Hispanic Acculturation: Associations with Family Planning Behaviors and Attitudes

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ABSTRACT

Introduction. The purpose of this study was to investigate the association of Hispanic acculturation in the U.S. with family planning behaviors and attitudes.

Methods. Surveys of 225 Hispanic women were collected that used acculturation measures of number of years lived in the U.S. and the Short Acculturation Scale for Hispanics (SASH), along with questions about family planning behaviors, including birth control use, sterilization, and abortion.

Results. SASH-Language statistically differed (p = 0.03) where those with ‘yes birth control’ had significantly lower English acculturation (M = 6.10, SD = 1.77) than those with ‘no birth control’ (M = 7.00, SD = 3.16). Greater U.S. acculturation on SASH-Ethnic Social Relations was associated positively with the attitude that finances are important when considering to have children (r = 0.18, p < 0.05). Number of years lived in the U.S. was associated positively with the attitude that it is a woman’s personal choice to have an elective termination of pregnancy (r = 0.19, p < 0.01).

Conclusions. Healthcare providers should consider patient acculturation level when discussing family planning topics. It is possible that a more detailed explanation concerning the reasons for family planning is necessary when discussing family planning topics with Hispanic patients who exhibit higher levels of English language acculturation.

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INTRODUCTION

Hispanics are a growing population in the U.S. where they account for 18% of the population,1 38% of which were not born in the U.S.2 Hispanic women have higher rates of sexually transmitted infections than Whites.3 Hispanic women also become pregnant at younger ages than Whites4 and have greater elective pregnancy termination rates than Whites but less elective pregnancy termination rates than Blacks.5 Young-adult Hispanic women reported that adolescent pregnancy is normal and believe that birth control equates with abortion.6 Mexican-American Hispanic women reported the reason they choose to undergo sterilization is difficulty in discussing contraception with their families and partners.7 Hispanic women reported less conversations with their parents about how to say "no" to sex and about contraception use as compared to Black and White women.8 Hispanics were more likely to report than White women that it is very important that their contraceptive does not contain hormones.9

Hispanic women with lower English language subscale acculturation scores on the Short Acculturation Scale for Hispanics (SASH) were more likely to use no birth control or cyclic hormonal contraception than long-acting reversible contraception (LARC) for pregnancy prevention as compared to those with higher acculturation levels.10 The same study showed no difference between low and high English language acculturation groups when comparing condom use to LARC use.9 Hispanic women with SASH language subscale lower levels of English language acculturation had lesser awareness of emergency contraception than those with higher acculturation levels.11 Higher English language acculturation levels were associated positively with ever-use of very effective contraception among Mexican-Americans with very effective contraception defined as intrauterine device (IUD), contraceptive implants, depot medroxyprogesterone acetate injection (Depo-Provera), medroxyprogesterone acetate/estradiol cypionate (Lunelle Monthly Contraceptive Injection), contraceptive patch, and oral contraceptive pills when acculturation was measured by the Simple Language-Based Acculturation Scale for Mexican Americans.12

The previous acculturation research for pregnancy prevention among Hispanic women did not measure association of years lived in the U.S. with family planning behaviors of typical use birth control when engaging in sexual intercourse, having had a sterilization procedure, having a partner who has had a sterilization procedure, or having had an elective termination of pregnancy. The association of typical use of birth control and acculturation only measured language acculturation and did not assess other measures of acculturation by media and ethnic social relations. Two studies10,11 used language items from the SASH,13 and one study used the Simple Language-Based Acculturation Scale for Mexican Americans.12 None of these studies related media and ethnic social relations acculturation topics to family planning behaviors.10,12

Acculturation is important to study because it has been linked to adverse neonatal outcomes. One study of Puerto Rican Hispanic women immigrants found that those with lower acculturation in the U.S. had babies with lower gestational age and lower birthweight than those with greater acculturation in the U.S.15 Our study investigated the association of Hispanic English language acculturation, media acculturation, ethnic social relations, and years in the U.S. with the family planning behaviors of birth control, sterilization surgery, and abortion. These different measures of acculturation were correlated with a number of pregnancy prevention attitudes regarding safety of hormonal birth control, pro-choice beliefs, family size, and financial aspects related to family planning.

METHODS

A total of 222 Hispanic patients were surveyed who were seen at a women’s health center in a suburban New York City public hospital that typically serves lower-middle income patients from Central America. Data were obtained during patient visits from March through May 2020. All Hispanic women were eligible to participate. All questionnaires were in Spanish. The surveys were self-administered and respondents answered them individually. Respondents provided oral informed consent. Responses were anonymous. The...
Demographic questions asked for participant age (years), age at first pregnancy (years), whether they were born in the U.S. (no/yes), and length of residence in the U.S. (years). Participants were asked about the number of children that they want to have.

Acculturation variables consisted of number of years lived in the U.S. and the 12-item SASH which has subscales for language, media, and ethnic social relations.\textsuperscript{13} The Language subscale consists of five items. A Likert scale was used to measure the items with a range from 1 (only Spanish) to 5 (only English). A sample item is, “In which language(s) do you usually think?”. The Media subscale consists of three items. A Likert scale was used to measure the items with a range from 1 (only Spanish) to 5 (only English). A sample item is, “In general, in what language(s) are the movies, TV, and radio programs you prefer to watch and listen to?”. The Ethnic Social Relations subscale consists of four items. A Likert scale was used to measure the items with a range from 1 (only Latinos/Hispanics) to 5 (all Americans). A sample item is, “Your close friends are”. Each of the subscales were scored by adding items for a total score. Greater scores indicated greater acculturation. Cronbach alpha reliability ratings were: Language = 0.84, Media = 0.88, and Ethnic Social Relations = 0.73.

Participants responded to four attitude items that were measured with a Likert scale varying from 1 (strongly disagree) to 5 (strongly agree). These items were: “birth control with hormones is safe”, “it is a woman’s personal choice to have an elective termination of pregnancy (i.e., abortion)”, “I want to have a lot of children”, and “finances are important when considering to have children”.

Family planning outcome variables were: 1) typically use birth control when engaging in sexual intercourse, 2) having had a sterilization surgery to prevent pregnancy or having a partner who had a sterilization surgery to prevent pregnancy, and 3) having had an elective termination of pregnancy (i.e., abortion); all measured as no/yes.

**Statistical Analysis.** Descriptive statistics of mean and standard deviation were used to describe the continuous variables. Frequency and percentage were used to describe the categorical variables. Pearson correlation analyses were performed for the acculturation and attitude variables. Analysis of covariance (ANCOVA) analyses comparing family planning with acculturation variables adjusted for age, age first became pregnant, and number of children they want to have. The SASH-Language subscale had a skewed distribution and was transformed logarithmically. Mean values are reported for untransformed variables for ease of understanding. Imputation of the mean of the other items from that participant was done for any SASH subscale missing one item from the subscale. All p values were two-sided with alpha at < 0.05. IBM SPSS Statistics Version 25 was used for all analyses.\textsuperscript{16}

### RESULTS

Table 1 describes the sample characteristics. Mean age for all patients was more than 32 years. Mean age of first pregnancy was almost 21 years. Mean number of children desired was more than two. Most respondents were born outside of the U.S. There were 18\% of participants who had moved to the U.S. within 12 months of their first pregnancy. When determining family planning approaches, more than one-third used birth control, 9.0\% had sterilization surgery, and 4.1\% had an abortion. Acculturation variables consisted of a mean of 10 years living in the U.S., SASH-Language toward Spanish language use, SASH-Media toward Spanish better than English, and SASH-Ethnic Social Relations toward more Latinos than Americans. Mean for the attitude items were between neutral and disagree except for “finances are important when considering to have children” which approached agree.

| Variable                                      | M (SD) or # (%) |
|-----------------------------------------------|-----------------|
| Mean age in years                             | 32.1 (8.06)     |
| Mean age first became pregnant in years       | 20.7 (4.72)     |
| Mean number of children you want to have      | 2.4 (1.07)      |
| Born USA (yes)                                | 5 (2.3)         |
| Moved to U.S. within 12 months of first pregnancy | 40 (18.0)   |
| Typically use birth control (yes)             | 88 (39.6)       |
| Sterilization surgery (yes)                   | 20 (9.0)        |
| Abortion (yes)                                | 9 (4.1)         |
| Mean years for live in USA in years           | 10.0 (6.37)     |
| SASH-Language [mean]                          | 6.4 (2.50)      |
| SASH-Media [mean]                             | 5.4 (2.84)      |
| SASH-Ethnic [mean]                            | 7.4 (2.21)      |
| Birth control with hormones is safe. [mean]   | 2.9 (1.00)      |
| It is a woman’s personal choice to have an elective termination of pregnancy (i.e., abortion). [mean] | 2.5 (1.27) |
| I want to have a lot of children. [mean]      | 2.6 (1.08)      |
| Finances are important when considering to have children. [mean] | 3.9 (1.41) |

Note: M = mean, SD = standard deviation, USA = United States of America, SASH = Short Acculturation Scale for Hispanics

Table 2 shows the correlation analyses. The acculturation variable of "live in the U.S." had small positive correlations with SASH-Language and "a woman's personal choice to have an elective termination of pregnancy (i.e., abortion)". SASH-Language had moderate positive correlations with SASH-Media and SASH-Ethnic Social Relations. SASH-Media had a moderate positive correlation with SASH-Ethnic Social Relations. SASH-Ethnic Social Relations had a small positive correlation with "finances are important when considering to have children". The attitude of "birth control with hormones are safe" had small-negative positive correlations with "a woman's personal choice to have an abortion" and "finances are important when considering to have children". The attitude of "a woman's personal choice to have an abortion" had a small positive correlation with "finances are important when considering to have children".
Table 2. Correlation of acculturation and attitudes.

| Variable                  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Live in USA              | 1.00|     |     |     |     |     |     |     |
| 2) SASH-Language          | 0.26***| 1.00|     |     |     |     |     |     |
| 3) SASH-Media             | 0.11 | 0.59***| 1.00|     |     |     |     |     |
| 4) SASH-Ethnic Social Relations | 0.14 | 0.48***| 0.53***| 1.00|     |     |     |     |
| 5) Birth control with hormones is safe. | -0.07| 0.05 | 0.08 | 0.15 | 1.00|     |     |     |
| 6) It is a woman's personal choice to have an elective termination of pregnancy (i.e., abortion). | 0.19**| 0.11 | 0.12 | 0.13 | 0.32***| 1.00|     |     |
| 7) I want to have a lot of children. | -0.04| -0.05| -0.13| -0.08| 0.02| -0.15| 1.00|     |
| 8) Finances are important when considering to have children. | 0.07 | 0.07 | 0.12 | 0.18*| 0.34***| 0.19*| -0.002| 1.00|

Note: USA = United States of America, SASH = Short Acculturation Scale for Hispanics.
*p<0.05, **p<0.01, ***p<0.001.

Table 3 shows the analyses for the acculturation variables and "typically use birth control when engaging in sexual intercourse". SASH-Language statistically differed where those with "yes birth control" had significantly lower mean values indicating Spanish than "no birth control". SASH-Media, SASH-Ethnic Social Relations, and live in the U.S. did not differ between the birth control groups. Table 4 shows the analyses for the acculturation variables and sterilization surgery and Table 5 shows analyses for the acculturation variables and abortion. None of the acculturation variables differed between the groups for sterilization surgery or abortion.

Table 3. Acculturation and typically use birth control.

| Variable                  | No birth control M (SD); (n = 93) | Yes birth control M (SD); (n = 73) | p value |
|---------------------------|-----------------------------------|------------------------------------|---------|
| Live in USA (years)       | 10.38 (6.54)                      | 9.20 (5.88)                        | 0.40    |
| SASH-Language             | 7.00 (3.16)                       | 6.10 (1.77)                        | 0.03    |
| SASH-Media                | 5.80 (2.87)                       | 5.39 (3.07)                        | 0.34    |
| SASH-Ethnic               | 7.89 (2.14)                       | 7.63 (2.21)                        | 0.38    |

Note: M = mean, SD = standard deviation, USA = United States of America, SASH = Short Acculturation Scale for Hispanics. All analysis of covariance (ANCOVA) analyses adjusted for age, age first became pregnant, and number of children they want to have. Sample size slightly varies due to omissions from participants.

DISCUSSION

SASH-Language values for those with "yes birth control" had significantly lower mean values indicating lesser English language acculturation (i.e., a Spanish language preference) than those with "no birth control". None of the other acculturation variables of years in the U.S., SASH-Media, or SASH-Ethnic Social Relations were associated significantly with any of the family planning behaviors. Greater American acculturation on SASH-Ethnic Social Relations had a small positive correlation with the attitude that "finances are important when considering to have children". Number of years lived in the U.S. was associated positively with the attitude that "it is a woman's personal choice to have an elective termination of pregnancy".

The only statistically significant finding for language acculturation with family planning behavior was a negative association of English language acculturation with "typically use birth control when engaging in sexual intercourse". Previous research reported less-acculturated Hispanics are less likely to have ever used an IUD, contraceptive implants, Depo-Provera, Lunelle Monthly Contraceptive Injection, contraceptive patch, or oral contraceptive pills as compared to greater-acculturated Hispanics. Our study differed from this pattern and showed the opposite. Public policy has focused on increased access to contraception among the underserved. Our hospital provides free access to a variety of contraceptive options without financial restrictions. Our findings differed from those of past research because our health care delivery, with increased access to free contraception, has helped to remove language acculturation barriers to contraception use.

English language acculturation was not significantly associated with having sterilization surgery or having had an abortion. The acculturation variables of years in the U.S., SASH-Media, and SASH-Ethnic
Social Relations were not significantly associated with any of the family planning behaviors of birth control, sterilization surgery, or abortion. Prior research reports that Hispanics are less aware of specific contraceptive methods, such as male sterilization, as compared to Whites and Blacks. Actuation may not be a key factor for understanding Hispanic attitudes and behaviors for sterilization and abortion.

The only significant association between acculturation as measured by the SASH sub-scales and family planning attitudes was that ethnic social relations acculturation was correlated significantly and positively with “finances are important when considering to have children”. Previous research in asset building among Hispanics showed that American acculturation was associated positively with the financial stability of home ownership. Hispanics that were more American ethnic acculturated also may consider financial topics as important related to their family planning.

No association of language acculturation was found with the pro-choice attitude that it is a woman's personal choice to have an elective termination of pregnancy (i.e., abortion). Years in the U.S. was associated positively with this pro-choice attitude. A prior study reported that language acculturation was associated positively with increased pro-choice attitudes among Hispanics while years in the U.S. was not associated with pro-choice attitudes. Social acceptability was a driving factor for making reproductive decisions. The U.S. has greater reproductive autonomy than Mexico and all of Central America except Costa Rica. Time living in the U.S., a country with greater reproductive autonomy than the countries of origin, may foster attitudes supporting reproductive autonomy. Differences between research findings for language acculturation may occur because of different measures of language acculturation used or differences in country of origin for study participants.

Number of years lived in the U.S. was associated positively with greater English language acculturation. However, number of years lived in the U.S. was not associated significantly with media or ethnic acculturation. Previous research indicated number of years lived in the U.S. was associated with both the language and media sub-scales of the SASH. Our research was consistent with this existing research in regard to language acculturation but different in regard to media acculturation. One reason for the observed discrepancy could be due to the different study cohort. The participants in Ellison et al. were both men and women, while our study looked solely at women. Another potential reason our study showed language acculturation to be the only acculturation measure significantly related to number of years lived in the U.S. was because language is required for function in society and the workplace, while media and ethnic acculturation are more related to leisure activities. Therefore, language acculturation by necessity would occur before media or ethnic acculturation. This reasoning also aligns with disparities of gender in the work force. Prior research showed that Hispanic women comprise the smallest percentage of the workforce with disparities of gender in the workforce. Prior research showed that pro-choice parents typically have fewer children than families with pro-life parents. Our findings were consistent with this pattern.

This study had some limitations. First, our study was from a single institution in a single geographic location with a homogenous ethnic background and our observed results may not generalize to other Hispanic immigrant populations. Second, we asked, “How many children do you want to have?” which may limit the ability to discern true attitudes toward family planning. Future research may better assess this issue by asking two distinct questions: “How many children do you have?” and “How many more children would you like to have?” Also, future research could further investigate why higher English language acculturated Hispanics typically use less birth control.

CONCLUSIONS

Higher English language acculturation as measured by SASH-Language was associated with not typically using birth control when engaging in sexual intercourse. Higher acculturation measured by years lived in the U.S. was associated positively with the attitude that it is a woman's personal choice to have an abortion. Higher acculturation measured by SASH-Ethnic Social Relations was associated positively with the attitude that finances are important when considering to have children. These findings can increase health care provider's cultural competence and focus the health care visit on family planning topics needing coverage based on the patient's acculturation level. Health care providers counseling Hispanic patients who exhibit high language acculturation should recognize that contraception counseling may require a more detailed discussion for successful adherence than for Hispanic patients with less language acculturation.

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