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The Use of Effective Contraception among Young Hispanic Women: The Role of Acculturation

Angelica M. Roncancio, PhD, **Kristy K. Ward, MD**, and **Abbey B. Berenson, MD**
Center for Interdisciplinary Research in Women's Health, University of Texas Medical Branch, Galveston, Texas, United States

Abstract

Purpose—Culture may play an important role in contraceptive preference among young Hispanic women. We examined whether acculturation predicted the use of different contraceptives, grouped by level of efficacy in preventing pregnancy.

Methods—One-thousand seventeen sexually active Hispanic women between the ages of 16 and 24 (mean age = 20.69 ± 2.42) responded to a self-administered questionnaire. Data were analyzed using multinomial logistic regression.

Results—Women low in acculturation (OR 1.79, CI 1.06 – 3.02) and bicultural (OR 2.66, CI 1.52 – 4.64) were more likely than women high in acculturation to have used no method of contraception than long-acting reversible contraception (LARC). Bicultural women were more likely to have used condoms that LARC (OR 2.51, CI 1.40 – 4.49) compared to women high in acculturation. Finally, women in low in acculturation (OR 1.98, CI 1.11 – 3.50) and bicultural (OR 1.88, CI 1.01 – 3.51) were more likely to have used cyclic hormonal contraception than LARC compared to women high in acculturation.

Conclusions—Educational efforts should focus on young Hispanic women who are bicultural and low in acculturation in order to increase their use of more effective contraceptive methods and reduce the number of unplanned pregnancies among this population.

Keywords

Contraception; Birth Control; Acculturation; Hispanics; Latinas

INTRODUCTION

Young Hispanic women are only half as likely to use contraception compared to non-Hispanic white women of the same age. Given this, it is not surprising that 76% of pregnancies among this group are unplanned (1) . In order to reduce the alarming rate of unplanned pregnancies among this population, more information about their contraceptive use is needed. Further, it is important to identify characteristics of users of each method so that at-risk women can be identified and targeted for interventions.

*Corresponding author: Angelica M. Roncancio, PhD, Tel.: +1 (713) 500-9621, Fax: +1 (713) 500-9750, amroncancio@gmail.com.

Acculturation is one characteristic that may help explain differences in contraceptive use among young Hispanic women. Acculturation describes the extent to which an individual from a non-dominant ethnic group (e.g., Hispanic) adopts different aspects of the culture of the dominant ethnic group (Caucasian) (2,3). A highly acculturated individual has adopted many of the values, beliefs, and traditions—including language—of the dominant culture. A bicultural individual has adopted some of the values, beliefs and traditions of the dominant culture but has still retained aspects of their non-dominant culture. A person low in acculturation has adopted few of the values, beliefs, and traditions of the dominant culture. Some researchers have found that condom use and general contraceptive use are positively associated with high levels of acculturation (4). Others have found that women with low levels of acculturation are more likely to use contraception compared to bicultural women (5). These findings suggest the importance of examining all three levels of acculturation, low, bicultural, and high, in relation to the use of contraception in order to understand patterns of use. To our knowledge, researchers have yet to examine this relationship between acculturation and the use of contraceptives of varying efficacies. This is a significant gap in the literature given that existing research suggests that the preference for different methods of contraception may vary by level of acculturation (6,7).

The purpose of this study was to examine the relationship of different methods of contraception, classified according to their efficacy in preventing pregnancy, among a sample of young sexually active Hispanic women. Specifically, we examined the relationship between the three different levels of acculturation and method of contraception employed at last sexual intercourse. We predicted that Hispanic women in the high acculturation group would employ the most effective methods of contraception compared to women in the low and bicultural groups.

METHODS

Data for the present study were collected between June 1, 2008, and May 29, 2009, as part of a larger, ongoing cross-sectional study as described previously (8). Women between 16 and 24 years of age who were patients in one of five University of Texas Medical Branch (UTMB) family planning clinics in southeast Texas were screened for eligibility for the main study. Those unable to understand English or Spanish or who were younger than 16 or older than 24 years of age were not eligible to participate. During the recruitment period captured in the present study, approximately 80% of those meeting eligibility criteria agreed to participate and provided informed consent. State law allows females 16 year of age or older to attend family planning clinics without parental consent, therefore, parental consent was not required to participate in the current study. From available refusal data, women who refused to participate did not differ significantly by age ($p = .97$) from participants. Women were reimbursed $5 for their time.

A total of 2086 women completed the self-administered questionnaire in either English or Spanish, depending on their preference. The current study focused on sexually active Hispanic women, therefore, participants who did not self-identify as Hispanic (N= 1058) were excluded from this study. Further, Hispanic women who reported never having had had sexual intercourse (N= 11) were excluded. This resulted in a final sample of 1017 participants.

Demographic data including age, education, income, marital status, ever having been pregnant, and clinic site were collected. In addition, participants were also asked about contraceptive use at last sexual intercourse. Contraceptive methods were grouped according to their efficacy in preventing pregnancy. Specifically, the effectiveness of the methods for typical use are: none (15–75%), a barrier method (i.e., condoms—85%), cyclic hormonal

contraception (oral contraceptive pills, contraceptive patch, vaginal ring—92%), or long-acting reversible contraception (LARC; depot medroxyprogesterone acetate injection, implantable hormonal contraception, intrauterine device—97–99.95%) (9). Other researchers may not define the depot medroxyprogesterone acetate injection as LARC. However, we made the decision to include it in the LARC category due to our focus on the efficacy of various contraceptive methods, the young age of our participants, and the fact that much like the implantable hormonal contraception and the intrauterine device, the efficacy of the depot medroxyprogesterone acetate injection is not user dependent. Those women who reported the use of more than one contraceptive method at last sexual intercourse (N= 69) were classified according to the most effective method of contraception they reported using. For example, women who reported using condoms and cyclic hormonal contraception at last sexual intercourse were included in the cyclic hormonal contraceptive group.

Four items from the language portion of the widely employed Short Acculturation Scale for Hispanics were employed to measure acculturation (10). The items assessed: language spoken as a child, language spoken at home, language thought in, and language spoken with friends. The response scale ranged from *Only Spanish* "1" to *Only English* "5". The scale reliability for our sample was $\alpha = .96$. Higher scores indicated higher levels of language acculturation. Scores on each item were summed and then the summed scores were divided into three groups: low acculturation (scores between 2 and 9), bicultural (scores between 10 and 14), and high acculturation (scores between 15 and 20).

All of the statistical analyses were conducted using SPSS 17.0 for Windows (Chicago, IL). In general, missing data were between 1–5% with the exception of income, which was 14.20%. Additional cases were excluded automatically by SPSS during analyses due to missing data. A multinomial logistic regression model was developed to examine the relationship between acculturation, and the method of contraception employed at last sexual intercourse. Additionally, we included demographic variables (age, education, income, marital status, and ever having been pregnant) in the model to examine and control for their influence on the outcome variable, contraceptive method at last sexual intercourse. A two-sided significance level of .05 was used to indicate statistical significance. Odds ratios, 95% confidence intervals, and levels of significance are reported.

RESULTS

The mean age of the sample was 20.7 ± 2.4 years of age. Other demographic data for the current sample are presented in Table 1. Most of the participants were in the low acculturation group (41.9%), 22.2% were in the bicultural group and 35.8% were in high acculturation group.

A multinomial logistic regression model was estimated to examine the relationships between acculturation, demographic variables, and method of contraception employed at last sexual intercourse (Table 2). The reference group for method of contraception used at last sexual intercourse was the use of a LARC method. We compared the use of LARC with each of the other methods of contraception. For example, we examined differences between women who employed LARC and women who employed condoms on the demographic variables: age, education, income, marital status, ever been pregnant, and acculturation. We did not find that age, education, income, or ever being pregnant were significantly associated with differences in the use of LARC and the use of condoms at last sexual intercourse. However, we found that marital status was significantly associated with differences in the use of LARC and the use of condoms at last sexual intercourse. Unmarried women were more

likely to have reported using condoms as opposed to LARC at last sexual intercourse compared to married women (p= .022).

We also found that acculturation was significantly associated with the method of contraception used at last intercourse. In comparing the use of no method at last sexual intercourse to the use of LARC, we found that women in the low acculturation (p= .030) and the bicultural acculturation groups (p= .001) were more likely to have used no method of contraception compared to women in the high acculturation group. In comparing the use of condoms at last sexual intercourse to the use of LARC, women in the bicultural acculturation group (p= .002) were more likely to have used condoms compared to women in the high acculturation group. Women in the low acculturation group did not significantly differ from women in the high acculturation group (p= .231). Finally, in comparing the use of cyclic hormonal contraception at last sexual intercourse to the use of LARC at last sexual intercourse, we found that women in the low acculturation (p= .019) and bicultural acculturation groups (p= .047) were more likely to have used cyclic hormonal contraception than women in the high acculturation group.

CONCLUSIONS

In general, those women who reported using LARC, such as depot medroxyprogesterone acetate injections, implantable hormonal contraception, or intrauterine devices, were more likely to be classified as high in acculturation compared to the women who employed the less effective methods of contraception. We also found that, compared to married Hispanic women, single Hispanic women were more likely to report the use of condoms rather than LARC at last sexual intercourse. This finding is consistent with existing research (11)and suggests that it is important to counsel these young women about the need to use more effective methods of contraception in order to avoid unplanned pregnancy, in addition to condoms to prevent sexually transmitted infections.

Compared to women classified as high in acculturation, those low in acculturation were more likely to use no contraception or cyclic hormonal contraception at last sexual intercourse than LARC. These results are not surprising given that research shows that, compared to more acculturated Hispanic women, less acculturated Hispanic women are more likely to use no method of contraception (4). Researchers have also found that less acculturated women prefer oral contraceptives to other methods of contraception (6). The preference for no method of contraception or cyclic hormonal contraception to LARC may be in part due to less acculturated women's endorsement of negative and incorrect beliefs about some long-term methods of contraception (12). It may also be due to language and access to care issues (13). Future research should investigate the potential role that limited access to Spanish-speaking health care providers may play in the use of LARC.

Consistent with previous research (5,6), it appears that the bicultural acculturation group was more likely than both the low and high acculturation groups to report using the least effective contraceptive methods, i.e., no method or condoms. We also found that the bicultural group was more likely than the high acculturation group to report using cyclic hormonal contraception than LARC. These findings indicate that the bicultural acculturation group is likely most vulnerable to unplanned pregnancies. It may be that these young women find themselves in-between two cultures with opposing attitudes toward what constitutes appropriate sexual behavior. While many of these young women are engaging in sexual activity, their parents may still hold more traditional attitudes and oppose this sexual behavior. This, in turn, may leave these young women without appropriate guidance regarding the use of effective contraception. In fact, researchers have found that although

these women may be sexually active, they feel unable to discuss sexuality and contraception with their families which often leads to pregnancy (14).

The majority of the current sample was of Mexican ethnic origin which limits the generalizability of the findings to other populations of Hispanic women. Also, contraceptive use was determined by the contraceptive method employed at last intercourse. Although this measure is commonly used in studies of contraceptive use (15,16), longitudinal studies are needed to inform us about contraceptive practices over time. However, to our knowledge, our study is the first to examine contraceptive use among young Hispanic women by effectiveness of the method used.

Over half of the women in our sample (57.4%) reported either using condoms or using no method of contraception. Our findings indicate that less acculturated and bicultural Hispanic women are less likely to employ LARC. Therefore, it is important that health care providers counsel these groups of women on the use of these methods to prevent unplanned pregnancy. It is especially critical for educational interventions and health care providers to identify and target young Hispanic women who are bicultural, since this is the group that is most likely to employ the least effective methods of contraception. In this way we may be able to decrease the unplanned pregnancy rate in this extremely vulnerable population.

List of Abbreviations and Acronyms

LARC	long-acting reversible contraception
UTMB	University of Texas Medical Branch

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Table 1

Demographic characteristics of the sample (N=1017)

	N (%)
Contraceptive method at last sexual intercourse	
No method of contraception	322 (33.4)
Condoms	231 (24.0)
Cyclic hormonal contraception	203 (21.1)
Long-term contraception	208 (21.6)
Education	
< high school diploma	457(46.7)
≥ high school diploma	521 (53.3)
Income	
< $15,000 per year	512 (58.6)
$15,000 to $29,999 per year	246 (28.2)
≥$30,000 per year	115 (13.2)
Marital Status	
Unmarried	488 (48.1)
Married	527 (51.9)
Ever been pregnant	
Yes	725 (75.6)
No	234 (24.4)

Frequencies that do not sum to total represent missing data

Table 2

Logistic regression model for Contraceptive Type Employed (N=1017)

Contraceptive method at last sexual intercourse [a]		***Exp* (β)**	***95% CI for Exp* (β)**	***P-value***
None				
	Age	.99	.90–1.08	.804
	Education			
	< high school diploma	1.11	.73–1.75	.622
	≥ high school diploma[b]			
	Income			
	<$15,000/ yr	.87	.47–1.61	.654
	$15,000–$29,999/ yr	.94	.49–1.82	.856
	≥$30,000/ yr[c]			
	Marital Status			
	Unmarried	1.14	.73–1.78	.560
	Married[d]			
	Ever been pregnant			
	Yes	1.55	.93–2.60	.095
	No[e]			
	Acculturation			
	Low	1.79	1.06–3.02	.030
	Bi-cultural High[f]	2.66	1.52–4.64	.001
Condoms				
	Age	.963	.88–1.06	.447
	Education			
	< high school diploma	1.30	.78–2.14	.311
	≥ high school diploma[b]			
	Income			
	<$15,000/ yr	.92	.47–1.77	.796
	$15,000–$29,999/ yr	.91	.45–1.86	.802
	≥$30,000/ yr[c]			
	Marital Status			
	Unmarried	1.75	1.08–2.82	.022
	Married [d]			
	Ever been Pregnant			
	Yes	1.12	.65–1.95	.684
	No[e]			
	Acculturation			
	Low	1.42	.801–2.50	.231

Contraceptive method at last sexual intercourse [a]		***Exp* (β)**	***95% CI for Exp* (β)**	***P-value***
	Bi-cultural High[f]	2.51	1.40–4.49	.002
Cyclic hormonal contraception				
	Age	.99	.90–1.10	.882
	Education			
	< high school diploma	1.20	.72–1.99	.485
	≥ high school diploma [b]			
	Income			
	<$15,000/ yr	.64	.34–1.22	.172
	$15,000–$29,999/ yr	.63	.31–1.27	.199
	≥$30,000/ yr[c]			
	Marital Status			
	Unmarried	1.32	.81–2.15	.266
	Married [d]			
	Ever been Pregnant			
	Yes	1.55	.89–2.71	.125
	No[e]			
	Acculturation			
	Low	1.98	1.11–3.50	.019
	Bi-cultural High[f]	1.88	1.01–3.51	.047

[a] "LARC" at last intercourse is the contraceptive method reference group

[b] "≥ high school diploma" is the education reference group

[c] "≥$30,000/ yr" is the income reference group

[d] *"Married"* is the marital status reference group

[e] *"No"* is the ever been pregnant reference group

[f] "High acculturation" is the acculturation reference group