Association Between Acculturation and Birth Control Usage Among Asian American Women in California

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OVERVIEW

Chi-square tests and logistic regression models ran on an analytical sample of 624 Asian American women from the California Health Interview Survey 2019-2020. Birth control usage is associated with some study covariates, but logistic regression models were not statistically significant. More studies need to be done investigating Asian American reproductive health behaviors in order to better understand how to meet Asian American women's health needs.

Background

Despite being the fastest growing sub-population in the United States, Asian Americans are one of the most understudied racial groups and are often left out of discussions addressing health disparities. There is especially little research on Asian American sexual and reproductive health behaviors.

Cultural barriers such as silence and shame around sex as well as a stigma against seeking sexual and reproductive health care prior to marriage discourages education and engagement with these resources.

Based on prior studies:
o Asian American women are the least likely ethnic group to use birth control to prevent pregnancy
o Higher levels of acculturation is associated with higher rates of risky sexual activity, earlier female sexual debut, and high number of partners

Methods

Data source: California Health Interview Survey (CHIS) 2019-2020 (weighted data set)

Analytical sample: 624 Asian American women of reproductive age (18-44 years old) capable of getting pregnant

Inclusion criteria: heterosexual, sexually active Asian American women of reproductive age (18-44yo) who are not pregnant nor infertile, with no plan to get pregnant

Bivariate analyses were conducted using Chi-square tests to examine association of study covariates with four exposures which served as proxies for acculturation and the study outcome of birth control use. Four logistic regression models were created for each acculturation proxy variable.

Results

Characteristic	OUTCOME		p-value
	No Birth Control	Uses Birth Control	
Age, years			
18-25	31.6%	68.4%	0.05
26-29	20.0%	80.0%	
30-34	23.0%	77.0%	
35-39	38.9%	61.1%	
40-44	38.9%	61.1%	
Insurance Coverage			
No	49.6%	50.4%	0.03
Yes	28.1%	71.9%	
Income (% FPL)			
0-99%	47.4%	52.7%	0.12
100-199%	34.8%	65.2%	
200-299%	27.0%	73.0%	
300% +	26.9%	73.1%	
Educational Attainment			
Less than Bachelors	39.3%	60.7%	0.01
Bachelor's degree	32.5%	67.5%	
Graduate Degree	19.4%	80.6%	
Usual source of healthcare			
Yes	28.6%	71.5%	0.31
No	36.3%	63.7%	
Family Type			
Single, no kids	25.5%	74.5%	0.002
Married, no kids	27.0%	73.1%	
Married, with kids	28.7%	1.3%	
Single, with kids	60.7%	39.4%	

Table 1: Association of study covariates and birth control usage among study population (CHIS 2019-2020)
Abbreviation: FPL = Federal Poverty Line

	CRUDE MODEL			ADJUSTED MODEL		
	OR	95% CI	p-value	aOR	95% CI	p-value
Born in the US						
No	REF			REF		
Yes	1.29	(0.77, 2.18)	0.33	1.29	(0.71, 2.33)	0.39
English Proficiency						
No	REF			REF		
Yes	0.90	(0.31, 2.61)	0.85	0.52	(0.16, 1.65)	0.26
Percent in US						
0-20%	REF			REF		
21-40%	0.91	(0.44, 1.87)	0.79	1.04	(0.43, 2.48)	0.94
41-60%	0.79	(0.28, 2.21)	0.65	0.95	(0.26, 3.50)	0.93
61-80%	0.88	(0.37, 2.13)	0.78	0.95	(0.33, 2.77)	0.93
81% +	0.77	(0.41, 1.44)	0.41	0.75	(0.31, 1.78)	0.50
Language Spoken at Home						
Other Lang(s) Only	REF			REF		
Some English	1.12	(0.55, 2.30)	0.75	0.93	(0.45, 1.96)	0.85
English Only	1.27	(0.68, 2.40)	0.45	1.10	(0.55, 2.19)	0.79

Table 2: Logistic Regression Models: Associations Between Acculturation Proxy Exposures and Birth Control Usage (CHIS 2019-2020)
Adjusted for the following covariates: age, insurance coverage, income, educational attainment, having a usual source of healthcare, and family type

Conclusion

Based on the bivariate analysis, the following factors were associated with birth control usage:

o Age (p = 0.05)
o Insurance coverage (p = 0.03)
o Educational attainment (p = 0.01)
o Marital status (p <0.01)

Asian American women who use birth control tend to be **younger, insured, have at least a bachelor's degree, and are single with no kids.**

Logistic regression models did not produce statistically significant findings. At this time, we are unable to make conclusions about the association between acculturation and birth control usage among Asian American women in California.

Discussion

Study limitations:

o Secondary data analysis: proxy variables and covariates limited by variables available through CHIS
o Proxies for acculturation: hard to capture the nuanced effect of acculturation through just geographic and linguistically-based proxies

Future directions:

This is the first study to our knowledge that quantitatively assesses the association of acculturation and birth control usage in a state-level representative sample of Asian American women of reproductive age. Future studies should aim to gather larger sample sizes and explore how this relationship may differ between Asian American men and women. Future surveys and studies should additionally strive to disaggregate Asian subgroups to better understand the unique needs of specific communities. Lastly, additional measures should be used to assess acculturation (e.g. self-identify, values, food and media preferences).

References

Huang K, Uba L. Premarital sexual behavior among Chinese college students in the United States. *Arch Sex Behav.* 1992;21(3):227-240. doi:10.1007/BF01542994

Lee C, Tran DY, Thoi D, Chang M, Wu L, Trieu SL. Sex education among Asian American college females: who is teaching them and what is being taught. *J Immigr Minor Health.* 2013;15(2):350-356. doi:10.1007/s10903-012-9668-5

Tong Y. Acculturation, gender disparity, and the sexual behavior of Asian American youth. *J Sex Res.* 2013;50(6):560-573. doi:10.1080/00224499.2012.668976