



Published in final edited form as:

J Immigr Minor Health. 2014 December ; 16(6): 1303–1306. doi:10.1007/s10903-013-9960-z.

IMMIGRANT ARAB AMERICANS AND ALCOHOL USE: LONGITUDINAL STUDY

Cynthia L. Arfken,

Department of Psychiatry and Behavioral Neurosciences, Wayne State University, Detroit, MI
USA

Carissa L. Broadbridge,

Department of Family Medicine and Public Health Sciences, Department of Psychology, Wayne
State University, Detroit, MI USA

Hikmet Jamil, and

Department of Family Medicine and Public Health Sciences, Wayne State University, Detroit, MI
USA

Bengt B. Arnetz

Department of Family Medicine and Public Health Sciences, and Institute of Environmental
Health Sciences, Wayne State University, Detroit, MI USA

Abstract

INTRODUCTION—English proficiency is associated with alcohol use in some immigrants groups, but little is known about its association among Arab Americans. Ethnographic work suggests gender, religion, education, and age influence prevalence of alcohol use among Arab Americans.

METHODS—Two year prospective study of recent Iraqi refugees and non-Iraqi Arab immigrants in Michigan using bilingual surveys and interviewers.

RESULTS—At Time 1, prevalence of lifetime alcohol use was 20.5% with males, Christians, better educated, older, and those with greater proficiency in English more likely to report ever drank. At Time 2, lifetime prevalence of drinking had increased to 34.0%. In analysis of male new drinkers, risk factors were Christian, older age and greater proficiency in English.

DISCUSSION—This study confirms drinking among recent immigrant Arab Americans varies by subgroups and suggests English proficiency may contribute to the increase in prevalence over time.

Keywords

Arab Americans; alcohol; acculturation; women

INTRODUCTION

Alcohol use differs across immigrant and minority groups (1). Seminal work on alcohol use focused on Irish Americans and Jewish Americans with their very different attitudes towards and pattern of alcohol use (2). Understanding the pattern of use and risk factors is critical for tailoring interventions. More recent work has examined alcohol use among American Muslims (3), a group expected to abstain as alcohol use is prohibited in Islam (4). A potential risk factor for drinking among immigrant groups, especially by women, is English proficiency (5-7).

Arab Americans appear to have a higher abstinence rate compared to that of the US-born non-Hispanic Whites and marked gender differences in lifetime and current alcohol use (8). However, those data were collected from Arab Americans who spoke English; thus it is unknown if the reported prevalence is biased upwards due to assimilation of immigrants proficient in English into an alcohol-permissive society. Importantly, it is unknown if Arab Americans' high abstinence rate differs by religious affiliation.

Ethnographic work suggests variability within Arab Americans on drinking (9). These differences included religion (Muslims were less likely to drink), education (more educated were more likely to drink), age (more permissive attitudes towards older men drinking), and gender differences within Christian groups (9). Specifically, Orthodox Christian women were just as likely to drink as Orthodox Christian men but Chaldeans reported that Chaldean women did not drink. (Chaldeans are an Iraqi ethnic group belonging to the Chaldean Catholic Church. Wine is not served during communion).

Using a longitudinal survey we tested if subgroup differences identified in past studies on alcohol use and English proficiency were associated with drinking among recently arrived immigrant Arab Americans interviewed in Arabic.

METHODS

Adult (18 or older) Iraqi refugees (n=298; average time in US=0.7 months) and non-Iraqi Arab immigrants (n=298; average time in US=8 months) were recruited in southeastern Michigan from refugee resettlement agencies (refugees) and through advertisement and community presentations (immigrants) from August 2010 – September 2011. People on temporary visas (e.g., students and visitors) were not recruited. A 35% random sample of eligible people was approached for participation. Participation rates were 98% (refugees) and 91% (immigrants). Trained bilingual research assistants surveyed the participants (Time 1) in Arabic at agencies or in their homes and approximately one year later (Time 2; 96% of original sample; n = 590). Compensation was \$35 per interview.

The survey included demographic questions on current age, gender, immigration status (refugee or immigrant), country of birth (representing 11 different Arab countries), religion, and education. Alcohol use questions included lifetime alcohol use, past 30 day alcohol use (Time 1 only) and past year alcohol use (Time 2 only) with responses of yes/no. There was one question on how well they spoke English (English fluency with choice of answers from 1=not at all to 4=very well).

The interview questions were translated into Arabic and back translated by an independent bilingual individual. One case was removed from the analysis due to nonresponse on alcohol questions at Time 2, leaving a final sample size for all analyses of 589. Of the 291 refugees, 83.2% were Christians and 56.8% had no college education. Of the 298 immigrants, 92.1% were Muslim and 43.2% had no college education.

Chi-square and t-tests were used for bivariate analysis, and logistic regression models were used for multivariable analysis with all variables entered simultaneously at Time 1 and Time 2 separately. Associations are summarized as odds ratios (OR) with 95% confidence intervals (95% CI). Models were assessed for fit (10) and stratified by gender to improve fit. Due to the few women who reported alcohol use at Time 1 or began drinking by Time 2, no models were constructed for them. Incident (or new) drinking was assessed for males who reported no drinking at Time 1 and drinking at Time 2. The study was approved by the institutional review board at Wayne State University.

RESULTS

Characteristics of the sample are shown in the Table. At Time 1, lifetime alcohol use prevalence did not differ by migration status (i.e., refugee or immigrant) but did differ across the other variables examined with high prevalence among those who reported speaking English very well (77.3%) (Table).

The prevalence of lifetime drinking increased 69.5%, from 20.5% at Time 1 to 34.0% at Time 2. For men, the prevalence increased by 65.9%; for women, the increase was 94.5%. No Christian refugee woman (i.e., Chaldean) reported ever drinking.

At both Time 1 and Time 2, males, Christians, the better educated, more English proficient, and older Arab Americans were more likely to report lifetime alcohol use (Table) and recent alcohol use (not shown). In multivariable logistic regression models for males at Time 1 and Time 2, migration status, religion, education, English proficiency and age were significantly associated with lifetime alcohol use. No variable was associated significantly with lifetime alcohol use at Time 2 for women.

The incident drinkers at Time 2 totaled 15.4% of the total sample (n=91), or 34% of those reporting lifetime alcohol use at Time 2. They were mostly male (n=71 or 22.4% of all men; women, n=20 or 7.8% of all women). In logistic regression analysis comparing male new drinkers to those who reported being abstinent at Time 1, religion (Muslims less likely (OR=0.01 (95% CI .00-.07) and English proficiency (Not at all (OR=.07, 95% CI 00-.99), Not Well (OR=.06, 95% CI .01-.65, Well (OR=.07, 95% CI .01-.80)) significantly predicted new drinking.

The longitudinal design offered the opportunity to examine discrepancies in reporting lifetime drinking. Only 12 participants reported they never drank at time 2 but reported having drunk at time 1; this number represents 9.9% of those reporting never drank at time 2. Of the 12 participants, 10 were males, 10 were Christian, and 8 had a high school education or less.

DISCUSSION

This study confirms subgroup differences in drinking among recent immigrant Arab Americans interviewed in Arabic similar to ethnographic research conducted in English (9); it also suggests English proficiency is associated with higher prevalence. It thus supplements and extends previous work describing basic drinking patterns among the immigrant group (9) and argues for additional research to examine changes in alcohol use with English proficiency. Although the finding that Muslims were less likely to drink than Christians may seem obvious, it has not been documented among Arab Americans. The findings are also consistent with reports that Arab American women were less likely to drink than men, especially Chaldean women (8, 9). However, over the one year of the study the prevalence of lifetime drinking by women almost doubled. The study also provides a lower boundary on alcohol measurement bias in this population (<10%), a relatively low bias for self-report data using a single question.

The study was limited by self-report with its accompanying problems, especially fear and mistrust among recent arrivals. For this reason problematic drinking, frequency, and quantity of alcohol use were never assessed. The dramatic increase in alcohol use prevalence may only indicate that participants felt more comfortable reporting drinking. If so, we might expect to find different subgroups (e.g., Muslims, women) at Time 2 to report alcohol use. However, the new drinkers at Time 2 were very similar demographically to established drinkers at Time 2. Thus, it appears that people already culturally permitted to drink began drinking when alcohol became more accessible.

It is unknown if the Arab-born, Christian, well-educated interviewers influenced the participants' responses. Likewise, due to small sample size when examining specific country of birth, we do not know if there were country-specific patterns of abstinence. For example, we cannot assess if the prevalence of alcohol use differs between immigrants from Lebanon (n=45 in the sample), an urban and well-educated country with a visible Christian community, and immigrants from Yemen (n=132 in the sample), a mostly rural country with few Christians.

In conclusion, alcohol use varied within an immigrant group with low alcohol use. Recent immigrant Arab Americans who drink were more likely to be males, Christians, better educated, and more proficient in English than those who abstain. After one year, the self-reported lifetime alcohol use increased by 69.5% and almost doubled among women. More research is needed on determinants of problematic use, and alcohol use disorder among this understudied immigrant minority.

Acknowledgments

This work was supported by a grant from NIH/NIMH (R01 085793): Mental health in Iraqi refugees: importance of post-displacement social stressors and institutional resources (Arnetz, PI) and in part from a grant from the state of Michigan (Lycaki-Young Fund). We gratefully acknowledge the contributions of the interviewers, staff, community organizers, and especially, the participants to this project.

REFERENCES

1. Dawson D. Beyond black, white and Hispanic: race, ethnic origin and drinking patterns in the United States. *J Subst Abuse*. 1998; 10:321–339. [PubMed: 10897287]
2. Cahalan, D.; Cisin, I. Drinking behavior and drinking problems in the United States. In: Kissin, B.; Begleiter, H., editors. *Social Aspects of Alcoholism*. Springer; New York: 1976. p. 77-115.
3. Arfken CL, Ahmed S, Abu-Ras W. Respondent-driven sampling of Muslim undergraduate US college students and alcohol use: pilot study. *Soc Psychiatry Psychiatr Epidemiol*. 2013; 48:945–953. [PubMed: 22996606]
4. Michalak L, Trocki K. Alcohol and Islam: An Overview. *Contemp Drug Probs*. 2006; 33:523–562.
5. Johnson T, VanGeest J, Cho Y. Migration and substance use: evidence from the US National Health Interview Survey. *Subst Use Misuse*. 2002; 37:941–972. [PubMed: 12180572]
6. Brown J, Council CL, Penne MA, Gfroerer JC. Immigrants and Substance Use: Findings From the 1999–2001 National Surveys on Drug Use and Health. 2005:76–99. No.:(SMA) 04-3909.
7. Zemore S. Acculturation and alcohol among Latino adults in the United States: a comprehensive review. *Alcohol Clin Exp Res*. 2007; 31:1968–1990. [PubMed: 18034692]
8. Arfken CL, Arnetz BB, Fakhouri M, Ventimiglia MJ, Jamil H. Alcohol Use Among Arab Americans: What is the Prevalence? *Journal of Immigrant and Minority Health*. 2011; 13:713–718. [PubMed: 21279687]
9. Arfken CL, Owens D, Said M. Binge drinking among Arab/Chaldeans: An exploratory study. *Journal of Ethnicity in Substance Abuse*. 2012; 11:277–293. [PubMed: 23216437]
10. Hosmer DW, Lemeshow S. Goodness of fit tests for the multiple logistic regression model. *Communications in Statistics – Theory and Methods*. 1980; 9(10):1043–1069. 1980.

TABLE

Prevalence of and associations with lifetime alcohol use at Time1 and Time 2 (n=589)

	% of total sample	Time 1 prevalence	OR (95% CI) Males only	Time 2 prevalence	OR (95% CI) Males only
Total sample		20.5%		34.0%	
Migration status					
Refugee	49.4%	20.3%	.49 (.19, 1.25)	38.5%	.89 (.32, 2.43)
Other immigrants	50.6%	20.8%	1.00	29.5%	1.00
Gender					
Females	44.1%	7.3%		14.2%	
Males	55.9%	31.0%		49.5%	
Religion					
Islam	45.0%	10.2%	.10 (.04, .24)	16.6%	.04 (.02, .12)
Christianity	54.5%	29.0%	Reference	48.0%	Reference
Mandaeism	0.5%	33.3%	(not included)	66.7%	(not included)
Educational level					
Less than college	62.5%	14.4%	.17 (.05, .63)	25.5%	.18 (.05, .72)
Some college/college graduate	32.4%	26.7%	.36 (.11, 1.24)	45.0%	.74 (.2, 2.65)
Advanced degree	5.1%	56.7%	Reference	66.7%	Reference
Age, mean					
	33.0 years		1.04 (1.02, 1.06)		1.05 (1.02, 1.07)
Mean age for drinkers	-	36.9		36.9	
Mean age for nondrinkers	-	32.0		32.7	
English fluency					
Not at all	15.6%	13.2%	.47 (.09, 2.56)	25.0%	.09 (.01, .81)
Not well	56.5%	17.6%	.43 (.09, 1.95)	30.0%	.09 (.01, .60)
Well	24.1%	27.7%	.39 (.09-1.72)	41.1%	.13 (.02, .90)
Very well	3.8%	77.3%	Reference	69.2%	Reference

P-values are from chi-square tests for categorical variables and t-tests for age (a continuous variable). The percentages refer to the row characteristic, e.g., 20.3% of refugees reported lifetime alcohol use at Time 1. Data were complete except for English fluency at Time 1 (5 missing) and English fluency at Time 2 (2 missing). There were too few women who drank at Time 1 for separate analysis and no variables significantly predicted women drinking at Time 2.