that violence directed at drug treatment centers in Mexico would make this variable more salient there. This unexpected finding may be due to the fact that, at the time of the survey, the non-border comparison city of Monterrey, traditionally one of Mexico’s safest and wealthiest cities, was experiencing a wave of cartel-related violence [62], thus contributing to higher feelings of insecurity there than on the border.

Experiencing a drug-dealing environment, once controlling for insecurity, increased the likelihood of getting

help for US residents, perhaps by motivating individuals to distance themselves from the drug scene through seeking help for their own problems. Being an immigrant to the US reduced the likelihood of obtaining help, possibly through heightened challenges related to language, acculturation, documentation status, or unfamiliarity with obtaining US health care [19, 56]. However, including language, generation or acculturation status in the model did not change the results. Conversely, having migration experience for Mexican residents increased the desire for help, perhaps due to the influence of their US experience on substance



use norms or attitudes towards treatment [41]. Yet, in line with other work [63], we did not find an effect of migration experience on actually obtaining help among Mexican respondents.

Since the combination of factors examined here did not explain the lower help-seeking observed on the border, other factors should be investigated in future research. For example, fear of exposure and stigma may be more likely in the smaller border cities as compared to the larger non-border cities. Additionally, the relatively more tolerant social norms for drinking in Mexico [64], or a social life that includes gathering at bars—both of which may be more prevalent in US border towns [65, 66]—may reduce the likelihood that heavy drinking will be seen as a problem requiring help. (However, other research [67] has not found a difference in drinking norms between border and non-border populations.) Additionally, border residents, especially more recent immigrants, may have less familiarity with the goals and methods of treatment, less knowledge of or trust in large service systems and institutions, believe they are not eligible, or worry that services would not be culturally sensitive. While the present study did not ask reasons for not wanting or getting help, an earlier border study [35] noted that embarrassment, lack of confidence in treatment efficacy, and feeling no one would understand their problem were factors frequently cited by border residents who had thought about but failed to get help for substance problems.

Our finding of a border/non-border difference in help-seeking contrasts to some extent with another recent study of treatment utilization on and off the US border. In comparing an urban border sample from the four US border states with a combined sample of Hispanics from five large metropolitan areas in the US interior, Reingle Gonzalez et al. [57] found that 5.6 % of lifetime alcohol users had ever obtained help, with no difference between border and non-border residents; in contrast, our findings showed a small but significant difference in obtaining help between border substance users (4.6 %) and non-border substance users (7.6 %). While the difference between the two studies' findings is small in absolute percentage terms, our conclusion of a border/non-border difference remained robust even after controlling for many of the same factors as the Reingle Gonzalez et al. study. It is possible that differences in the comparison sites chosen or heterogeneity among communities in the border area [68] account for the different conclusions.

On the Mexican side, our findings of lower receipt of help on the border corroborate findings from an earlier Mexican National Survey on Addictions, which showed lower use of treatment services in border cities, despite higher rates of substance use, as compared to elsewhere in Mexico [6].

## Potential Limitations

This study contributes to the scant literature on border substance treatment-seeking by being able to compare border and non-border residents in the US as well as Mexico on both desire for and receipt of help. However, as a secondary analysis of existing data, our study was not able to include all potential predisposing and enabling factors relevant to help-seeking, notably treatment availability (there is little published information comparing availability in the study sites) and, perhaps most importantly, respondents' perceived barriers to wanting or getting help.

Additionally, our analysis on the Mexican side was limited by the very low prevalence of the outcome variables. In Mexico, only 31 individuals in the non-border city and 34 in the border site expressed a desire for help, thus limiting the statistical power to identify all variables associated with that outcome and making it difficult to isolate determinants of receipt of help from determinants of desire for it.

## Implications for Substance Treatment on the Border

The substantial gap between need and treatment on the border, where untreated substance problems can only exacerbate the other challenges and stresses of border living, presents a charge to local policy planners, program administrators and health educators to increase the proportion of those who get help, not only through enhancing access and availability but also by addressing low rates of desiring help, and increasing motivation to seek it. Future research should investigate whether there are border-specific barriers to wanting help, and how to minimize them. The substantial movement of individuals and strong mutual influences from one side of the border to the other also highlight the need to better understand the common as well as the unique implications of border residence on both sides. In the UMSARC study, for example, almost 20 % of US border residents had crossed into Mexico in the past year for the purpose of obtaining health care, so understanding motivations and barriers for substance treatment on both sides of the border is vital.

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## Compliance with Ethical Standards

**Conflict of interest** The authors report no conflicts of interest.

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