



Published in final edited form as:

Subst Abus. 2015 ; 36(3): 264–271. doi:10.1080/08897077.2014.955900.

Vida PURA: A Cultural Adaptation of Screening and Brief Intervention to Reduce Unhealthy Drinking among Latino Day Laborers

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Abstract

Background—Brief intervention is known to reduce drinking in primary care, however because health care access is limited for Latino immigrants, traditional brief interventions are unlikely to reach this population.

Methods—Using Barrera and Castro’s framework, our study aims to culturally adapt a screening and brief intervention program to reduce unhealthy alcohol use among Latino day laborers, a particularly vulnerable group of Latino immigrant men. We conducted 18 interviews with Latino day laborers and 13 interviews with mental health and substance use providers that serve Latino immigrant men. Interviews were conducted until saturation of themes was reached. Themes from interviews were used to identify sources of mismatch between traditional screening and brief intervention and our target population.

Results—Unhealthy alcohol use was common, culturally accepted, and helped relieve immigration-related stressors. Men had limited knowledge about how to change their behavior. Men preferred to receive information from trusted providers in Spanish. Men faced significant barriers to accessing health and social services, but were open to receiving brief interventions in community settings. Findings were used to design Vida PURA, a preliminary adaptation design of brief intervention for Latino day laborers. Key adaptations include providing brief intervention at a day labor worker center, by *promotores* trained to incorporate the social and cultural context of drinking for Latino immigrant men.

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AUTHOR CONTRIBUTIONS

India J. Ornelas contributed to the research conception, design, data collection, analysis interpretation of results and drafting the manuscript. Claire Allen contributed to the research design, data collection, analysis, interpretation of results and drafting the manuscript. Catalina Vaughan contributed to the research design, data collection, analysis and interpretation of results. Emily C. Williams contributed to the research design, interpretation of results and revisions of the manuscript. Nalini Negi contributed to the interpretation of results and revisions of the manuscript.

The authors report no conflict of interest.

Conclusions—Culturally adapted brief intervention may help reduce unhealthy drinking in this underserved population.

INTRODUCTION

Latinos are a large and growing proportion of the United States (US) population (17%), in part to dramatic increases in immigration.¹ Latinos have more unhealthy alcohol use and alcohol-related consequences than other racial/ethnic groups.^{2,3} These disparities are particularly evident among Latino immigrant men, where studies have shown that 44 – 58% report binge drinking in the past month, compared to 23% of men in the United States overall.^{4–7} In addition, they have less access to healthcare than other racial/ethnic groups, in part due to legal status and employment issues.⁸

Brief intervention is known to reduce drinking among primary care patients with unhealthy alcohol use identified by population-based screening and is recommended by the United States Preventive Services Task Force for all primary care patients.^{9–11} Standard protocols for brief intervention vary in content but generally include: personalized feedback on drinking behaviors, discussion of the benefits and consequences of changing drinking behaviors, and making a plan for behavior change.^{9,12} However, because health care access is limited for Latino immigrants, primary care based interventions are unlikely to reach this population. Even outside of primary care settings, brief interventions' efficacy may not generalize to Latinos due to differential risk factors and drinking contexts in this population. For instance, male gender socialization in Latino culture encourages men to conceal emotions and use more avoidant coping strategies, such as drinking.¹³ This is exacerbated by cultural norms that accept men drinking to intoxication at early ages in some Latino heritage groups.¹⁴ Latinos also face unique stressors related to their immigrant and racial/ethnic minority status that put them at increased risk for unhealthy alcohol use, such as discrimination, language barriers, and social isolation.¹⁵ Therefore, alcohol-related interventions may need to be culturally adapted in order to reach and be effective among Latino men.

One population that may be particularly in need of culturally-adapted interventions is Latino day laborers, who are typically hired by the hour or day to do landscaping or construction jobs via an informal labor market which takes place on streets or through hiring centers that match workers with temporary jobs. Many Latino immigrant men turn to day labor as a source of income upon first arriving to the U.S, especially in new immigrant destinations (i.e, areas of the U.S. that have seen recent rapid growth in immigration, but are not areas where immigrants have typically settled).^{16,17} Most day laborers are single men, and represent one of the poorest segments of the Latino population due to their labor conditions and undocumented immigration status.¹⁶ They tend to settle in low-income neighborhoods and often live in shared housing arrangements with other single men, leaving family members behind in their countries of origin.¹⁸ These factors may make Latino day laborers particularly vulnerable to unhealthy alcohol use.^{19,20} Based on lack of access and limited effectiveness of traditional interventions, as well as increased need for alcohol-related interventions in this population, we sought to culturally adapt screening and brief intervention for Latino day laborers.

METHODS

Overview of Methods

Our process was guided by Barrera and Castro's framework for the cultural adaptation of existing evidence-based interventions, which includes an information gathering stage, followed by adaptation of the intervention, pilot testing the intervention with the new cultural group, refining the intervention, and then conducting a trial to determine its efficacy.²¹ The present study included the first two of these steps: 1) gathering information to identify sources of mismatch between the original intervention and target population, and 2) a preliminary adaptation design.

As part of the information gathering stage, we conducted in-depth interviews with two populations: 1) Latino day laborers who represented the target population (N = 18) and 2) social service providers working with Latino immigrant men in the areas of mental health and substance use in Seattle, Washington who could provide insight on both the services available to men and their experiences serving this population (N = 13). Similar to other cultural adaptation approaches, our aim was to identify characteristics of Latino day laborers, as well as intervention delivery, administrative and community factors that might influence the implementation of the program.^{22–24} The study was approved by the Institutional Review Board at the University of Washington.

Study Samples and Recruitment

Latino immigrant men were recruited from a community-based day labor worker center. Men waiting for employment opportunities were approached and screened for eligibility. Those who were currently engaging in unhealthy drinking (defined below), spoke Spanish, were foreign-born, identified as Latino and provided informed consent were invited to participate. Unhealthy drinking was defined as a score of 4 or greater on the Alcohol Use Disorders Identification Test of Consumption (AUDIT-C) questionnaire, a three item measure that has been validated for identifying unhealthy alcohol use among Latino men.²⁵ Higher AUDIT-C scores indicate greater severity of unhealthy alcohol use.²⁶ Social service providers were purposively selected to meet the following inclusion criteria: currently work in health and social services; and, work in an agency that serves Latino clients. Providers included staff at county health agencies, alcohol treatment centers, and community-based organizations serving Latino day laborers and had worked in the field for ten years on average. They were invited to participate by email or telephone and provided informed consent prior to the interview. Many providers were bilingual, and 4 chose to do the interview in Spanish. All participants approached were eligible and agreed to participate in the study.

Data Collection Procedures

All interviews were conducted by trained bilingual staff. The interview guide for the day laborers consisted of 25 closed and open-ended questions with scripted probes. Questions covered demographic and occupational characteristics, community and individual values, drinking patterns, causes and consequences of drinking, coping strategies, and attitudes about receiving screening and brief intervention. The interview guide for service providers

consisted of 15 open-ended questions on a variety of topics including: occupational characteristics, patterns of substance use in Latino men, unmet needs in the Latino community, and perceptions regarding providing brief intervention to day laborers. Both guides were based on literature related to cultural adaptation of interventions and alcohol use among Latinos.^{23,27,28} All interviews were conducted in private spaces at the community partner organizations. Interviewers took notes in all interviews, and all but one interview was audio recorded due to the participant's request. We planned to interview as many participants as needed to reach saturation (i.e., were no longer obtaining new knowledge).²⁹ We reviewed and discussed the data throughout recruitment and stopped enrolling participants once we reached saturation.

Analysis

All audio-recorded interviews were transcribed, and all transcripts were uploaded into Atlas.ti. Interviewers also wrote case summaries briefly describing the participant, their responses and any reflections. Transcripts were analyzed using inductive content analysis based on an established coding scheme.³⁰ Examples of codes for Latino day laborers were: patterns and context of drinking, reasons for drinking, alcohol expectancies, negative consequences of drinking, coping strategies, and receptivity to screening and brief intervention. Examples of coding categories for provider interviews were: Latino clients' service use patterns, Latino clients' patterns of drinking, and potential barriers and facilitators to providing screening and brief intervention to Latino immigrant men. Each transcript was independently coded by two members of the research team. The research team met to discuss coding decisions and modified the coding scheme as necessary. Case summaries and coded quotations were then reviewed by all team members for prevalent themes and select prototypical examples of each for presentation. We then used the results to inform the preliminary adaptation design.

RESULTS

Information Gathering

Characteristics of the Latino day laborers are presented in Table 1. Below we highlight the themes that informed the preliminary adaptation design of brief intervention to reduce unhealthy alcohol use. We grouped themes into three categories based on Barrera and Castro's framework: 1) characteristics of Latino day laborers, 2) intervention delivery, and 3) administrative and community factors impacting the intervention.^{21,23}

Characteristics of Latino Day Laborers

Heavy drinking was common and culturally accepted—Most of the men in the study reported frequent drinking ranging from several times a week to daily. Men reported drinking several beverages per occasion, often referring to buying “un seis” (a sixpack) or more at a time. Episodes of binge drinking usually occurred on weekends, because drinking during this time was seen as having less of a negative impact on employment opportunities and productivity. Providers also iterated that “fiesta drinking,” or drinking heavily at parties on weekends, was common among their Latino immigrant male clients. As one provider noted, “They drink because they go to fiestas. They say, ‘I’ll drink up to 10 beers at that one

occasion. It's just at the party, that one occasion, and the rest of the week I have to work hard.”

Drinking was related to and helped relieve immigration-related stressors—

When asked about their reasons for drinking, men reported drinking more when they were feeling lonely, socially isolated and guilty about being away from their families as a result of immigrating to the United States. As one participant shared, “I will tell you why I drink... because I am far away from my family. I live on the streets, and all that; to give me courage.” Providers confirmed this. As one provider stated,

“Maybe they weren't an alcoholic when they were in Mexico, and they found out here that they are not getting what they expected. They can't get a job. They don't speak the language. They feel like the police are going to get them at any time and they get involved in alcohol. It's the only thing that makes them forget.”

Both men and providers shared how drinking helped Latino immigrant men ease symptoms of depression and anxiety. As one man stated, “When I drink more, it's a refuge.” Drinking also provided a way for men to relate to other men. When speaking about his clients one provider remarked,

“They miss Mexico. They don't speak the language. They feel frustrated because of their job issues, their status, documentation issues, and immigration issues. They don't feel free and they feel depressed - and they go out, and they drink, and they find the same group, you know? They feel like they are on the same page.”

Drinking also helped men relieve their sense of vulnerability and social isolation by making men feel stronger and more confident. Others reported speaking better English when drinking and feeling more friendly, conversational, and outgoing.

Men were also aware of the negative consequences of their drinking, especially poor work performance and job loss. Both men and the providers observed a cycle of drinking which would start as a way to relieve stress associated with immigration, followed by negative consequences such as financial hardship, which caused more stress and depression, which men would then, again, try to relieve with drinking. As one man stated, “I have always sought refuge in alcohol. It makes me feel better for a while but then after drinking the next day I fall back into depression.”

Men had limited knowledge about what constitutes unhealthy drinking and were unsure of how to change their behavior—Despite having experienced negative consequences as a result of their drinking, many men had little desire or motivation to change their behavior. Those that had a desire to change were often demoralized by previous attempts or unsure about what to do or where to seek help. Furthermore, many of the men had witnessed heavy drinking and its consequences among their family and friends for generations and saw it as acceptable among other Latino men. All men had limited knowledge about what constituted unhealthy drinking and few could identify strategies to reduce their drinking.

Intervention Delivery

Men preferred to receive information in Spanish from trusted providers—Both the men and the providers we interviewed felt strongly that alcohol screening and brief intervention should be provided by someone the men could relate to and spoke their language, such as a community health worker. Language was cited as a common barrier to care, and men preferred to discuss their alcohol use in Spanish. Providers noted that it was important for anyone providing alcohol-related counseling to understand the social and cultural context to drinking. This included men's social norms around drinking, limited access to services, and being undocumented. One provider noted, “[There is] a lack of bilingual and bicultural providers who understand the culture on this side of the border as well as the other side of the border. There are many that want to do the work but don't have the ability.”

Administrative and Community Factors

Men faced barriers to accessing health and social services—Men cited language, cost and a lack of cultural sensitivity as barriers to seeking health care. Most men did not have health insurance, due to their employment and legal status. None of the men had consulted a health care provider about their alcohol use. Furthermore, many feared seeking health and social services because of the legal status, as illustrated in quotes from providers below.

“And that is so important when you go somewhere; you know you can be safe, because our community right now is not safe. So they go home and they're with their wives, or on the freeway, or anywhere, if they get out - just recently, I had a client who got out of the car at a gas station and started to be questioned. He said, “I was just getting gas. I did nothing.”

“People are afraid that if they access any resources if they're undocumented they will be deported. That's the big thing here... If you access any public funding you're going to be on a list.”

There are few existing culturally appropriate alcohol prevention and treatment services—Men were dissatisfied with the programs that existed (such as Alcoholics Anonymous), and noted that few were low-cost or offered in Spanish. One exception was a grant-funded program administered by the county to pilot test screening, brief intervention and referral to treatment in community health centers, one of which served mostly Latino patients. Patients screened through this program were also eligible for free or low-cost treatment if referred. However, both men and providers interviewed stated that Latino immigrant men rarely sought health care services and therefore, would be unlikely to receive screening through this program.

Men were receptive to screening and brief intervention in community settings—Although the men we interviewed did not frequently seek health services in clinics, they were receptive to receiving information and counseling about their drinking at community-based organizations that they trusted and were already seeking other services. As one man stated,

“We prefer to carry our pain, than to heal, because I can’t... I have no money to do it. If, well, there is a place with programs where they start to increase your awareness and help you with all of these types of problems... well, it would help a lot.”

Providers also believed that providing screening and brief intervention in trusted community settings would be an effective approach to reaching Latino immigrant men.

Culturally Adapted Intervention: Vida PURA (*Puede Usted Reducir su Consumo de Alcohol*)

Based on these results we identified several areas of mismatch between how screening and brief intervention is traditionally offered and how it would be implemented and received in our target population (Table 2). We aimed to retain the core elements of brief intervention while also addressing sources of mismatch in a preliminary adaptation design.¹² Our adaptations included changes to the setting, intervention delivery, intervention content and referral.

Intervention Setting

Our interviews with both Latino immigrant men and providers revealed that it was critical to provide brief intervention in a setting that is both safe and familiar to the men. Our design moves brief intervention from the clinical setting to a day labor worker center, which has the potential to increase the reach and uptake of the intervention. Latino day laborers indicated that they would welcome counseling around their alcohol use in community-based organizations, such as a day labor worker center. Day labor worker centers are most often non-profit agencies that help connect day laborers with jobs, while also ensuring fair wages and good working conditions. Day laborers often spend time at centers waiting for their name to be called from a lottery; time during which screening and brief intervention could be offered. Furthermore, they are seen as a trusted site for receiving services, especially in new destination communities where there are often fewer agencies serving immigrants and anti-immigrant sentiment is prevalent.¹⁷

Intervention Delivery

Our findings also suggested that Latino day laborers felt most comfortable discussing their alcohol use in Spanish with providers they trusted. Our intervention design uses trained *promotores* to provide both alcohol screening and brief intervention in Spanish. *Promotores* are health advisors that share sociodemographic characteristics in common with program participants, including ethnicity and language spoken. Their familiarity and understanding of the community enhances participant comfort and trust, making participants more likely to engage in open discussion and receive advice or direction about their drinking.

Intervention Content

Although many were unaware that their drinking was unhealthy, Latino day laborers we interviewed were receptive to receiving feedback on their drinking and some expressed interest in strategies to change their behavior. Therefore, our findings suggest that the core elements of brief intervention (i.e. personalized feedback, discussion of the benefits and

consequences of changing drinking behaviors, and making a plan for change) would be effective for Latino day laborers with some modifications. In our intervention, *promotores* provide feedback on the men's drinking behaviors using a low-literacy visual aid. They will also use motivational interviewing (MI) to discuss the benefits and consequences of their drinking and if appropriate elicit a plan for behavior change. MI is a client-centered, directive counseling style originally developed to address unhealthy drinking and is considered to be a culturally competent approach because it allows counselors to incorporate issues related to social context in the discussion.^{31–33} This approach is well-suited for this population because it focuses on those with ambivalence and it identifies strategies for those who would like to change their behavior, but lack knowledge or self-efficacy about how to do so. Furthermore, MI is based on interacting with participants with a spirit of collaboration, while allowing the participant to maintain their autonomy (which can be especially important for vulnerable populations, such as Latino day laborers). MI has also been culturally adapted for Latinos, by incorporating social and cultural influences on drinking.^{22,33} *Promotores* are likely to already be familiar with this context, and it can also be added to their training. For example, *promotores*' can ask about common stressors among day laborers that lead to unhealthy drinking, as well as cultural values that might enhance their motivation to change.

Referral to Treatment and Community Resources

When needed, providers often follow brief intervention with referral to treatment or other services.³⁴ We were especially concerned with how to implement referral given the barriers that men and providers identified during the information gathering stage. Subsequent conversations with staff with local community health centers and alcohol treatment centers helped us to identify agencies providing low or no-cost services in Spanish that would accept referrals from the *promotores*.

DISCUSSION

Our qualitative interviews with Latino day laborers and social service providers pointed to both a significant need for interventions to address unhealthy alcohol use among Latino day laborers, as well as ways in which brief intervention could be adapted for this population. Latino day laborers in our study commonly engaged in unhealthy alcohol use, especially binge drinking at celebrations which was seen as culturally acceptable. Although few studies have assessed the prevalence of unhealthy alcohol use among Latino day laborers, our study is consistent with findings indicating this population is at high risk for unhealthy alcohol use.^{5,6,33} Other studies of Latino day laborers and migrant farmworkers have also noted a culture which accepts and encourages binge drinking during weekend and non-work times, and using alcohol to relieve physical exertion, diminish isolation, expand social connectedness, and cope with boredom and distress from too little work and money earned.^{20,35,36} Studies of Latino immigrant men in other parts of the US have also linked unhealthy alcohol use to immigration related stressors, including language barriers, discrimination, social isolation, economic hardship, and limited access to health and social services.^{37–39} Similar to these studies, we found that undocumented men had a sense of vulnerability and limited access to services.^{40–42}

Our findings speak to the need to translate interventions that are effective in clinical settings for use in community settings, especially among populations with limited access to health care. Previous research suggests expanding the use of brief intervention beyond clinical settings and notes that day labor worker hiring sites provide a unique setting for public health outreach.^{20,43} Expanding the use of evidence-based interventions to community settings may help reduce disparities.⁴⁵ Furthermore, testing interventions in settings that are closer to actual circumstances of practice helps decrease the gap between research and practice. Therefore, our preliminary adaptation of the intervention, which aims to address the issue of limited healthcare access by adapting the setting of the intervention, is consistent with theory and recommendations. Few studies have tested the feasibility of offering brief interventions in community settings where high-risk underserved populations are more likely to access them. Future research will be needed to understand the feasibility and efficacy of this approach.

The goal of changing the intervention agent from a clinician to a community health worker (*promotor*) was to improve both engagement and efficacy of the intervention. *Promotores* are recognized as a culturally appropriate way to provide health education and counseling to Latinos in community-based settings.⁴⁴⁻⁴⁶ While it has been established that *promotores* are an effective way to promote health and increase access to health services in Latino immigrant communities, no studies have evaluated using *promotores* to reduce unhealthy drinking among Latino immigrant men in community settings.⁴⁶⁻⁴⁸ However, this approach has promise because *promotor*-based interventions have been effective in increasing condom use and HIV testing among Latino immigrant men in both traditional and new immigrant destinations.^{49,50} Studies have also shown that community health workers trained to use motivational interviewing have been effective in reducing cardiovascular and HIV risk behaviors.^{51,52} Furthermore, brief interventions delivered by non-physicians and peer educators have been effective in reducing drinking in Latino and Spanish-speaking populations.^{33,53} Brief interventions that are ethnically matched (i.e. Latino patients receiving interventions from Latino clinicians) are also more effective than those that are not.⁵⁴ Challenges to using non-clinicians include the time and effort needed to train them and maintaining fidelity to intervention protocols. Further research, including pilot testing of our proposed intervention, will help assess the feasibility and efficacy of this approach.

Our findings suggested other areas of further research may be needed to address alcohol disparities among Latino immigrant men. While our results were supported by studies conducted with Latino immigrant men in other locations, it is not clear whether the adapted intervention would be generalizable to other communities. Many men in our study also had levels of unhealthy alcohol use that indicated dependence, which may decrease the efficacy of brief interventions.⁵⁵ In this limited population of Latino immigrants, we also identified factors which put them at risk, such as social isolation, legal status and discrimination. Future research should assess whether brief interventions need to be complemented by policy level interventions that address the root causes of unhealthy drinking among Latino day laborers.

Given that Latinos are the fastest growing racial/ethnic group in the country, reducing unhealthy drinking in this population could have a significant public health impact by

lowering rates of morbidity and mortality due to cardiovascular disease, cancer and unintentional injury.⁵⁶ Culturally adapted screening and brief intervention may be an effective way to reach this underserved population.

Acknowledgments

FUNDING

Dr. Ornelas is supported by the National Center for Advancing Translational Sciences of the National Institutes of Health (KL2TR000421). Dr. Williams is supported by a Career Development Award from VA Health Services Research & Development (CDA 12-276) and a fellowship from the Implementation Research Institute (IRI) at the George Warren Brown School of Social Work at Washington University. IRI is supported through an award from the National Institute of Mental Health (R25 MH080916-01A2) and the Department of Veterans Affairs, Health Services Research & Development Service, Quality Enhancement Research Initiative (QUERI). Other than providing funding for the study and authors' time, the funding agencies acknowledged were not involved in the work reported in the manuscript or preparing the manuscript. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

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TABLE 1

Characteristics of Latino Day Laborers (N = 18)

	N	%
Age		
20–29	1	5
30–39	3	17
40–49	7	39
50 or older	7	39
Marital Status		
Married	3	17
Single	9	5
Divorced	6	33
Education		
None or Primary	8	44
Secondary	6	33
High School Graduate or more	4	22
Employment Status		
Part-time/seasonal work	8	44
Unemployed	10	56
Country of Origin		
Mexico	11	61
El Salvador	4	22
Guatemala	2	11
Honduras	1	6
Age at Immigration		
Under 20	3	17
20–29	6	33
30–39	7	39
40 or older	2	11
Length of Residence in US		
10 years or less	7	39
>10 years	11	61
Audit C score		
4 to 6	3	17
7 to 9	8	44
More than 10	7	39

Table 2
Themes, Sources of (Mis)match and Features of the Culturally Adapted Intervention

	Themes	(Mis)match with Traditional SBI	Cultural Adaptations
Group Characteristics	<ul style="list-style-type: none"> Unhealthy drinking was common among Latino day laborers Drinking was related to and helped relieve immigration-related stressors Men had limited knowledge about what constitutes unhealthy drinking and were unsure of how to change their behavior 	<ul style="list-style-type: none"> BI which provides personalized feedback, increases awareness, and culturally relevant strategies is needed 	<ul style="list-style-type: none"> Format and content of BI needs to incorporate the social and cultural context of men
Intervention delivery	<ul style="list-style-type: none"> Men prefer to receive information from trusted providers in Spanish 	<ul style="list-style-type: none"> BI provided by health care providers that cannot speak language and lack awareness of culture may be less effective 	<ul style="list-style-type: none"> BI delivered by <i>promotores</i> in Spanish
Administrative and Community Factors	<ul style="list-style-type: none"> Men faced barriers to health and social services Few programs provide culturally appropriate alcohol-related services Men receptive to receiving SBI in community settings 	<ul style="list-style-type: none"> BI provided in health care settings unlikely to reach those that need it BI needs to provide referral to truly accessible services 	<ul style="list-style-type: none"> BI conducted at day labor worker center BI refers men to low-cost services in Spanish