Futuros Saludables [Healthy Futures]: Knowledge, Beliefs and Attitudes about Contraception among Rural Latino Youth in Kansas

By

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Futuros Saludables [Healthy Futures]: Knowledge, Beliefs and Attitudes about Contraception among Rural Latino Youth in Kansas

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Abstract

Background: Pregnancy rates for Latino teens in rural areas are higher than White non-Hispanics peers. Although Latino teens are the fastest growing teen minority in the country, efforts to attend to their reproductive health needs have lagged behind. The aim of this manuscript was to explore knowledge, beliefs and attitudes about contraception among teens in the rural Latino community to inform culturally appropriate strategies for teen pregnancy prevention.

Design: Adolescents aged 15-24 years from a Latino rural Kansas community completed a survey and participated in focus groups. The survey assessed demographics, acculturation, reproductive health care access, pregnancy intentions, contraceptive methods use and knowledge. Focus groups discussed the intertwined complex relationship among attitudes, subjective norms, perceived sexual behaviors, teen pregnancy, and contraception.

Results: Participants (107) completed the survey and participated in focus groups. Mean age of participants was 18.0 (SD=2.8), 43.0% were female and most were Christian (85.7%) and self-identified as Hispanic/ Latino (86%). According to the Short Acculturation Scale for Hispanics (SASH), acculturation levels were high. Results from the focus groups, supported by data from surveys described multiple layers of difficulties that placed these young participants at a higher risk of teen pregnancy: Geographical/rural access, Cultural barriers, Religious influences, lack of sexual education and personal attitudes towards pregnancy and contraception use. Overall Rural Kansas seems to be a close knit community that reports heavy familial expectations of abstinence “staying virgin till matrimony”. Furthermore, this community follows religious beliefs on contraception mechanism of action, attributing abortive action and immorality to it. Cultural and religious influences characterize family planning behaviors in this
Latino youth rural community (sexual taboo, virginity and *Marianismo, Familismo*, family dishonor) and obstruct discussions, education and access to sexual health and contraception knowledge and services.

**Conclusions:** Despite engaging in sexual behaviors counter to familial and religious expectations, the combination of significant myths and misconceptions, and lack of sexual education on contraception added to limitations in access to family planning services likely contribute to the high rates of unplanned pregnancy among Latino adolescents and young adults living in rural Kansas. Our findings of parental influences and expectations coupled with strong concepts misleading the knowledge on mechanism of action and consequences of birth control use, strongly underscore the need for a culturally-relevant community-based pregnancy prevention intervention that targets specific demystification of contraception in a frame of specific parental expectations and education.
Acknowledgements

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Chapter I: Introduction

Despite the decrease in the last two decades, teen pregnancy rates in the United States continue to be among the highest in the industrialized world [1]. For Latinos in the US, teen pregnancy rates and teen birth rates are 1.5 times higher than the national average [1]. Latinos in rural counties in the state of Kansas have between 4-10 times higher teen pregnancy rates than counties with predominantly White Non-Hispanic populations [1, 2]. The high rate of teen pregnancy among rural Latino females is particularly concerning as 1) Latinos are the fastest growing teenage population: by the year 2020, one in five teenagers will be Latino [1], 2) teen pregnancies are associated with increased health care costs (9.4 billion dollars per year) and use of public assistance, and 3) worse health, education and economic outcomes for both the teen mother and her offspring [3-4].

Significantly lower utilization of contraceptives, poverty, and lack of access to health services are all associated with these higher rates of teen pregnancy in rural communities [5]. Latino youth face additional psychosocial and cultural barriers. For this group, availability of contraception is not only affected by the relatively limited health infrastructure, but also the predominant cultural values of Latinos (mainly traditional Mexican/Catholic) as well as lack of education [6-8]. These barriers further limit knowledge and use of effective contraception. For those who have the ability to access reproductive health care, health care providers’ knowledge of contraception and attitudes about whether contraception should be provided have been identified as potentially significant barriers [9]. Behaviors related to family planning is an understudied area in the Latino rural population, especially among adolescents and young adults.

The theory of planned behavior (TPB) is a theory that links beliefs and behavior [10]. It has been applied to studies of the relationship between beliefs, attitudes, behavioral intentions
and behaviors in various fields of healthcare including reproductive health care. In particular, TPB has improved the predictability of condom use [11]. The theory states that attitudes toward behavior, subjective norms, and perceived behavioral control, together shape an individual's behavioral intentions and behaviors. This theory of planned behavior model is a very powerful and predictive model for explaining human behavior [12, 13].

The aim of this manuscript was to explore knowledge, beliefs and attitudes about contraception among teens in a rural Latino community in Kansas to provide a deeper understanding of behaviors related to family planning in this community. We specifically wanted to address long-standing disparities in pregnancy among the fastest growing young population in the country. We focused particularly in a state that lags behind in implementing the proven most efficacious pregnancy prevention strategies. An assessment of access, utilization, attitudes and behaviors about family planning will serve as a first step in a continuum of research to ensure feasibility, acceptability, and successful eventual implementation of Latino youth pregnancy prevention strategies for both boys and girls equally in rural areas.
Chapter II: Literature Review

Latinos’ beliefs and attitudes on contraception have been studied in the US mostly in urban contexts and focused mainly on girls \cite{6, 7, 8, 14}. Limited studies have looked into related aspects in Latino immigrants in rural or non-urban settings, where the highest rates of teen pregnancies occur. What is more, studies have mainly focused in adults.

Warren and collaborators, recently reviewed characteristics related to effective contraceptive use among a sample of young adult (18-25 years old), non-urban, Latinos in Oregon who participated via a computer-assisted survey interviewing system\cite{15}. Consistent with previous studies, the authors described the proportion practicing contraception effectively was low among this group of young Latino adults living in rural areas. The authors looked at relationship variables among participants and their influence on contraception use. Results showed that partner involvement was positively associated with likelihood of use of male condoms, rather than female methods. The group noted that the gap between pregnancy intentions and contraceptive behaviors in this population is not well understood and requires further research.

More recently, the MICASA study addressed reproductive health outcomes in rural immigrant Latino farm-workers in California\cite{16}. This group examined sexual and reproductive health experience in the context of demographic characteristics including sex and region of birth in a group of older adult Latino immigrants in California (34 to 39 years old). The group reported this population reflected traditional behaviors protective of reproductive health, including later sexual debut and low number of lifetime sexual partners, especially among women. The authors concluded that educational and clinical services must address known barriers to adoption of protective health behaviors for Latino Immigrants.
Migration and determinants of teen pregnancy have also been studied in rural communities in California [17] among a participant population where more than half self-identified as Latino. Findings were consistent with the few studies that have explored residential mobility among youth and showed that it increases the risk of teenage pregnancy among other negative health outcomes.

Looking at a population closer to the Midwest, the influence of patriarchal behavior on birth control access and use among recent Hispanic immigrants was researched by Gonzales and colleagues [18] who carried out 200 interviews in a convenience sample of recent immigrants in Columbia, Missouri. Their study looked at mainly 4 questions: “man in control”, violence in the household, reproduction as a cornerstone of women’s subordination to men, and partners influencing choices about birth control and the use of family planning services. Results suggested that patriarchal cultural norms among the Hispanic community did not significantly influence the use of birth control and family planning services among new Hispanic immigrants. Also, new Hispanic immigrants seem to be more accepting of contraception and premarital sex. Discouraging patriarchal concepts was thought to facilitate their acculturation to their new environment.

Of note, most of these studies have been performed on a population of young adults or older, and specific aspects related to reproductive behaviors such as beliefs, attitudes and knowledge related to sexual intercourse, teen pregnancy and contraception have not been evaluated in rural Latino adolescent and young adult immigrants. This is the most vulnerable population when it comes to unwanted pregnancy and it is imperative to understand these aspects of their reproductive behaviors to identify key barriers and facilitators for family planning and contraception use. This information will inform the development of efficiently tailored,
developmentally and culturally appropriate teen pregnancy prevention interventions in this particular patient population.
Study Design and Sample

Ours was a mixed methods study collecting quantitative and qualitative data from adolescents aged 15 to 24 in a Latino community in rural Kansas. Research staff recruited participants through Mexican health events, public high schools, and community colleges that were composed by a majority of Latinos. Recruitment was facilitated by community liaisons who obtained permission from the recruitment sites to conduct the sessions. Participants were eligible if they were 15 to 24 years of age and were interested in participating. Participants 18 and older provided verbal informed consent. For those younger than 18, their parents provided the consent. Despite the focus of the study on the Latino community, we did not exclude participants based on race nor ethnicity. All participants received a $10 gift card for their time and were offered light refreshments during each encounter. The study was approved by the Institutional Review Board at the University Of Kansas Medical Center and no safety issues came up during the focus groups sessions.

Procedures

Our project is framed in the theory of planned behavior (TPB) and social ecological models. We relied on the principles of TPB to understand the knowledge, attitudes, beliefs and perceived norms related to making decisions about contraceptive use and reproductive health.

We developed a focus group guide designed to explore beliefs, perceptions and attitudes about contraception, pregnancy and family planning with Latino youth in rural Kansas.

Participants were first consented and took part in a focus group according to their age and gender (15-19 and 20-24 years old). Eighteen focus groups were conducted (9 done with males...
and 9 with female participants), with a range of 4 to 12 participants, in a private setting at the recruitment venues from July 2014 to May 2016. Of note, a mixed FG was conducted but given the low participation of the female participants, this data were excluded from the analysis.

Sessions lasted 30 mins in average, and were conducted in either Spanish or English, according to the participant’s preference. Two bilingual research staff members participated in the focus groups, there was one moderator, and one scribe who would also be in charge of recording the session. At the start of the focus group session, the staff introduced themselves, explained the goal of the study as well as the rules of the session. The moderator prompted participants to discuss casual things such as soccer or familiarity with the project topic with participants as an ice-breaker. Focus groups were conducted until theme saturation was reached. All sessions were recorded using security coded protected mobile phones and tablets PCs. Immediately after completing the focus group, participants were asked to complete a 57 item survey, either in Spanish or English, according to participant’s preference. This took approximately 35 mins to complete.

Of note, although initially we expected participants to complete the survey after participating in the FG, depending on availability of participants and timing of focus groups, some participants completed the survey before they participated in the focus group.

**Instruments**

The focus group interview guide can be seen in Appendix 1. Questions asked reviewed three main topics: 1) teen pregnancy, 2) sex and 3) contraception. The anonymous self-administered survey included socio-demographic data such as date of birth, gender, race, ethnicity and health care coverage. Participants also answered questions on acculturation including the number of years living in the US and questions from the Short Acculturation Scale
for Hispanics (SASH)\textsuperscript{[19]}. The main questions included previous attendance to sexual education classes in their lifetime; main person with whom they discussed sexual education, sources of contraception information; knowledge of different contraception methods; attitudes towards contraception; use and type of contraception in their last sexual intercourse; visit to a healthcare provider regarding contraception use; screening for Sexual Transmitted Infections (STIs); plans for using contraception in the next three months and having ever had a pregnancy scare or an unplanned pregnancy.

**Data Analysis**

The audio-taped focus groups were transcribed verbatim by bilingual research staff. Analysis of focus groups primarily involved an iterative process following grounded theory\textsuperscript{[20]}. Each analysis team member (RB, AG, and BC) read all transcripts, generated first-level codes, and summarized key findings into analytic themes. Subsequently, these themes were grouped into coding categories and a code map was developed to categorize and retrieve comments addressing each theme. For core domain categories, two independent observers coded the transcripts. Triangulation and consensus were used throughout the analysis phase to maximize the reliability of the findings. The exact definitions of our domain categories were derived during initial analysis of focus groups data.

Quantitative data from the surveys were managed and analyzed using Redcap and SPSS. Analyses included means and standard deviations for continuous data following a normal distribution and frequencies and percentages for categorical data.
Chapter IV: Results

Demographic data are described in table 1. Overall 107 participants completed both the focus group and the survey. Mean age of participants was 18.0 (SD=2.8), 43.0% were female, and 55.7% were currently in high school. Most participants identified themselves as Christian (85.7%) and 86.0% as Hispanic/Latino.

Regarding acculturation, 62.7% of participants had lived more than 10 years in the US. Results from the SASH revealed that 48.6% of participants spoke predominantly Spanish at home, 24.3% spoke predominantly Spanish with friends, 16.8% watched TV or listened to radio in Spanish and 15.9% reported thinking only in Spanish.

Table 1: Demographic and acculturation characteristics of participants (N=107)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SD) Age, years</td>
<td>18.01 (2.8)</td>
</tr>
<tr>
<td>Women</td>
<td>46 (43.0)</td>
</tr>
<tr>
<td>Christian/Catholic</td>
<td>90 (85.7)</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>92 (86.0)</td>
</tr>
<tr>
<td>Currently in high school</td>
<td>59 (55.7)</td>
</tr>
<tr>
<td>Years living in US &gt; 10 years</td>
<td>67 (62.7)</td>
</tr>
<tr>
<td>Speak only Spanish at home</td>
<td>52 (48.6)</td>
</tr>
<tr>
<td>Speak only Spanish with friends</td>
<td>26 (24.3)</td>
</tr>
<tr>
<td>Watch TV or listen to radio only in Spanish</td>
<td>18 (16.8)</td>
</tr>
<tr>
<td>Think only in Spanish</td>
<td>17 (15.9)</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>81 (75.7)</td>
</tr>
<tr>
<td>Sexually Active</td>
<td>47 (43.9)</td>
</tr>
</tbody>
</table>
Results from the focus groups and surveys described multiple layers of difficulties that placed these young participants at a higher risk of teen pregnancy: Geographical/rural access, Cultural barriers, Religious influences, lack of sexual education and personal attitudes towards pregnancy and contraception use. The following summarize the main obstacles identified within these layers of risk.

**Layers of risk**

**Geographical/rural access**

During focus groups, participants indicated that it would be difficult to access local confidential reproductive health services. The majority stated they “would not even think” about requesting contraception from their regular health providers since either these health provider was known to the family or confidentiality could not be assured; or because seeing a provider who would deliver contraception would be a known event and this encounter would be commented on by the entire town.

- “It’s really like a double edged sword in a way, because like in my community like you know them, because you know, you see them around the community.”
  (Male FG).

- “If you don’t know them well enough to talk to them, but at the same time they know you enough where you don’t want them to know.”
  (Male FG).

- “Yeah, I have problems because my father is a doctor and I never go to doctors because he’s doctor and he knows a lot of doctors and now I can’t say, “can I go....” you know? “.
  (Female FG).
Seeking care out of town to avoid these obstacles was difficult since this would require transportation, identified in the surveys as the main obstacle when trying to access care by 13.1% of the participants. Most prominent obstacles encountered when trying to access care were distrust of health care system (12.1%), lack of confidentiality (8.4%), documentation issues (7.4%), previous bad experience (7.4%) and fear of discrimination (6.5%).

Survey data analysis further identified that only 55.1% of participants had health coverage. Answers to the question “when you last needed medical care, where did you go?” included 40 participants (37.4%) that attended a Doctor’s office, 27 (25.2%) stated could not remember or have not needed medical care, 18 (16.8%) attended a community or hospital clinic and 10 (9.3%) that attended a school-based clinic, with 7 (6%) who attended the ED (5 participants did not respond to this question). Of note, 70 (65.4%) of the participants said yes to the question” when you seek health care do you usually wait until you are sick?”

This was also reflected in the questions assessing access to reproductive health care for those who would need it: out of the 47 sexually active participants (43.9% of the total sample), screening for STIs including specifically for HIV was below 20% for both genders. Access to sex health care was also low as 19.1% had been provided and 20.3% prescribed contraception in their lifetime.

**Cultural barriers**

Latino cultural values that influence sexual health and contraception seemed to prevail during focus groups discussions. The most salient themes that came up during focus groups included virginity and *Marianismo*, Family dishonor, Sexual taboo and *Familismo.*
**Virginity**

Sex was regarded to with guilt and fear of disappointing family expectations, “prohibited before marriage”, mainly among girls. Familial expectations of virginity prevailed when participants where asked about their views on sex at their age, particularly for young girls Boys were more likely to be told to “be careful”; whereas girls were not expected to engage in sexual intercourse before marriage.

- “My mom she would be like “oh my gosh, you are already doing stuff”, “no you should be waiting” and sometimes is hard to talk about it because they get hard headed and they think other things”.
  (Female FG).

- “Because I’m not at the age that I should have relationships and that I’m not yet married to someone”.
  (Female FG).

- “My mom works at McDonald's and many guys work that are 17 year old and they tell them that they messed with that girl, and they say she has it like that and she has it here and she does it like that and they tell to my mom and my Mom comes and tells me: “Hey look, take care of your virginity because the boys talk like that about.” (translated)
  (Female FG).

- “Well, do not open your legs. That you have to be married first”.
  (Female FG).

**Marianismo**

Connected with the concept of virginity, Marianismo is an aspect of the female gender role in the machismo of Hispanic American folk culture. It is the veneration for feminine virtues like purity and "moral" strength. During focus groups discussion, this concept was reflected in female participants, who reported that actively seeking contraception was viewed by the community as a sign of “being easy” or promiscuous, going against the cultural expectations of virtue and
virginity for young women. Women and girls are not expected to know nor ask about topics related with sex, nor contraception.

- “All the families are like “oh they are just guys” I would show you in your family if there would be more girls they would be like “ok you need to be safe” I think is more different with a guy than with a girl. With a guy is “just be safe” with girl is “no you can’t do this”, “you are not old enough”, “you gotta be safe”. So they are more strict with the girl more safe with the girl than with a guy.” (Female FG).

- “My mom has always told me not to do that, and that I’m very young, to wait, but my dad knows, he even bought me, he bought me, so, he talked to me, he told me not to, but then he said yes, he says that he was also my age once and all that, he bought me, he gave me the "talk" as it is said.” (translated) (Female FG).

**Family Dishonor**

Teen pregnancy was frowned upon and was viewed as a sign of disrespect to their families and as unacceptable. Participants brought up the main consequences of teen pregnancy when asked about their thoughts on teen pregnancy itself. Most common themes where school-drop out, necessity of getting a job, shame felt by pregnant teen and families being dishonored.

- “…her mother waited for the father, he hit her and kicked her out of the house…when they found out she was pregnant…” (Male FG).

- “For example my mom said that if I have a baby she will kick me out” (translated). (Male FG).

Survey data analysis further supported this concept of disrespect to the family if pregnancy while still a teen, or out of wedlock. A third of the participants (31.7%) answered that they somewhat agreed/strongly agreed that they would dread telling their friends they were pregnant; 34.5%
thought it was quite likely/extremely likely that a child out of wedlock would not be acceptable in their families, and only 43.9% thought it is not OK for an unmarried female to have a child.

**Sexual silence/taboo**

Focus groups discussions indicated that the topic of sex overall was regarded as taboo and either avoided or brought up in conversations with parents with difficulty/awkwardness. Parents were not used to talking about sex related topics. Parents and youth would resist these types of conversations, in the youth’s opinion, possibly because opening these type of discussions would mean their young sons/daughters are already engaging in sexual intercourse, and this would be most upsetting and unacceptable to parents.

- “...they (parents) didn’t talk to their parents about it (sex)…” “…if I talked to my mom, she would be like “oh no! What are you already doing?””
  (Female FG )

- “I don’t think my mom would be ok with me, “oh mom let’s go to the doctor I want to know about birth control” she would be like “oh my gosh, what are you doing?”. (Female FG).

In fact, when participants were asked where they would go for more information about a new method of birth control, most frequent answers were: the internet (23.3%), their friends (19.6 %), a doctor/nurse (17.7%) but parents only in 13.1%.

**Familismo (The importance of immediate and extended family ties)**

Interestingly, although the topic was taboo, participants explained during focus groups that they would feel more comfortable talking to their older siblings, cousins or young aunts about sex and contraception, than to parents or doctors.
“If is not the parents it has to be someone that is really close to them, cause I know some times about me sometimes I'm scare to talk to my parents about all that stuff, so I go to an uncle or to a girlfriend, friend, or other friend, they talk to me cause they like think the same that is different from parents, and other people”.
(Male FG).

Survey data analysis supported this, and indicated that participants would still identify parents as the most common source for discussing sex (50.5%), followed by friends (35.5%), siblings (13.1%) and partners (13.1%).

Connected with this concept of Familismo, and although pregnancy out of wedge was seen as a disrespect to the family, participants explained “keeping the baby” was expected by families who religiously considered the birth and eventually embraced the new life in most cases, and helped the pregnant teen. Abortion was seen as a sin and not even considered as a possibility. Interestingly, adoption was not brought up as an option.

Survey responses further showed that almost half of the participants seem to consider quite/extremely likely that every pregnancy is a blessing (55 participants, 51.4%).

Religious beliefs

Discussions in focus groups revealed strong catholic culture among Latinos and in rural Kansas. Strong beliefs (often not evidence based) lead to Myth and misconceptions about the mechanism of action of contraception. Boys described contraception as “having an abortion”, “killing the sperm”, and that “it means someone doesn’t have a chance to live”. Many participants explained how they believed contraception “prevented the creation of a life” and therefore should be considered abortive, further explaining that Catholics do not support contraception.
Condoms were more accepted among boys, but withdrawal was preferred as the primary means of contraception.

- “...taking pills is like having an abortion, and we are against abortion...” (Male FG)
- “Because taking the pills is for not to have a baby, then if it is like trying to, although there is not the baby inside but if it is like taking his life, the opportunity that maybe there will be a life”. (translated, Male FG).

Interestingly, survey data showed that only a minority of participants were “against birth control use”: 15 participants (14% of the total).

**Lack of sexual education**

Focus groups discussion revealed that contraceptive knowledge primarily consisted of condoms and oral contraceptive pills. Most participants were unsure on most types of contraception forms, and its efficacy or use. Participants stated they did not know how these were inserted, used or had misconceptions about their mechanism of action and side effects.

- “I heard of them, but it's like all I heard, commercials, but I don't really know about this.”
  (Female FG)
- “The contraceptives that the woman uses, in the top of my head or what everyone has told me is that these pills hurt the woman, that damage the reproductive system, that later they have problems getting pregnant and that if you forget to take a pill can have a problem then I could become pregnant, I think that kind of thing would be good to know what's beyond, any kind of contraceptive, that is efficient and that it has no side effects.”
  (Translated) (Male FG)
- “The pills, for what I know, women has a lot of problems when they want to get pregnant, that’s what I know, I’ll be scare for my partner to use one.”
  (Male FG)

- “I say that everything has consequences, I have heard the case of women who take pills and do so many things without knowing that they run the danger that many women can no longer get pregnant or many women are already pregnant and take those things and then it is as an abortion are taking someone’s life, because I have a cousin that his wife was taking pills, but I think it did not work and she got pregnant but because of so many pills she had taken told that they had to abort because her baby was deformed, then that is a risk that you are running to take things, it is like everything that one does brings consequence.” (Translated) (Male FG)

This was consistent with survey data: Table 2 describes contraception knowledge. The most common methods of contraception participants have heard of were the male condom (86, 80.4%), followed by abstinence (83, 77.6%), birth control pills (80, 74.8%), and withdrawal (62, 57.9%). More men than women had heard of abstinence and withdrawal, as well as implants and contraceptive foam. Only a third of the participants have heard of Long Acting reversible contraception or LARC (Implants 38, 35.5%; IUD 32, 29.9%).
Table 2: Methods for preventing pregnancy you have heard of:

<table>
<thead>
<tr>
<th>Method</th>
<th>TOTAL (N=107) N (%)</th>
<th>MALE (n=61) n (%)</th>
<th>FEMALE (n=46) n (%)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male condom</td>
<td>86 (80.4)</td>
<td>49 (80.3)</td>
<td>37 (80.4)</td>
<td>0.989</td>
</tr>
<tr>
<td>Abstinence</td>
<td>83 (77.6)</td>
<td>52 (85.2)</td>
<td>31 (67.4)</td>
<td>0.028</td>
</tr>
<tr>
<td>Birth control pills</td>
<td>80 (74.8)</td>
<td>48 (78.7)</td>
<td>32 (69.6)</td>
<td>0.282</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>62 (57.9)</td>
<td>41 (67.2)</td>
<td>21 (45.7)</td>
<td>0.025</td>
</tr>
<tr>
<td>Emergency contraception pill</td>
<td>54 (50.5)</td>
<td>31 (50.8)</td>
<td>23 (50.0)</td>
<td>0.933</td>
</tr>
<tr>
<td>The patch (Ortho Evra)</td>
<td>52 (48.6)</td>
<td>25 (40.9)</td>
<td>27 (58.6)</td>
<td>0.070</td>
</tr>
<tr>
<td>Injectable birth control(Depo Provera, the shot)</td>
<td>52 (48.6)</td>
<td>30 (49.2)</td>
<td>22 (47.8)</td>
<td>0.980</td>
</tr>
<tr>
<td>Diaphragm, cervical cap or female condom</td>
<td>49 (45.8)</td>
<td>30 (49.2)</td>
<td>19 (41.3)</td>
<td>0.418</td>
</tr>
<tr>
<td>Vasectomy or male sterilization</td>
<td>46 (43.0)</td>
<td>27 (44.3)</td>
<td>19 (41.3)</td>
<td>0.760</td>
</tr>
<tr>
<td>The rhythm</td>
<td>42 (39.3)</td>
<td>22 (36.1)</td>
<td>20 (43.5)</td>
<td>0.437</td>
</tr>
<tr>
<td>Tubal or female sterilization</td>
<td>41 (38.3)</td>
<td>22 (36.1)</td>
<td>19 (41.3)</td>
<td>0.581</td>
</tr>
<tr>
<td>Vaginal ring or nuva ring</td>
<td>38 (35.5)</td>
<td>20 (32.8)</td>
<td>18 (39.1)</td>
<td>0.497</td>
</tr>
<tr>
<td>Birth control implants (Implanon, Norplant)</td>
<td>38 (35.5)</td>
<td>30 (49.2)</td>
<td>8 (17.4)</td>
<td><strong>0.001</strong></td>
</tr>
<tr>
<td>IUD (Mirena)</td>
<td>32 (29.9)</td>
<td>18 (29.5)</td>
<td>14 (30.4)</td>
<td>0.917</td>
</tr>
<tr>
<td>Contraceptive foam, jelly or cream</td>
<td>25 (23.4)</td>
<td>20 (32.8)</td>
<td>5 (10.9)</td>
<td><strong>0.008</strong></td>
</tr>
<tr>
<td>The today sponge</td>
<td>10 (9.3)</td>
<td>8 (13.1)</td>
<td>2 (4.3)</td>
<td>0.123</td>
</tr>
</tbody>
</table>
Sexual education classes at school

Although most of the participants had attended Sexual education classes, they felt these classes were not useful, in fact participants described them as boring, not an environment to ask pertinent questions and in most cases mainly focused on “health” in general, with no particular discussion on contraception. In fact, most students were able to opt out of it.

- “I didn’t have a health class in high school, if they give you the option to testing you don’t have to take it at all, like I did it twice and I passed it and I didn’t have to take it. That’s probably why like a lot of people don’t get that information.” (Female FG)

- “Yeah, I don’t think I had it in my school, I think they just kind of covered the topic a little bit throughout our health class.” (Female FG)

- “Don’t have sex, abstinence.” (Female FG)

- “Is more general, on you physical education it just cover like all little part of sex ed and that's it.” (Female FG)

- “I think that here in the schools yes, they give us classes but not so explained, not so much as to prevent, it is just like a physical education class, I think there’s a lack of information, maybe a class where they explain in detail "look, this can happen, so you end like this".” (translated) (Male FG)

Further analysis of the survey data showed that more than half of the sample had attended sexual education classes irrespective of gender (64, 59.8%). Participants recalled discussing “how to say no to sex” (42%), importance of waiting till matrimony (45.72%) but only 25.23% recalled a demonstration on how to use a condom during sexual education classes.
Personal attitudes towards contraception/pregnancy:

Among sexually active participants, there was a low use of effective contraception. And although frowned upon, most teens seemed to be ambivalent when it came to pregnancy prevention, reflected in their low use of contraception and their pregnancy ambivalence.

Low contraception use

Table 3 shows most common methods used at last sexual intercourse, indicating participants had engaged in use of male condom (53.2%) as main form of contraception, followed by none (14.9%), pills (10.6%) and withdrawal (8.5%). Only 1 person had used the patch or IUD in their last sexual intercourse, and 4 participants did not respond.

Table 3: Contraceptive method used at last intercourse

<table>
<thead>
<tr>
<th></th>
<th>TOTAL (n=47) n (%)</th>
<th>MALE (n=36) n (%)</th>
<th>FEMALE (n=11) n (%)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male condom</td>
<td>25 (53.2)</td>
<td>20 (55.6)</td>
<td>5 (45.5)</td>
<td>0.557</td>
</tr>
<tr>
<td>No method</td>
<td>7 (14.9)</td>
<td>7 (19.4)</td>
<td>0 (0.0)</td>
<td>0.113</td>
</tr>
<tr>
<td>Birth control pills</td>
<td>5 (10.6)</td>
<td>3 (8.3)</td>
<td>2 (18.2)</td>
<td>0.354</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>4 (8.5)</td>
<td>3 (8.3)</td>
<td>1 (9.1)</td>
<td>0.937</td>
</tr>
<tr>
<td>IUD (Mirena)</td>
<td>1 (2.1)</td>
<td>1 (2.8)</td>
<td>0 (0.0)</td>
<td>0.576</td>
</tr>
<tr>
<td>The patch (Ortho Evra)</td>
<td>1 (2.1)</td>
<td>0 (0.0)</td>
<td>1 (9.1)</td>
<td>0.067</td>
</tr>
</tbody>
</table>

Most participants 21.9% agreed it would be quite/extremely likely that they would have sex without using any birth control in the following 3 months.
Pregnancy ambivalence

- “I don’t think it’s socially acceptable. Like we view it as socially acceptable, but here, we’re kind used to it, so we’ll see someone get pregnant and the person will be like, “oh that was a bad decision”, but after, you’re like “oh, congratulations! Good for you, you’re going to have a baby.””
  (Male FG)

- “That’s not even a big deal. . . That’s how it is now, that’s how bad it could be, so whenever you meet someone and they say they are pregnant is not a big deal”.
  (Male FG)

Almost half of the sample had already had a pregnancy scare (53.2%), and in fact 8.5% had already had an unplanned pregnancy.

Further data showed that 46.7% somewhat/strongly agreed to look forward to experiences a new baby would bring, 32.7% would look forward to telling friends that they were pregnant, 45.7% buying things for the new baby and 54.2% would look forward to raising a child with your partner. In fact, 26.1% was quite/extremely likely to think that if things were different in their life they would love to have a baby now.
Chapter V: Discussion

The purpose of our study was to explore knowledge, beliefs and attitudes about contraception among teens in a rural Latino community in the southwest of Kansas to inform culturally and age appropriate teen pregnancy prevention strategies for this particular at risk population.

Our mixed methods study revealed multiple layers of risk that youth face in this Latino rural community when it comes to pregnancy prevention including lack of sexual education and personal attitudes towards pregnancy and contraception use. Supporting previous studies describing factors that account for the disparity in teen child-bearing between rural and metropolitan areas [5] our data showed a lack of access to reproductive health care. Our qualitative data further revealed details on main barriers to access reproductive health care among this youth living in a rural Latino community, including lack of trusted, confidential and age-appropriate local reproductive health services, lack of transportation and insurance. These results are also consistent with the mistrust, lack of resources and insurance experienced by the general Latino population [22].

Cultural barriers described by participants represent concepts of taboo, virginity and Marianismo, and Familismo, family dishonor, previously described in the Latino literature, added another very important layer of obstacles for teens to access contraception. Our participants referred to sexual intercourse as a taboo topic, described before in the Latino culture literature as “sexual silence” [23], where sex is regarded as a topic frequently avoided in discussions with parents, seen as embarrassing. Our participants further described that when sexual intercourse was discussed, parental expectations of remaining virgins till matrimony was a clear message to girls, while boys were told to “just be careful”. This expected naïveté among
Latinas has been described, and referred to as “Marianismo”\textsuperscript{[24]}; women and girls are not expected to know nor ask about topics relates with sex, nor contraception.

\textit{Familismo} and the importance of family ties has been described before in the literature \textsuperscript{[25]}; data from our study add details on how although a taboo topic, this group of rural Latino youth still discussed topics related to sex more frequently with parents, friends and siblings in that order. Qualitative data added details on how participants would turn to trusted older close family members (cousins, older siblings, aunties) more frequently than parents or health providers for details on this topics.

However, when it came to finding out details on birth control, they would turn to the internet, friends, health providers and lastly parents for further information.

Also, the concept of Familismo and family ties probably explain why even although teen pregnancy or out of wedge was considered a family dishonor, a new life was eventually considered a blessing and embraced.

Our study describes another important layer of religious beliefs, most likely very connected to the cultural layer, but specifically represented by the strong myth and misconceptions shared by these groups of adolescents regarding the mechanism of action of hormonal contraception, with strong roots in religious background, that leads youth to equate birth control as “abortion” and therefore “evil”. This terminology and biased understanding may reflect religious messages intended to steer youth away from contraception due to the larger goal of hoping to deter sexual activity. It makes sense for this group of young Latinos, to choose withdrawal and condoms as preferred methods of contraception instead of an effective hormonal method of birth control.

Similarly to what has been reported before among Latino adolescents \textsuperscript{[26]}, our participants showed lack of sexual education. Our study adds the concept that youth shows lack of interest in
sex education classes, feel unhappy/uninterested/unexcited about the content of this classes that were strongly focused on abstinence, and did not feel the environment is conducive to educative discussions.

When it came to a personal layer of risks, participants expressed pregnancy ambivalence, which supported their lack of contraception use.

Overall Rural Kansas seems to be a close knit community that reports heavy familial expectations of abstinence “staying virgin till matrimony”. Cultural and religious influences characterize family planning behaviors in this Latino youth rural community (taboo, virginity, *Marianismo*, and *Familismo*, family dishonor) and obstruct discussions, education and access to sexual health and contraception knowledge and services. Furthermore, this community follows religious beliefs on contraception mechanism of action, attributing abortive action and immorality to it.

Despite engaging in sexual behaviors counter to familial and religious expectation, the combination of significant myths and misconceptions, and lack of sexual education on contraception added to limitations in access to family planning services likely contribute to the high rates of unplanned pregnancy among Latino adolescents and young adults living in rural Kansas.

In recent years, efforts to prevent teen pregnancy have focused increasingly on the needs of underserved youth. Teens living in rural areas, in particular, have been a source of growing concern. Challenges to reproductive health care access seem to be even higher for young Latino immigrants, possibly linked to a cultural and religious tone of taboo around the topic of family planning.
Our findings of parental influences and expectations coupled with strong concepts misleading the knowledge on mechanism of action and consequences of birth control use, strongly underscore the need for a culturally-relevant community-based pregnancy prevention intervention that targets specific demystification of contraception in a frame of specific parental expectations.

In the mist of current changes in policies that remove access to contraception and education on effective family planning, specific obstacles faced by young rural Latino immigrants should inform teen pregnancy prevention interventions and local policies, in particular in states with abstinence only efforts.

**Limitations**

Study limitations include lack of generalizability due to sampling restricted to a geographic area, although recruitment occurred in four different towns. Also, although the sample included 107 participants, only 47 of them were sexually active.

Another limitation is that the quantitative data from the surveys is cross-sectional and therefore causality cannot be interred.

Information generated through focus groups and questionnaires is contextually rich and contains evidence that often is not otherwise accessible through quantitative survey methods only. However, qualitative analysis can be a source of potential bias among the investigators. This possibility was minimized utilizing a multidisciplinary team and research triangulation with three study members to enhance credibility of analysis.
Considerations for Future Research

Adolescent and young adult Hispanic immigrants residing in rural areas of the United States seem to be trapped in between Hispanic traditional parental expectations and “new” culture peer behaviors and influences. Research shows that cultural norms play a significant role in the inclusion and connection of Hispanic immigrants to the family planning in adolescents and young adults. Understanding immigrant communities with specific cultural heritage and barriers may be important to inform future studies and the design of developmentally, culturally, and linguistically appropriate pregnancy prevention strategies for Latino youth in rural areas.
References


Harvey, DrPH1, Meredith R. Branch, MPH1, Deanne Hudson, BSN, MPH, CHES1, and Antonio Torres, MPH1.


23. Adolescence. 1988 Fall;23(91):667-88. Hispanic and black American adolescents' beliefs relating to sexuality and contraception. Scott CS1, Shifman L, Orr L, Owen RG, Fawcett N.

24. Spirituality Among Latinas/os Implications of Culture in Conceptualization and Measurement. Maureen Campesino, PhD, RN, PsyNP and Gary E. Schwartz, PhD

25. Adolescence. 1988 Fall;23(91):667-88. Hispanic and black American adolescents' beliefs relating to sexuality and contraception. Scott CS1, Shifman L, Orr L, Owen RG, Fawcett N

Appendix A: Focus Group Guide

Script Template

Opening

“Hello. My name is INTRODUCE YOURSELF. Today we would like to have a conversation with you about reproductive health. What we are trying to accomplish before we leave here today is to get a better understanding of Reproductive Health needs among young Latinos. Are there any questions?”

Respond to participant questions.

“Let us go over some rules. First, let us all turn off our cell phones so we are not interrupted. This will allow us to keep track of what people are saying. Remember that we have one person talking at a time. Please do not interrupt someone when they are talking. Also, everything you tell us today will be kept completely confidential. We will summarize the things you tell us and combine it with other focus groups we are organizing. Let’s emphasize that we expect no one will discuss individual remarks outside the group once we are done today. Also, everyone has the freedom to leave the group at any time if you are uncomfortable. One of my jobs today as the moderator is to make sure we discuss all of the issues we planned to discuss. If I ask questions while you are still talking, I am not trying to be rude; I am just making sure everyone has a chance to talk and that we have enough time to discuss all of the issues”.

“Let us begin.” (Point to someone to start; randomly select people to demonstrate that people do not talk in sequence).
Sex (sexual health): Questions 1-4

1. KNOWLEDGE: “What comes to your mind when you hear the word sex?”

2. SOURCE OF KNOWLEDGE:
   - “How confident are you about your knowledge of sex, why?”
   - “Who do you talk to when you have questions about sex?”; “where do you usually go to get information about sex?
   - (What does this person or resources offer you?” How do you feel about the information that you receive via online sources? )

3. NORMS:
   - “Are there individuals or groups who would approve of you having sex, why?”
   - “Are there individuals or groups who would disapprove of you having sex, why?”
   - What comes to mind when you think about virginity? How important is this to you/your partner?

4. CULTURAL BACKGROUND: In your opinion, do Latinos think different from other racial and ethnic groups about (topics related to) sex?

Pregnancy:

1. KNOWLEDGE:
• “What do you know about pregnancy?”; “What comes to mind when you think about pregnancy?” or “Is there anything else you associate with pregnancy?”
• “What would you think are the pros of getting pregnant?” or “What would encourage you to get pregnant?”
• “What would you think are the cons of getting pregnant?” or “What would discourage you from getting pregnant?”

2. SOURCES OF KNOWLEDGE: “Who do you talk to when you have questions about pregnancy?”

3. NORMS:
• “Tell me about individuals or groups who would approve of you getting pregnant?”
• “Tell me about individuals or groups who would disapprove of you getting pregnant?”

4. CULTURAL BACKGROUND: In your opinion, do Latinos think different from other racial and ethnic groups about (topics related to) pregnancy?

Contraception:

1. KNOWLEDGE:
• “What do you think about birth control?”; “What else comes to mind when you think about using birth control methods?” or “Is there anything else you associate with using birth control?”
• “What do you see are the advantages of using birth control methods?” or “What do you believe are the advantages of using birth control methods?”
• “What do you see as disadvantages of using birth control methods?” or “What do you believe are the disadvantages of using birth control methods?”

• What do you know about long acting and short acting contraceptive methods?

2. SOURCES OF KNOWLEDGE:

• What would you consider trusted sources of information about sex, contraceptives?

• Who would you talk to about birth control? Who would you feel comfortable talking to about birth control?

3. NORMS:

• “Please list the individual or groups who would approve or think you should use birth control” or “Are there individuals or groups who would approve of you using birth control?”

• “Please list the individual or groups who would disapprove or think you should not use birth control” or “Are there individuals or groups who would disapprove of you using birth control?”

4. CONTROL PERCEPTION:

• “Please list any factors or circumstances that would make it easy or enable you to use birth control”

• “Please list any factors or circumstances that would make it difficult or prevent you from using birth control”
“Would you feel comfortable asking your partner to use a condom? Would you feel comfortable talking about contraception with your partner? Why/why not?”

5. CULTURAL BACKGROUND: In your opinion, do Latinos think different from other racial and ethnic groups about (topics related to) THE USE OF BIRTH CONTROL?”

“Are there any final questions? (Respond to questions) Thank you for participating in this focus group today. We appreciate your time and are excited to learn more about what you think.”
Appendix B: Survey

Date: ___ ___ / ___ ___ / ___ ___ ___ ___  Time: ___ ___: ___ ___ am /pm

Demographics:

1. What is your age?

2. What is your sex?
   a. Female
   b. Male

3. What is your zip code at home?

4. Who do you currently live with?
   a. Parents
   b. Partner
   c. Roommates
   d. Someone else. Specify: ________________
   e. No one
   f. Refuse to answer

5. If you are in school, what grade are you?
   a. 9th grade
   b. 10th grade
   c. 11th grade
   d. 12th grade
   e. Not in highschool
   f. Other grade: ________________

6. What was the highest level of education you have completed?
   a. Less than high school diploma
   b. High school diploma or GED
   c. Some college
   d. Two-year college degree
   e. Four-year college degree
   f. Advanced degree

7. Are you Hispanic or Latino?
   a. Yes
8. What is your race? (Select one or more responses.)
   a. American Indian or Alaska Native
   b. Asian
   c. Black or African American
   d. Native Hawaiian or Other Pacific Islander
   e. White
   f. I cannot identify with any of these

9. What is your religion, if any?
   a. Protestant
   b. Catholic
   c. Jewish
   d. Christian
   e. Islamic
   f. Some other religion. Specify:_________________
   g. Don’t know
   h. Refuse to answer

10. How long have you been in the USA?
    a. Less than 1 year
    b. 1 year
    c. 5 years or less
    d. 10 years or less
    e. More than 10 years

11. How long have you been in Kansas?
    a. Less than 1 year
    b. 1 year
    c. 5 years or less
    d. 10 years or less
    e. More than 10 years

Language Preferences:
12. What language is spoken at home?
    a. English
    b. Spanish
    c. English more than Spanish
    d. Spanish more than English
    e. Both equally
f. Other: ________________

13. What language is spoken among friends?
   a. English
   b. Spanish
   c. English more than Spanish
   d. Spanish more than English
   e. Both equally
   f. Other: ________________

14. What language do you watch TV/ listen to the radio in?
   a. English
   b. Spanish
   c. English more than Spanish
   d. Spanish more than English
   e. Both equally
   f. Other: ________________

15. What language do you think in?
   a. English
   b. Spanish
   c. English more than Spanish
   d. Spanish more than English
   e. Both equally
   f. Other: ________________

Health Care Access:
16. Do you currently have health insurance?
   a. Yes
   b. No
   c. Not sure

17. When you last needed medical care, where did you go?
   a. Emergency department
   b. Doctor’s office
   c. School-based clinic
   d. Community or hospital clinic
   e. Other ________________
   f. I have not needed medical care/ can’t remember
18. When was your last general check-up from a doctor or nurse, meaning when did you get a general physical and were not hurt or sick?
   a. Past year
   b. 2 years
   c. greater than 2 years
   d. Don’t know

19. When you seek health care do you usually wait until you are sick?
   a. Yes
   b. No

20. If you have trouble accessing health care, which of the following most applies? (Select all that apply)
   a. Lack of transportation
   b. Fear of confidentiality
   c. Documentation issues
   d. Distrust of the health care system
   e. Fear of discrimination
   f. Previous bad experience
   g. Other: (Please explain)

_______________________________________________________________________________
_______________________________________________________________________________
_______________________________________________________________________________
_______________________________________________________________________________

Have you ever had any of these sexual health services from a doctor or other care provider (like a nurse)?

21. A check-up or medical test to see if you had a sexually transmitted disease (STD)?
   a. Yes
   b. No

22. Have you ever been tested for HIV, the virus that causes AIDS? (Do not count tests done if you donated blood.)
   a. Yes
   b. No
   c. Not sure

23. A method of birth control or a prescription for a method (like “The Pill”)?
   a. Yes
   b. No

24. Have you ever made a visit to a doctor or clinic where you received sexual health care services? (This could be a visit where you got an annual gynecological exam, a birth control method, or a test for STDs or pregnancy.)
   a. Yes
   b. No
25. How would you rate your experience with your school nurse, from 1-10 (1 being the worst and 10 being the best)?
   1.....2.....3.....4.....5.....6.....7.....8.....9.....10

Pregnancy Risk:
26. Have you ever had a class on sex education?
   a. Yes
   b. No

27. Which of the following topics were covered in the sex education classes you attended?

<table>
<thead>
<tr>
<th>Topic</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
<th>Refuse to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The importance of using birth control if you have sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. A demonstration on how to use a condom</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. How to say ‘no’ to sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. The importance of waiting until marriage to have sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. The availability of many different types of birth control methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

28. Who talks to you regarding sex?
   a. Parents (Mother, Father or both)
   b. Siblings
   c. Family Member (specify:__________________)
   d. Friends
   e. Partner (Current or past)
   f. The internet
   g. TV or radio
   h. Other: ______________

29. Are you against the use of birth control?
   a. Yes
   b. No

30. Have you ever had sexual intercourse?
   a. Yes
   b. No

31. How old were you when you had sexual intercourse for the first time?
   a. I have never had sexual intercourse
   b. 11 years old or younger
c. 12 years old
d. 13 years old
e. 14 years old
f. 15 years old
g. 16 years old
h. 17 years old or older

32. Have you ever had oral sex? This is when a partner puts his/her mouth on your vagina/penis or when you put your mouth on your partner’s vagina/penis.
   a. Yes
   b. No

33. Have you ever had vaginal intercourse or sex? This is when a man inserts his penis into a woman’s vagina.
   a. Yes
   b. No

34. Have you ever had anal sex? This is when a man inserts his penis into his partner’s anus or butt.
   a. Yes
   b. No

35. During your life, with how many people have you had sexual intercourse?
   a. I have never had sexual intercourse
   b. 1 person
c. 2 people
d. 3 people
e. 4 people
f. 5 people
g. 6 or more people

36. During the past 3 months, with how many people did you have sexual intercourse?
   a. I have never had sexual intercourse
   b. I have had sexual intercourse, but not during the past 3 months
c. 1 person
d. 2 people
e. 3 people
f. 4 people
g. 5 people
h. 6 or more people

37. During your life, with whom have you had sexual contact?
   a. I have never had sexual contact
   b. Only Females
c. Only Males  
d. Females and males

38. Which of the following best describes you?  
   a. Heterosexual (straight)  
   b. Homosexual  
   c. Bisexual  
   d. Not sure

39. Did you drink alcohol or use drugs before you had sexual intercourse the last time?  
   a. I have never had sexual intercourse  
   b. Yes  
   c. No

40. Are you currently trying to get pregnant or impregnate your partner?  
   a. Yes  
   b. No

41. Have you (or your partner) ever had a pregnancy scare?  
   a. Yes  
   b. No

42. Have you (or your partner) ever had an unplanned pregnancy?  
   a. Yes  
   b. No

43. The last time you had sexual intercourse; did you or your partner use a condom?  
   a. I have never had sexual intercourse  
   b. Yes  
   c. No

44. Even if you haven’t used a method yourself, please mark if you have ever heard of each of the following methods for preventing pregnancy.

<table>
<thead>
<tr>
<th>Method</th>
<th>Yes, have heard of</th>
<th>No, Never heard of</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Not having sex at all</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Birth control pills or oral contraceptives (the pill)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Male condoms (rubbers)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Injectable birth control, like Depo Provera (the Shot, Lunelle)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
e. the birth control patch, or Ortho Evra
f. an IUD or intrauterine device, like Mirena
g. a diaphragm, cervical cap, or female condom
h. a vaginal ring or nuva-ring
i. contraceptive foam, jelly or cream
j. the Today sponge
k. Birth control implants, like Implanon (Norplant, tubes in your arm)
l. The rhythm method or natural family planning, (That is, when you use a calendar, temperature or mucous test to try to predict the safe period when you cannot get pregnant and you only have sex on those safe days) (Billings method, periodic abstinence)
m. withdrawal or pulling out
n. Tubal or female sterilization
o. Vasectomy or male sterilization
p. Emergency contraception or the ‘morning after pill’

45. The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy? (Select only one response.)
   a. I have never had sexual intercourse
   b. No method was used to prevent pregnancy
   c. Birth control pills
   d. Condoms
   e. An IUD (such as Mirena or ParaGard)
   f. Implant (such as Implanon or Nexplanon)
   g. A shot (such as Depo-Provera)
   h. Patch (such as Ortho Evra)
   i. Birth control ring (such as NuvaRing)
   j. Emergency contraception
   k. Sponge
   l. Diaphragm
   m. Cervical cap
   n. Female condom
   o. The rhythm method or natural family planning
   p. Withdrawal or some other method
   q. Not sure

46. Which method (s) are you currently using or have you used most recently? Please select all that apply.
   a. Condoms
   b. Birth control pill
   c. IUD (intrauterine device)
   d. Birth control ring (such as NuvaRing)
   e. A shot (such as Depo-Provera)
   f. Spermicids
   g. Emergency contraception/Morning after pill
   h. The patch
   i. Implant
   j. Sponge
   k. Diaphragm
   l. Cervical cap
m. Female condom
n. None of these

47. How important are each of the following characteristics to you in deciding which birth control method to use?

<table>
<thead>
<tr>
<th></th>
<th>Not at all important</th>
<th>Slightly important</th>
<th>Quite important</th>
<th>Extremely important</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. It is very effective at preventing pregnancy</td>
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<td>b. It has a low cost</td>
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<td>c. It is easy to use</td>
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<td>d. It doesn’t contain hormones</td>
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<td>e. It is acceptable to my partner</td>
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<td>f. It doesn’t interrupt sex</td>
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<td>g. It is effective at preventing HIV or STDs</td>
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48. In the next 3 months, how likely is it that you will have sex without using any method of birth control?
   a. Not at all likely
   b. Slightly likely
   c. Quite likely
   d. Extremely likely
   e. Don’t expect to have sex
   f. Don’t know
   g. Refuse to answer

49. If you heard about a new method of birth control, like from a TV ad or from someone you knew, and you wanted to learn more about it, what is the first source you would use to get information about this method?
   a. Your friends
   b. Your partner (current or past)
   c. Your mother or father
   d. Siblings or other relatives
   e. A doctor or nurse
   f. A teacher or counselor
   g. A minister, priest or rabbi
   h. The internet
   i. Books, magazines or pamphlets
   j. TV or radio
   k. Don’t know
50. If you found out today that you (or your partner) were pregnant, how would you feel? Please select one response.
   a. Very upset
   b. A little bit upset
   c. A little pleased
   d. Very pleased

51. How much do you agree or disagree with each of the following statements? Please select one response per statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Somewhat agree</th>
<th>Neither</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I am often nervous that I am pregnant and relieved when I get my period (Male: I am often nervous that my partner is pregnant and relieved when she gets her period)</td>
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<td>b. It is likely that I’ll have an unplanned pregnancy while I’m single</td>
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<td>c. It doesn’t matter whether you use contraception or not, when it is your time to get pregnant, it will happen.</td>
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<td>d. My pregnancy scare made me more careful about using protection when I have sex. (Male: My partner’s pregnancy scare made me more careful about using protection when I have sex)</td>
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<td>e. My pregnancy scare made me switch to a more reliable method of birth control. (Male: My partner’s pregnancy scare made me switch to a more reliable method of birth control)</td>
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</tbody>
</table>
52. The following statements relate to feelings you might have if you (or your partner) became pregnant. Please tell me if you agree or disagree with each.

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Somewhat agree</th>
<th>Neither</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. You worry that a new baby would keep you from doing things, like working, going to school and going out</td>
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<td>b. You look forward to the new experiences that a baby would bring</td>
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<td>c. You would look forward to telling your friends that you were pregnant</td>
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<td>d. You worry that you don’t have enough money to take care of a baby</td>
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<td>e. You would dread telling your friends that you were pregnant</td>
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<td>f. You would look forward to buying things for a new baby</td>
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<td>g. You worry that a baby would ruin your relationship with your partner</td>
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<td>h. You would look forward to raising a child with your partner</td>
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</table>

53. And, for each of the following, please tell me how likely you think it is to happen to you. Would you say it is not at all likely, slightly likely, quite likely or extremely likely?

<table>
<thead>
<tr>
<th></th>
<th>Likely</th>
<th>Slightly likely</th>
<th>Quite likely</th>
<th>Extremely likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. In life, things just seem to happen to me</td>
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<tr>
<td>b. In life, I think I take many more risks than other people my age</td>
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<td>c. In my family it is not acceptable to have a child out-of-wedlock</td>
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<td>d. Many of my friends have had unplanned pregnancies</td>
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<tr>
<td>e. Most of my friends think using birth control is important</td>
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<td>f. If things were different in my life, I would love to have a baby now</td>
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<td>g. I have all the information I need to avoid an unplanned pregnancy</td>
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<td>h. It is OK for an unmarried female to have a child</td>
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</table>
j. Pregnancy is something that should be planned

k. Every pregnancy is a blessing

HPV:

54. HPV is a sexually transmitted infection
   a. Yes
   b. No
   c. I do not know

55. The primary cause of cervical cancer is HPV
   a. Yes
   b. No
   c. I do not know

56. HPV infections can lead to anal and throat cancers.
   a. Yes
   b. No
   c. I do not know

57. The HPV virus may cause genital warts
   a. Yes
   b. No
   c. I do not know

58. The HPV vaccine is safe
   a. Yes
   b. No
   c. I do not know

59. HPV vaccine can cause a person to become sterile
   a. Yes
   b. No
   c. I do not know

60. Vaccinating against HPV will help protect against various HPV related cancers
   a. Yes
   b. No
   c. I do not know

Technology:

61. Do you own any of the following? (Select all that apply)
   a. Computer/ Laptop
   b. House phone
   c. Cell phone
62. When communicating, what method(s) do you commonly use? (Select all that apply)
   a. Postal Mail
   b. Email
   c. Video chat software
   d. Social network
   e. Text message
   f. Phone call
   g. Face-to-face
   h. Other: ________________

63. Which one of the following communication methods, do you consider to be the most efficient?
   a. Postal Mail
   b. Email
   c. Video chat software
   d. Social network
   e. Text message
   f. Phone call
   g. Face-to-face
   h. Other: ________________

Social Preferences:
64. Where do you most commonly hang out?
   a. Friend’s house
   b. Movies (like Cinemark)
   c. Park
   d. Bar
   e. Mall
   f. Pool
   g. Other: ________________