

Hookah Use among Arab, Chaldean & Caucasians in the Greater Community of South East Michigan

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ABSTRACT

Background:

Little is known about hookah use (water pipe) in the U.S. Many Arabs have immigrated from middle east countries where hookah usage is common place in the culture & accepted as a social activity in every day life. It has been claimed that more than 100 million people worldwide smoke hookah daily.

Methods:

A cross sectional study was conducted by trained interviewers who distributed questioners to clients, community individuals, and others at high traffic locations, [e.g. night clubs, specialty shops, higher academic institutions, & community organizations]. Data analysis was conducted on 1,091 out of 1,219 participants, due to exclusion criteria of ethnicities and races outside of the Arab/Chaldean & Caucasian population for targeted participant comparison and analysis. Notes: Never smoked the hookah does not mean never smoked cigarettes. 90 participants were former hookah users but they were included in the data analysis as hookah users because the study's aim was to understand the behavior and characteristics of hookah users at large.

Results:

Mean age for study population was 32.2 [SD14.95]. There were significant differences (P= 0.001) Between those who smoked the hookah or did not in most variables [e.g., gender, marital status, age, education & ethnicity]. The prevalence of hookah usage was highest among Arabs [52%] followed by Chaldeans[35%] then Caucasians at [28%]. Participants mainly obtained the hookah tobacco from local ethnic stores [41%] & from a home at [20%], but they smoked the hookah mainly at a home [39%] and at a café at [32%]. Participants mainly shared the hookah with a friend [52%] & their family at [48%]. The main reasons for smoking the Hookah was for socializing issues [45%], tasted nice [22%] & relieved stress at [8%]. 31% of hookah users indicated they will not quit Hookah usage.

Conclusion:

Based on these results, an educational cessation program will be recommended for the Michigan community through non-profit organizations.

Introduction

Background: As Chaldeans and Arabs have migrated around the world, they have carried with them traditions of tobacco use such cigarette and/or Hookah (water pipe) smoking. Hookah is a historical & cultural form of tobacco use by many in the Middle East & North Africa. Many of the health problems associated with cigarette smoking also have been found for hookah use. Although there are no Middle East regional data on hookah smoking, a national survey in Kuwait revealed 57% of the men & 69% of the women use it. Tamim & others found 21% of college students in Lebanon smoked hookah on a regular basis; almost 12% smoked cigarettes as well. In a Syrian university study, Maziak & fellow researchers reported 62.6% & 29.8% water pipe use, respectively, for young men & women. Data are needed on its use in America as it is a growing phenomenon among non-Middle Easterners. The specific research objective of this study was to compare personal characteristics, tobacco use (hookah), in two Middle Eastern groups (Chaldean, Arab American) with Caucasian.

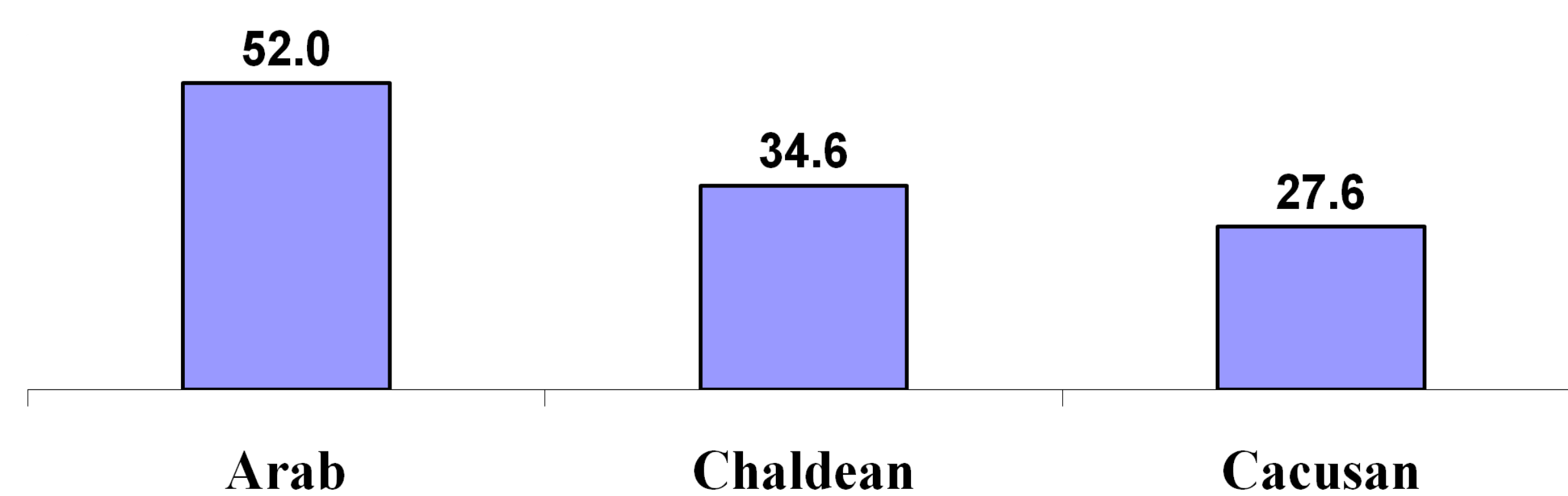
Methodology

The survey tool was available in English and Arabic & based on translation & back-translation procedures. The final sample (N=1091) was 33.1% Chaldean, 43.4% Arab, & 123.5% Caucasian.. Study approval was obtained from the WSU. Participants responded to questions adopted from the National Health Interview Survey that asked about *current, former, & never* tobacco use. *Current* use was defined as smoking in the previous 30 days. *Former* use was smoking at any time, but not in the past 30 days. *Never* smoking was no tobacco use ever, not even one or two puffs. All of these questions were asked for both cigarette & hookah smoking; no other forms of tobacco use were identified. Chi-square tests & analyses of variance were computed to examine group differences & logistic regression analyses used to examine the predictors of tobacco use

Results

The study population was 1091, 33.1% self identified as Chaldean, 43.4% as Arab American, and 23.5% as Caucasian. Average age of the sample was 35.2, (SD= 14.95); 49.7% were female; 57.3% were married; 31.4% had not completed high school and 48.8% have income less than \$20,000; 84.5% had lived in the U.S. four years or more. Of those born outside the U.S., the highest portion was from Iraqi [Arab & Chaldean 42.4%] followed by Lebanon 16.8%].

Prevalence of Hookah Smoking P < 0.001



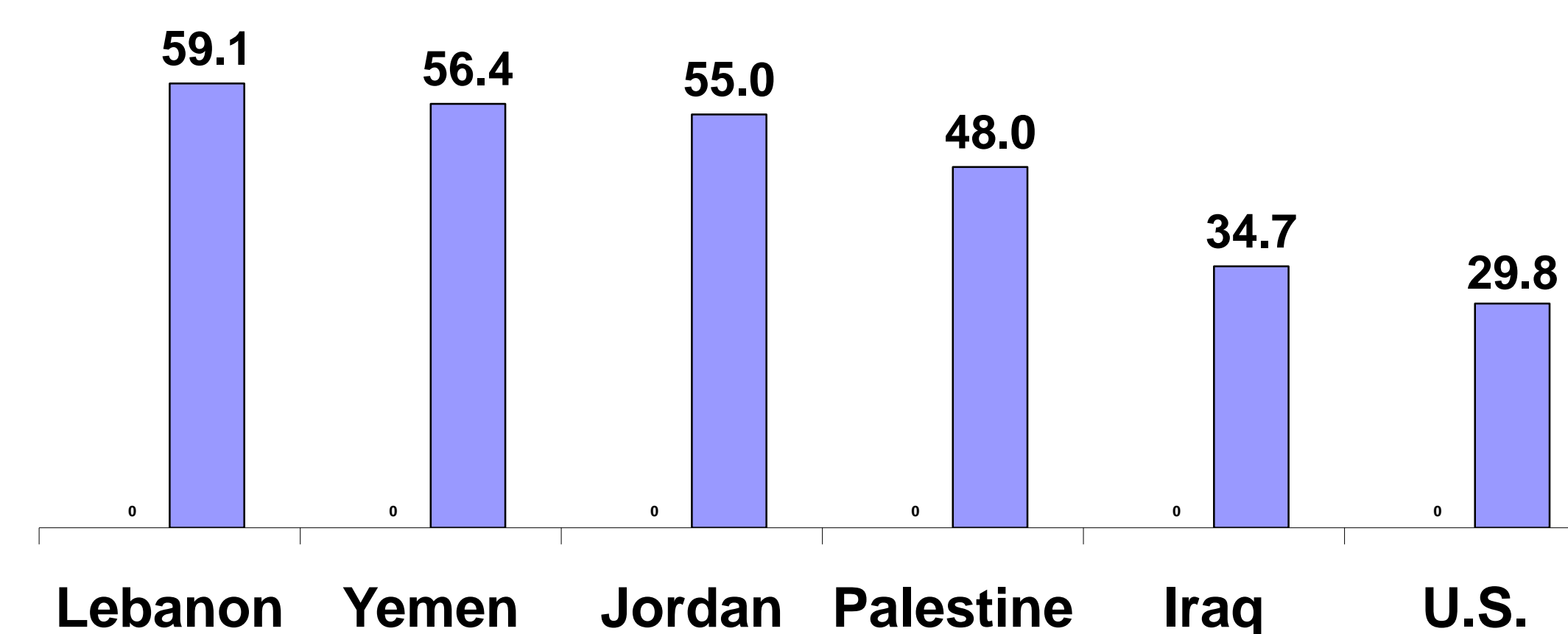
Prevalence of Hookah Smoking by Variables in Different Ethnicities

Variable	Arab [473]	Chaldean [361]	Caucasian [257]
Age / < 20 / 20 + Y	57.0 / 48.4 *	48.9 / 25.5 *	44.3 / 4.6 *
Male / Female	55.1 / 48.4	45.6 / 21.7 *	35.0 / 22.9 *
Single / Married	47.2 / 48.2 *	45.2 / 22.6 *	34.2 / 25.4
Less HS / HS +	42.9 / 56.2 *	21.0 / 40.4 *	28.0 / 28.4
< \$20,999 / +	39.2 / 61.9 *	18.1 / 44.8 *	22.3 / 32.9
< 3 Y / 3 + Y in U.S,	50.8 / 52.0	3.3 / 37.7 *	
Yes / No health Insurance	54.1 / 47.2	36.5 / 25.0	27.5 / 31.6

* P < 0.05 - < 0.001

Prevalence of Hookah Smokers by Country of Origin

P < 0.001



Odd Ratio & 95% C.I.

Among Arab & Chaldean [Caucasian used as Reference]
Who Smoke or do not Smoke the Hookah

Adjusted Variable	Sig.	Odd Ratio	95.0% C.I.	
			Lower	Upper
Caucasian		1		
Arab	0.001	0.31	0.20	0.48
Chaldean	0.024	0.57	0.35	0.93
Gender	0.002	0.47	0.35	0.64
Age in years	0.001	1.04	1.02	1.05
Income	0.001	1.73	1.23	2.44
Education	0.630	0.91	0.63	1.30
Year in U.S.	0.294	1.27	0.81	1.99
Marital Status	0.686	0.92	0.65	1.30

% of Study Population who Responded to Q. How/Where they Get the Hookah

Place	Arab	Chaldean	Caucasian	Total
From store	45.1	45.3	21.2	41.3
From family member	29.5	10.5	3.8	19.7
From a café	10.4	24.2	28.8	17.5
Borrowed	2.9	10.5	30.8	9.7
From own home	10.4	3.2	5.8	7.5
Purchased by another	1.7	6.3	9.6	4.4

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% of Study Population who Responded to Q. Where do you smoke the Hookah

Place	Arab [473]	Chaldean [361]	Caucasian [257]	Total [1091]
Café	28.5	41.9	24.5	31.6
Home	47.2	33.8	26.4	38.8
Friend's house	11.4	18.9	30.2	17.6
Restaurant	7.3	4.1	5.7	6.0
Other places	5.7	1.4	13.2	6.0

% of Study Population who Responded to Q. Why do you Smoke the Hookah

Reason	Arab	Chaldean	Caucasian	Total
Socialize with family / friends	32.3	43.6	91.5	45.2
Loneliness	4.4	7.4		4.7
Relieve Stress	10.1	7.4		7.7
Taste	25.9	23.4	6.4	22.1
More than one reasons	27.2	18.1	2.1	20.4

Discussion

Discussion:

It was not surprising that hookah use was significantly higher among the Arab Americans as this form of smoking has been recorded as a cultural activity in the Middle East for well over 500 years and supports the observation of Kandela that many Arabs take personal habits with them as they migrate around the world. Actually, it was expected that there would be more hookah smokers among those from the Middle East than was reported based on recent Middle East data. It could be that some smokers had already switched to the convenience of cigarettes or are unwilling to acknowledge this traditional behavior in a country where it is not as common.

Hookah use was a very strong predictor of current cigarette smoking. It may be that hookah smoking is gateway to higher rates of cigarette use in the long run and also it is possible that hookah smoking may become a substitute for cigarettes because it costs less. The use of any type of tobacco raises questions about the predictors for hookah smoking are similar to study findings in the Middle East. Several study limitations are identified. A major one is the use of convenience sampling, uneven participation of the ethnic groups, the data collection process and the limited information on tobacco use patterns.

Conclusion

There were significant difference among those who smoke hookah vs not when tested for ethnicity, gender, age & income. Stores are the main place for people to get tobacco and the Café is the most common place to smoke hookah. However, the most common reason to smoke hookah were socialize with family and friends More research is needed for these unique immigrant populations prior to the testing of a culturally sensitive intervention.

References

- World Health Organization Tobacco Free Initiative. Regional Databases (Eastern Mediterranean Region). Available at <http://www.emro.who.int/TFI/CountryProfile-Part6.htm#table5>.
- U.S. Department of Health and Human Services. (USDHHS). (2004). *The Health Consequences of Smoking: A Report of the Surgeon General*. Washington, DC. : U.S. Government Printing Office Number 0-16-051576-2. Atlanta: CDC Office of Smoking and Health.
- The Sacred Narghile (Hookah, Shisha, Waterpipe). Available at <http://www.sacrednarghile.com>.
- State Cigarette Tax Rates and Rank, date of last increase, annual pack sales and revenues, and related data.2004. Available at <http://tobaccofreekids.org/research/factsheets/pdf/0099.pdf>



