

Teenage Pregnancy Prevention: An Observational Study

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Abstract: The Department of Health and Human Services began administering a Teen Pregnancy Prevention (TPP) program through what is now the Office of Population Affairs in 2010 (DHHS, 2021). Via replication of approved, evidence-based programs, sexual education was administered to teens across the country with the goals of preventing teen pregnancies and sexually transmitted infections (DHHS, 2021). One funded program delivered the TPP curriculum in community-based settings across southwestern Ohio for four years, using undergraduate nursing students as facilitators. The program served 1,642 females, ages 15-19. The objectives were to gather data on baseline knowledge, attitudes, behaviors, intentions, and perceptions related to sexual health in a target population and examine trends in knowledge at 12-months post-intervention. Identical surveys were distributed at baseline and 12 months post-intervention. Survey questions from the original instruments were assigned to one of nine categories for a more focused exploration of critical topics. Teens' perceptions of risk did not align with the risky behaviors reported. Healthcare providers must work to find ways to address feelings of invincibility in teens before other educational efforts may be effective. Implications for Nursing: Ongoing evaluation of target populations is necessary to ensure effective programming.

Keywords: teen pregnancy prevention, sexually transmitted infection, women's health, sex education

Introduction

The U.S. Department of Health and Human Services (DHHS) identified five Healthy People 2020 goals related to family planning for females, three of which were: to reduce pregnancy rates for adolescent females, to increase the proportion of those 15-19 years of age who effectively used contraception, and to increase the proportion of teens who received formal instruction on reproductive health topics by the age of eighteen (DHHS, 2018). Teen Pregnancy Prevention (TPP) programming was one educational initiative funded through DHHS to address these health priorities in communities across the nation.

Southwestern Ohio includes a diverse demographic makeup, including economically disadvantaged urban neighborhoods, affluent suburbs, large farms, and traditional "rust belt" communities. The purpose of this project was to provide a community-based TPP program to adolescents in the region, through replication of an evidenced-based teen pregnancy prevention program. The design of the intervention made use of a creative, sustainable, service-learning structure involving junior-level nursing students, their experienced faculty, and community partners who were dedicated to educating and empowering women and girls. The FOCUS curriculum (Boyer, *et al.*, 2005a). was delivered, with fidelity, by upper-level nursing students enrolled in a baccalaureate nursing program.

The purposes of this observational, replication-extension study were to gather data on knowledge, attitudes, behaviors, intentions, and perceptions related to sexual health in a target population of 15-19 year old females in southwestern Ohio and to examine trends in knowledge at 12-months post intervention.

Methods

Response frequency and means were found using Statistical Analysis Software (SAS). Original survey questions were reviewed and were assigned to one of the following categories: 1)

demographics and reported behaviors, 2) knowledge-based, 3) opinions, 4) perceived opinions of friends, 5) intentions for future practice, 6) perception of risk, 7) attitudes regarding condom use, 8) comfort related to health seeking behaviors, or 9) confidence in health seeking behaviors. The frequency procedure was used to calculate frequency, percent, cumulative frequency, and cumulative percent for each response. Aggregate descriptive statistics for some questions were evaluated through the means procedure, when appropriate, and mean, median, and standard deviation were calculated. Finally, a mixed procedure was used to determine the proportions of change between baseline surveys and 12-month follow-up surveys in the five applicable categories.

Procedures

Research Population

Recruitment and selection of participants occurred through guidance counselors and staff of local high schools, vocational schools, and staff of community-based agencies. Staff distributed flyers requesting female volunteers, 15-19 years of age. Memorandums of Understanding were signed with each partnering agency. Descriptions of program materials were shared with administrators, parents, and teens.

The study sample included 1,642 females, ages 15-19 years, who participated in the baseline survey, 463 participants who completed a condensed, 4-month follow up survey (used to check in), and 307 participants who completed the 12-month follow-up questionnaire. Program locations were within Butler, Hamilton, Warren, and Montgomery Counties, in southwestern Ohio. The program was implemented in full and with fidelity at all delivery sites. The day-to-day program session length and number of sessions was determined by the site's preferences.

Risks and Informed Consent

The primary risks involved with this voluntary study were related to the potential for breaches of confidentiality. Surveys were coded and identifying information was removed. Data was stored in double-locked locations. The secure Qualtrics system was used for electronic follow-up surveys. Participants and parents/guardians for those under 18 years old signed informed consents. All program facilitators were required to complete an online CITI training for research ethics. This research was conducted in compliance with the University's Institutional Review Board.

Conflicts of Interest

There are no known conflicts of interest to report.

Program Description

TPP participants committed to 9-10 total hours, including the time required for completion of the three included surveys. The actual curriculum delivery required 8 hours total and was divided into the number of sessions the partnering site preferred. Session goals were to: 1) increase knowledge regarding unintended pregnancies and STDs and modify beliefs and attitudes that are known to impact sexual behaviors, 2) review hormonal and barrier contraceptive options and build communication skills to prevent risky behaviors and increase condom use, 3) address sexually transmitted infections and communication skills surrounding prevention, and 4) modify participant

attitudes about impacts of alcohol use and risky behaviors, allowing participants to practice refusal skills and learn how to properly use a condom (Boyer *et al.*, 2005b).

Instruments

The original FOCUS study (Boyer *et al.*, 2005a) utilized a baseline survey and two follow-up questionnaires, none of which are considered to be validated tools. The surveys were modified, with approval from program developers, to replace military-based language with more general terms more appropriate for the new target population. One hundred twenty-eight questions were collected via hard copy before participants completed the educational program. An identical survey was distributed at 12-months post-intervention. The four-month surveys were excluded from this analysis because the questions asked did not match the other two surveys. Participants had the option of completing the follow-up surveys via mailed hard copies or via a secure online platform.

Results

Demographics and Reported Behaviors

Aggregate descriptive statistics of baseline data revealed that 786 participants (48.46%) were white; 684 participants (42.17%) were black; 86 participants (5.3%) identified as “other”; 42 participants (2.59%) were Hispanic; 16 participants (.99%) were Native American; and 8 participants (.49%) were Asian. Thirty-four participants declined responding. As for years of high school completed at baseline, 718 (46.96%) had completed three years; 536 (35.06%) had completed two years; 208 (13.6%) had completed four years; and 67 participants (4.38%) had completed one year of high school.

Of the 1,624 participants, 1188 (73.15%) answered that they had previously had sex and 436 (26.85%) stated that they had not (frequency missing=32). When asked how many people they had sex with, 36.55% (n=515) answered 0 partners; 52.09% (n=734) answered one partner; 8.09% (n=114) answered two partners, and less than 2% answered four or more partners. One steady partner was reported by 56.75 (n=748) participants. More than one partner was reported by 7.12% (114).

In terms of sexual behaviors within the past three months, 55.94% (n=900) reported having sex. Regarding birth control use in that time period, 28.53% (n=463) answered that they “always” used it; 5.61% (n=91) said “usually”; 4.5% (n=73) said “sometimes”; 3.82% (n=62) responded “almost never”; 17.38% (n=282) said never. Related to condom use, 17.65% (n=288) said they “always” used them; 8.27% (n=135) said “usually”; 7.35% (n=120) said “sometimes”; 8.52% (n=139) said “almost never”; and 17.52% (n=286) said they “never” used condoms in that time frame.

Knowledge Comparison Between Baseline and 12-Month Follow-Up

The follow-up survey demonstrated a significant increase in correct responses to knowledge-based questions. Of the 128 questions on the baseline survey, thirty-one were designated in this analysis as knowledge-based questions. Twenty-seven of those questions (87%) showed a significant increase in correct responses by the 12-month follow-up (Tables 1 and 2). As the original survey instrument was utilized, responses were presented on a Likert scale. In order for a response to be identified as “correct”, it was required to be on the correct “side” of the scale; for instance, “agree”/“strongly

agree” might be correct or “disagree”/“strongly disagree” might be correct, depending on the response that was factually correct.

Table 1 Knowledge Comparison between Baseline and 12-Month Follow-Up

Knowledge-Based Question	% Correct at Baseline	% Correct at 12-Month Follow-Up	p-value
Women with HIV can give it to their babies through breast milk	56.9%	73.2%	<.0001
Withdrawal of the penis before ejaculation prevents STDs	64.8%	77.1%	<.0001
STDs can be passed from woman to baby during birth, even if the mother has no symptoms	72.3%	86.4%	<.0001
A person can be infected with HIV for five or more years without developing AIDS	55.7%	75%	<.0001
The human papillomavirus can lead to cervical cancer	45.8%	64.5%	<.0001
If a woman’s fallopian tubes are blocked through scar tissue, an ectopic pregnancy may result	53.3%	74.1%	<.0001
The female condom is a pouch with an internal ring that covers the cervix and an external ring over the vaginal opening to catch sperm and other secretions	62.7%	85.2%	<.0001
Pelvic inflammatory disease is an infection of the uterus, ovaries, and fallopian tubes	46.1%	66.3%	<.0001
Some STDs can harm the brains of unborn babies	57.5%	71.1%	<.0001
Sperm can live up to 72 hours once inside a woman’s reproductive tract	63.9%	78%	<.0001
Withdrawal of the penis before ejaculation is effective in preventing pregnancy	49.7%	63.6%	<.0001
Depo-Provera is effective in preventing pregnancy	59%	76.8%	<.0001
Depo-Provera is effective in preventing STDs	41%	53.9%	<.0001
Implanon is effective in preventing pregnancy	51.2%	69.3%	<.0001
Getting an STD increases the risk of getting HIV	59%	71.7%	0.0002
If a woman has scarring/fallopian tube	57.8%	70.8%	0.0002

blockage, she may become sterile

Table 2 Knowledge Comparison between Baseline and 12-Month Follow-Up continued

Knowledge-Based Question	% Correct at Baseline	% Correct at 12-Month Follow-Up	p-value
Implanon is effective in preventing STDs	37%	49.1%	0.0002
Depo-Provera is a birth control that consists of a hormone injected every three months	65.7%	78%	0.0003
Women with particular STDs may have rashes around their vagina/anus/mouth	76.5%	86.7%	0.0004
Withdrawal before ejaculation is effective in preventing STDs	43.4%	55.4%	0.0004
STDs can be transmitted through (ear) piercings if sterile needles are not used	74.1%	84%	0.0010
Chronic/recurrent yeast infections may be a sign of HIVA 12-ounce beer/4-5-ounce wine/1-2 ounce shot all have the same amount of alcohol	34%	46.7%	0.011
Birth control pills are effective in preventing pregnancy	79.8%	88%	0.0028
A woman with an STD always has symptoms	56.9%	66.6%	0.0041
Birth control pills are effective in preventing STDs	55.1%	62.3%	0.0293
The vagina/cervix are covered by thin cells, makes a woman more susceptible to infection	55.1%	63.3%	0.0316
Birth control pills are 99% effective if taken correctly	69.9%	77.1%	0.0369

Baseline and 12-Month Follow-Up Reported Opinions

The follow-up survey demonstrated a significant increase in a “more affirmative” response to one opinion question- the importance of talking with their partner about using birth control before sex. Seven questions were identified as belonging in the “opinion” category of the baseline survey. Given the prompt, “Talking to a partner about using birth control before sex is”, 1,316 (81%) stated it would be “very good”; 203 (12.5%) stated it would be “somewhat good”; 90 (5.54%) answered “neutral”; 8 (0.49%) answered that it would be “somewhat bad”; and 7 (0.43%) said “very bad”. For the prompt

“Using birth control to prevent pregnancy before sex”, 1,336 (81%) said it would be “very good”; 224 (13.6%) said “somewhat good”; 65 (3.95%) answered “neutral”; and less than 1% n=13 said it would be “somewhat bad” or “very bad” (n=7). Regarding “talking to a partner about using a condom before having sex”, 1,291 (78%) thought it would be “very good”; 204 (12%) answered that it would be “somewhat good”; 119 (7%) were neutral; and less than 1% said it would be “somewhat bad” (n=16) or “very bad” (n=15).

Of the seven questions identified as “opinion” questions, one response was noted as significantly “more affirmative” at 12-month follow up as compared to baseline: When asked if participants thought it was important to talk to a partner about using birth control before sex, 92.5% agreed at baseline and 95.8% agreed at 12-months post-intervention (p=0.0895). See Table 3.

Table 3 Perceived Opinions of Friends

Question	Agree/Strongly Agree	Neutral Response at Baseline	Disagree/Strongly Disagree
My friends think it’s important for me to go to a healthcare provide to discuss choosing a method of birth control	1163 (70.74%)	350 (21.29%)	131 (7.97%)
My friends think it’s important for me to talk with my partner about using birth control before sex	1245 (75.68%)	292 (17.75%)	108 (6.56%)
My friends think it’s important for me to talk with my partner about using condoms before sex	1298 (78.76%)	266 (16.14%)	84 (5.1%)
My friends think it’s important for me to use birth control to prevent pregnancy	1339 (81.4%)	240 (14.59%)	66 (4.02%)
My friends think it’s important for me to get condoms before having sex	1286 (78.13%)	291 (17.68%)	69 (4.19%)

Baseline and 12-Month Follow-Up Perceived Opinions of Friends

The follow-up survey demonstrated a significant increase in a “more affirmative” response regarding the participant’s perceived opinions of friends. Of the six questions identified as related to “opinions of friends”, four responses were noted as significantly “more affirmative” at the 12-month follow up. See Table 4.

Table 4 Perceived Opinions of Friends Comparison between Baseline and 12-Month Follow-Up

Opinions of Friends Question	Agree/Strongly Agree at Baseline	Agree/Strongly Agree at 12-month Follow-Up	p-value
My friends think it’s important for me to go to a healthcare provider to discuss choosing a method of birth control	70.2%	81.6%	0.0005
My friends think it’s important for me to talk with my partner about using a condom	75.3%	84.3%	0.00021
My friends think it’s important for me to use birth control to prevent pregnancy	81.3%	88%	0.0128
My friends think it’s important for me to get condoms before having sex	75%	82.8%	0.0129

Intentions for Future Practice

The follow-up survey demonstrated an increase in a “more affirmative” response regarding the participant’s intentions for future practice for using contraception. Of the six questions identified as “intentions for future practice” questions for the purpose of this analysis, two questions were noted as significantly “more affirmative” at 12-month follow up, versus baseline: Regarding the question stem about planning to be checked for STD infections if engaged in unsafe sex, 88.3% agreed/strongly agreed at baseline and 95.2% agreed or strongly agreed at the 12-month follow-up (p=0.0011). Regarding the stem “I plan to talk to a partner about using birth control before sex”, 84.6% agreed/strongly agreed at baseline and 91.3% agreed/strongly agreed at 12-months post-intervention (p=0.0062). Table 5. presents reported intentions for future practice at baseline.

Table 5 Reported Intentions for Future Practice

Question	True/Very True	Neutral Response at Baseline	Untrue/Very Untrue
I plan to talk to my partner about using birth control before sex	1399 (85.51%)	154 (9.41%)	83 (5.08%)
I plan to use birth control to prevent pregnancy before	1422 (87.03%)	131 (8.02%)	81 (4.95%)

having sex			
I plan to talk to my partner about using a condom before having sex	1454 (88.72%)	118 (7.2%)	67 (4.09%)
I plan to get condoms before having sex	1372 (83.45%)	174 (10.58%)	98 (5.96%)
I plan to use condoms consistently and correctly when having sex	1438 (87.68%)	124 (7.56%)	78 (4.76%)
I plan to be checked for STD infections if I have engaged in unsafe sex	1475 (90.33%)	106 (6.49%)	52 (3.18%)

Perception of Risk

The follow-up survey demonstrated no significant difference regarding the participant's perception of risk for an unplanned pregnancy or STI. As far as perceived chances for an unplanned pregnancy in the upcoming six months, 800 (49.29%) reported that they believed they had no chance of an unplanned pregnancy; 434 (26.74%) believed they had a very low chance; 273 (16.82%) perceived a low chance; 90 (5.55%) noted a perceived moderate chance; and 26 (1.6%) perceived a high chance of unplanned pregnancy. Regarding their perceived risk of getting an STD in the upcoming six months, 320 (19.68%) perceived no chance; 515 (31.67%) noted a very low perceived chance; 391 (24.05%) said they thought they had a low chance; 331 (20.36%) reported a perceived moderate chance; and 69 (4.24%) stated that they believed they had a high chance.

Concerning their perceived risk of having an unplanned pregnancy in the upcoming six months as compared to their peers, 1,244 (76.36%) reported that they believed they were at a lower/much lower risk; 287 (17.62%) thought they were at about the same risk; and 98 (6.01%) thought they were at a higher or much higher risk than their peers. As for STD risk, compared to other girls in the group, 1,408 (86.54%) believed that they were at a lower/ much lower risk; 192 (11.8%) thought they were at about the same risk; and 27 (1.66%) reported their perception of a higher or much higher risk.

The majority of participants stated that they believed their sexual behavior with regard to unplanned pregnancy was "very safe" (n=793, 48.86%); 440 (27.11%) stated "fairly safe"; 286 (17.62%) said their behavior was somewhat risky; and 104 (6.41%) noted what they believed to be very risky behavior. Regarding chances of an STD, behaviors were considered "very safe" by 1095 (68.18%); "fairly safe" by 337 participants (20.98%); "somewhat risky" by 137 (8.53%); and "very risky" by 37 participants (2.3%).

When asked about the need to use condoms more often, 1,013 (62%) stated that they did not believe a change in behavior was necessary.

Attitudes Related to Condom Use

The follow-up survey demonstrated no significant difference regarding the participant's attitudes toward condom use. Participant reported attitudes related to condom use at baseline are outlined in Table 6.

Table 6 Attitudes related to Condom Use.

Attitudes Related to Condoms Question	Agree/Strongly Agree	Neutral Response at Baseline	Disagree/Strongly Disagree
I don't like sex with condoms	527 (32.22%)	483 (29.52%)	626 (38.27%)
Condoms decrease the feeling during sex	635 (38.72%)	530 (32.32%)	475 (28.96%)
Having a partner put on a condom spoils the mood	343 (20.99%)	542 (33.17%)	749 (45.84%)
I enjoy sex more when my partner uses condoms	447 (27.31%)	751 (45.88%)	439 (26.82%)

Comfort Related to Health Seeking Behaviors

The follow-up survey demonstrated a significant increase in the participant's comfort level seeking health services. Of the seven questions assigned to the "perception of comfort" category, there were four with significant differences between baseline and 12-month follow-up: Regarding how difficult they thought it would be to get latex condoms before sex, 68.7% thought it would be "easy" or "very easy"; by 12-months post-intervention, 78.9% answered easy or very easy ($p=0.0022$). When asked how difficult it would be to seek healthcare to discuss birth control, 75.6% thought it would be easy/very easy at baseline and 82.2% thought so at 12-months post-intervention ($p=0.0280$). When asked how difficult they thought it was to talk with a partner about birth control before having sex, 73.8% said it would be easy/very easy at baseline and 80.4% at the 12-month follow-up ($p=0.0334$). When asked how difficult it would be to use latex condoms consistently and correctly when having sex, 75.9% said easy/very easy at baseline as compared to 81.3% at the 12-month survey ($p=0.0822$). See Table 7.

Table 7 Comfort in Health Seeking Behaviors at Baseline.

Comfort related to Health Seeking Behaviors Question	Very Difficult/Somewhat Difficult	Neutral Response at Baseline	Somewhat Easy/Very Easy
How difficult would it be to talk to a partner about birth control before having sex?	217 (13.23%)	256 (15.61)	1167 (71.16%)
How difficult would it be to always use birth control to prevent pregnancy before sex?	156 (9.51%)	260 (15.85%)	1224 (74.64%)
How difficult would it	185 (11.31%)	270 (16.5%)	1181 (72.19%)

be to go to a healthcare provider to discuss birth control?			
How difficult would it be to talk to a sexual partner about using a latex condom before having sex?	110 (6.67%)	225 (13.66%)	1312 (79.66%)
How difficult would it be to get latex condoms before sex?	225 (13.68%)	266 (16.17%)	1154 (70.15%)
How difficult would it be to use a latex condom consistently and correctly when having sex?	150 (9.19%)	292 (17.88%)	1191 (72.94%)
How difficult would it be to go to a healthcare provider to get checked for an STD if you had sex without a condom?	257 (15.69%)	262 (16%)	1119 (68.331%)

Confidence Related to Health Seeking Behaviors

The follow-up survey demonstrated a significant improvement regarding the participants’ confidence in seeking health services. Table 8 identifies participant responses in the “confidence related to health seeking behaviors” category at baseline.

Table 8 Confidence in Health Seeking Behaviors at Baseline.

Confidence related to Health Seeking Behaviors Question	Agree/Strongly Agree	Neutral Response at Baseline	Disagree/Strongly Disagree
I’m confident that I can talk to a partner about using birth control before sex	1391 (84.76%)	180 (10.97%)	70 (4.27%)
I am confident that I can use birth control to prevent pregnancy before sex	1382 (84.11%)	190 (11.56%)	71 (4.32%)
I am confident that I can go to a healthcare provider to discuss the birth control that is right for me	1261 (77.07%)	250 (15.28%)	125 (7.64%)
I am confident that I can talk to a partner about using condoms before sex	1400 (85.52%)	180 (11%)	57 (3.48%)
I am confident that I	1021 (80.12%)	228 (13.94%)	97 (5.93%)

can get condoms from my healthcare provider before sex			
I am confident that I can use a condom consistently and correctly when having sex	1303 (79.89%)	238 (14.59%)	90 (5.52%)
I am confident that I can go to a healthcare provider to be checked for STDs if I have engaged in unsafe sex	1317 (80.5%)	225 (13.75%)	94 (5.75%)

Of the seven questions identified as being related to “confidence”, four questions were noted as significantly “more positive/affirmative” at the 12-month follow up. See Table 9.

Table 9 Confidence in Health Seeking Behaviors Comparison between Baseline and 12-Month Follow-Up

Confidence in Health Seeking Behaviors Stem	Agree/Strongly Agree at Baseline	Agree/Strongly Agree at 12-month Follow-Up	p-value
I’m confident that I can get condoms from my healthcare provider before sex	77.4%	89.8%	<.0001
I’m confident that I can use condoms consistently and correctly when having sex	79.8%	90.1%	0.0002
I’m confident that I can go to a healthcare provider to be checked for STDs if engaged in unsafe sex	81.3%	88.9%	0.0073
I’m confident that I can talk to a partner about using condoms before sex	83.4%	89.5%	0.0205

Discussion

One way to make sense of this data is to consider what was learned about “most” participants. Most participants in this study reported having had sex with one steady partner. Most said they thought it would be “very good” to talk with a partner about birth control and condom use before sex and that using birth control would be “very good”. Most teens reported that they intended to practice every behavior presented to promote sexual health. Most reported that they were comfortable and confident in talking with partners and healthcare providers about sexual health topics. Most participants

perceived that their friends thought that safe behaviors were important. Most noted that it would be somewhat or very easy to obtain and use birth control and condoms.

The critical gap noted through this study lies in teen perception of risk. Most participants in this study reported that they were having sex and said they did not always use birth control or condoms. Yet, most participants answered that they believed they had no chance of an unplanned pregnancy and that their sexual behavior with regard to unplanned pregnancy was “very safe”. Most teens perceived that they were at a lower/much lower risk than the other girls in their class. As far as STD prevention, only 17.65% said they always used condoms in the previous three months. However, most participants considered their behavior related to STD risk as “very safe” and 62% stated that they didn’t believe they needed to use condoms more often. Most respondents reported that they thought they had no chance, a very low chance, or low chance of getting an STD in the next six months.

This is not the first time that a lack of perceived vulnerability or an “it could never happen to me” philosophy has been associated with teens. Wickman, Anderson, and Smith Greenberg’s 2008 study discussed this very concept of perceived “invincibility” as being linked to risk taking in young people, citing many other references: Duncan *et al.*, 2002; Giesbrecht, 1999; Gray, 2008, Greene *et al.*, 2000, and Moffat & Johnson, 2001. Wickman *et al.* (2008) also pointed out that an existing significant risk doesn’t necessarily translate into a perceived risk in the teen population (citing Ethier *et al.*, 2003). The most significant potential problem with this notion is that if the Transtheoretical Model of Health Behavior Change (Prochaska & Velicer, 1997) applies, teens may never move beyond the precontemplation stage (stage 1) because they do not identify themselves as being at risk in the first place. In that case, no efforts toward education, accessibility, or prevention can be effective until a shift can be made in perceived risk.

Limitations and Future Research

One limitation of this study is that the target population was a relatively homogenous sampling from southwestern Ohio. This project was funded to educate a very distinct group; females 15-19 from four, “high risk” counties. The evidence-based program and associated survey instruments focused substantially on an assumed heterosexual population and did not intentionally address evaluation or educational needs more specific to LGBTQ+ youth. It will be critical, moving forward, for large-scale TPP efforts, to expand their reach to include individuals of any and all genders and every sexual orientation.

Another area for future research should be to continue to explore teen perceptions of risk and invincibility. If a lack of perceived risk can be identified as the primary, overarching risk factor for some teen populations, it’s possible that educational efforts and programming could be tailored to address and overcome that issue at the beginning of the intervention, so that appropriate and effective preventative care can become possible.

Conclusion

It is known that many women do not feel knowledgeable about birth control options, report that they do not believe they are well educated about how to correctly use birth control, and say that they have not always had positive experiences when discussing birth control options with their health care providers (ACNM, 2013). Ensuring access to high quality, non-judgmental reproductive services and offering options for contraceptive methods remain important responsibilities of health care practitioners (Todd & Back, 2020).

This observational study presents a snapshot of one subset of the teens in the United States, but trends change over time. In order to effectively reduce unplanned teen pregnancies, health care providers must stay up-to-date regarding teen knowledge, misperceptions, attitudes, and behaviors. Farb and Margolis (2016) confirm these priorities, noting that target populations must continue to be evaluated so that TPP programs can continue to be effective and engaging.

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