Short Communication

Alcohol-related social problems among Mexican Americans living in U.S.–Mexico border and non-border areas ☆

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ABSTRACT

This paper examines alcohol-related social problems among Mexican Americans living along the U.S.–Mexico border and in non-border areas. Interviews were conducted among Mexican Americans in the border regions of California, Arizona, New Mexico, and Texas (N = 1307). Non-border respondents were interviewed primarily in Houston and Los Angeles (N = 1288) as part of the Hispanic Americans Baseline Alcohol Survey (HABLAS). Both the border and HABLAS surveys employed multistage cluster sample designs (response rates were 67% and 76%, respectively). In the bivariate analysis, there were no significant differences between border and non-border areas in the proportion of those with one or more social problem. In non-border areas, the prevalence of alcohol problems did not differ significantly by age. However, along the border the prevalence of alcohol problems was significantly different across age groups, with 18 to 29 year old men and women having the highest prevalence. The final models showed no residence effect on problem likelihood. Drinking was strongly associated with problems. Although young border residents had higher problem prevalence rates than older residents, the logistic regression models showed no effect of border residence on the likelihood of problems, indicating that problems are due to alcohol consumption, not the border environment. The border, however, did appear to influence more drinking among young people. Regardless of residence, alcohol treatment and preventive interventions tailored to Mexican Americans are essential and special attention should be focused on younger individuals near the border.

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1. Introduction

Twenty-six counties in four U.S. states (Arizona, California, New Mexico, and Texas) share common borders with Mexico. The proportion of Hispanics in these counties, composed mostly of Mexican Americans, is approximately 52% (La Fe Policy & Advocacy Center, 2006). In border areas, there are higher levels of poverty and unemployment, lower levels of education (Gerber, 2009; U.S./Mexico Border Counties Coalition, 2007), and higher rates of health problems such as tuberculosis, hepatitis A, and liver disease (CDC, 2008a, 2008b; PAHO, 2007).

Rates of binge drinking are also higher in border areas. Data from the Texas–Mexico border show that 36% of men binged at least once per month, whereas nationally, 7% of Mexican Americans binged (Caetano, Ramisetty-Mikler, Wallisch, McGrath, & Spence, 2008; Ramisetty-Mikler, Caetano, & Rodriguez, 2010). Unfortunately, most border alcohol studies focused on the Texas–Mexico border (Caetano

et al., 2008; Holck, Warren, Smith, & Rochat, 1984; Wallisch, 1998; Wallisch & Spence, 2006), excluding other border states.

Analysis of our data from border regions of all four border states, and U.S. non-border areas also indicate that alcohol consumption is higher on the border (Caetano, Mills, & Vaeth, 2012). Border men consume a higher mean number of drinks per week compared to non-border men and 18–29 year old border men have higher rates of binge drinking (48%) than young non-border men (36%). Border women also drink more than non-border women, but the amount of drinking decreases more rapidly with age on the border than off the border. On the border, 18–29 year olds consume significantly more drinks per week than their older border counterparts as well as their younger and older non-border counterparts. In addition, the prevalence of binge drinking among 18–29 year olds on the border is 26% versus 14% off the border.

Alcohol-related social problems may be legal, interpersonal, job, or health-related. Such problems are linked to the drinker's social environment and may be shaped by where one resides. This paper describes and compares rates of such problems among Mexican Americans living in border and non-border areas. Because previous analyses of these data showed significant age differences in drinking both on and off the border (Caetano et al., 2012), the prevalence of problems by age within location is compared. We hypothesize that 18–29 year old border

residents will be more likely than both younger and older non-border residents to experience social problems.

2. Method

The non-border Mexican American respondents were interviewed as part of the 2006 Hispanic Americans Baseline Alcohol Survey (HABLAS; N = 1288). Respondents were interviewed in Los Angeles, Houston, New York, Philadelphia, and Miami. The border survey (N = 1307) interviewed Mexican Americans in urban areas in border counties of California, Arizona, New Mexico, and Texas between March 2009 and July 2010. Both surveys utilized a multistage cluster sampling methodology with weighted survey response rates of 76% (HABLAS) and 67% (border). Respondents signed written informed consents and the Committee for the Protection of Human Subjects of the University of Texas Health Science Center at Houston approved both studies.

Both surveys utilized identical questionnaires with the exception of questions regarding drinking in Mexico, which were asked only in the border survey. The questionnaire was pre-tested in English, translated into Spanish, and back-translated to English. Bilingual interviewers conducted hour-long Computer Assisted Personal Interviews in respondents' homes.

2.1. Measures

2.1.1. Alcohol-related social problems

Respondents reported the experience of the following problems within the previous year: belligerence, police problems, accidents, health-related problems, spousal problems, problems with one's children, and work-related problems (see Hilton, 1991). Items were coded "1" for "yes" and "0" for "no" and respondents were categorized as follows: 1) ex-drinkers, lifetime abstainers, and current drinkers who experienced no problems in the previous year; and 2) current drinkers who experienced one or more problem in the previous year.

2.1.2. Average number of drinks per week

This was assessed by combining the self-reported frequency and quantity of drinking wine, beer, liquor, and mixed drinks in the previous year (12 oz of beer, five ounces of wine, or 1 1/2 oz of liquor). We report the risk associated with an increase in drinking five drinks per week.

2.1.3. Binge drinking

This was defined as drinking four or more (women) and five or more (men) drinks per occasion within a two hour period in the previous year. Men were categorized as: 1) current drinkers who did not binge in the previous year/ex-drinkers/abstainers; 2) current drinkers who binged 1–11 times in the previous year; and 3) current drinkers who binged one or more times a month. For women, the two binge drinking categories were combined because of the small number in the highest binge category (N = 15).

2.1.4. Demographic variables

Location: Border versus non-border. *Birthplace*: Foreign versus U.S. *Age*: Measured continuously (multivariate analyses) and categorically (bivariate analyses): 18–29, 30–39, 40–49, and 50+ years. *Marital status*: 1) married/cohabitating, 2) separated/divorced/widowed, and 3) never married/never lived with someone. *Education*: 1) less than high school, 2) high school diploma/general equivalency diploma (GED), and 3) some college/technical/vocational school, or beyond. *Employment status*: Men, 1) full/part-time employment, 2) unemployed/temporary illness/in school, and 3) retired/disabled/never worked/other. For women, a homemaker category was included. *Religion*: 1) Protestant, 2) Catholic, 3) other, and 4) no preference. *Income*: Total household income with 12 possible responses (<$4000 to >$100,000).

Because 15.2% of income data were missing, the log-transformed variable was multiply imputed for the analyses (see Caetano & Mills, 2011).

2.2. Analysis

To account for the multistage cluster sample design of both surveys, Stata 11.1 (StataCorp., 2009) was used. Weighted data were analyzed to correct for unequal probabilities of selection into the sample. A post-stratification weight also corrected for nonresponse and adjusted the sample to known population demographic distributions. Bivariate associations were assessed with chi-square statistics. Correlates of alcohol-related problems were assessed with multivariate logistic regression. Preliminary models were fit using the average of the 10 imputed income values, and final model estimates were obtained by combining estimates from analyses on each of the 10 imputed datasets using Rubin's rules (Carlin, Galati, & Royston, 2008; Rubin, 1987). Because drinking practices vary by gender, gender-specific models were run. Because previous analyses of this sample detected interactions involving location, gender, and age (Caetano et al., 2012), age by location interactions was tested in the models. Since the interactions were not statistically significant, they are not reported.

3. Results

3.1. Sociodemographics

The mean age off the border was 37.8 years (±0.6) versus 41.3 years (±1.0) on the border. Off the border, 48% were women versus 53% on the border. Off the border the mean annual income was 26.0 K (±1.2) versus 28.5 K (±2.0) on the border. The proportion of those with less than a high school education was comparable off and on the border (48% and 49%, respectively), as was the proportion of married or cohabitating individuals (60% and 58%, respectively).

3.2. Problem prevalence

Among non-border men, approximately 24% had one or more social problem versus 20% of border men. Among non-border women, approximately 5% reported one or more problem versus approximately 7% of border women (data not shown, differences not statistically significant).

3.3. Problem prevalence in relation to age

Previous analyses of these data showed significant age differences in drinking, both on and off the border (Caetano et al., 2012). In the current analysis, an examination of a similar association revealed no age differences in problem prevalence among men or women in non-border areas (Table 1). On the border, however, a significantly higher proportion of young men and women reported one or more problem than older border residents. Among border men, more than one third of 18–29 year olds had one or more problem compared to less than 10% of 50+ year olds. Among border women, the prevalence of problems among 18–29 year olds was more than twice that of 30–39 and 40–49 year olds and more than 12 times that of 50+ year olds.

3.4. Correlates of alcohol-related social problems

The final model for men showed no effect of border residence status on the likelihood of problems (Table 2). Only the drinking variables were associated with problems for men. The likelihood of problems increased as the mean number of drinks consumed per week increased. The risk for problems associated with binge drinking increased more than three- and four-fold for binge drinking less than once per month and one or more time per month, respectively.