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### A Peer-Led Evidence-Based Contraceptive Counseling Initiative

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A Peer-Led Evidence-Based Contraceptive Counseling Initiative

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## Table of Contents

<b>Abstract .....</b>	<b>4</b>
<b>Introduction and Background.....</b>	<b>6</b>
<b>Purpose .....</b>	<b>8</b>
<b>Review of Evidence.....</b>	<b>8</b>
<b>Access to Knowledge .....</b>	<b>8</b>
<b>Access to Care .....</b>	<b>11</b>
<b>Peer Education and Sexual Health .....</b>	<b>13</b>
<b>Environments that Foster Sexual Health .....</b>	<b>14</b>
<b>Theoretical Model.....</b>	<b>16</b>
<b>Project Design .....</b>	<b>16</b>
<b>Phase 1: Assembling a Community Stakeholder Group .....</b>	<b>16</b>
<b>Phase 2: Recruitment of Peer Educators.....</b>	<b>18</b>
<b>Phase 3: Stakeholder Engagement and Session Planning .....</b>	<b>19</b>
<b>Phase 4: Creation of Data Collection Instruments.....</b>	<b>21</b>
<b>Phase 5: Pilot of Sessions Led By Peer Educators.....</b>	<b>23</b>
<b>Results.....</b>	<b>24</b>
<b>Sexual Health Education.....</b>	<b>24</b>
<b>Sexual Health Content .....</b>	<b>25</b>
<b>Access to Care .....</b>	<b>25</b>
<b>Post-Session Satisfaction .....</b>	<b>26</b>
<b>Current Contraceptive Satisfaction .....</b>	<b>26</b>
<b>Discussion .....</b>	<b>27</b>
<b>Education .....</b>	<b>27</b>

Access to Care .....	28
Peer Education .....	29
Implications for Practice.....	30
Strengths, Limitations, and Future Directions .....	32
Conclusions .....	33
References .....	35
Figure.....	43
Figure 1.....	43
Tables.....	44
Table 1 .....	44
Table 2 .....	45
Table 3 .....	45
Table 4 .....	46
Appendix .....	47
Appendix A .....	47
Appendix B.....	48
Appendix C .....	49
Appendix D .....	50
Appendix E.....	51
Appendix F .....	52
Appendix G .....	54

## Abstract

The experience of sexual health and wellness varies for newly independent college freshman. For reproductive-age women, gaps in knowledge and self-efficacy overlap with barriers accessing contraception and reproductive health care contributing to high-risk behavior and poor sexual health outcomes. Community-based participatory research was used to develop and implement a peer-education program targeting sorority women on a college campus in the Southeastern United States in the fall semester of 2021. Two senior nursing majors completed continuing education to be empowered as peer-educators using The University of California San Francisco Beyond the Pill framework. They engaged directly with nursing faculty stakeholders and the research team to facilitate group contraceptive counseling sessions for sixty-two of their peers, through the shared social network of their sorority. Two contraceptive counseling sessions were piloted during the 2 month intervention period. The majority of respondents answered “yes” to previously having a class that included content on sexual health and/or reproduction, although key findings highlighted a gap between knowledge and self-efficacy within this population. Sexual health content and information related to values, practical skills and communication, including negotiating safe sex and condom use, were requested by respondents. While 70% of the respondents received a prescription or method of birth control within the last year, none of the respondents were accessing their contraceptive care through university health service services. Of the 18 session participants, 10 indicated they were “extremely or somewhat likely” to make changes to their current contraceptive plan after the session content. Results identify the underutilization of student health for well-woman exams, STI screenings, and prescriptions or methods of birth control. A tremendous opportunity awaits

student health services to provide evidence-based contraceptive care to a currently vulnerable and underserved population of young women.

**Keywords:** *college health, sexual health information, peer education, contraception, contraceptive counseling, CBPR research*

## Introduction and Background

Sexual health is defined by the World Health Organization (WHO) as:

A state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled (WHO, 2022).

Individual sexual health and well-being is a function of:

- access to quality information about sex and sexuality;
- knowledge about the risks and unintended consequences of unsafe sexual activity;
- access to sexual health care;
- an environment that encourages and fosters sexual health (WHO, 2022).

In 2021, the United States Department of Education reported 66%, or 2.1 million, of high school graduates attended college (USDOE, 2021). Of those 2.1 million high school graduates attending college, immediate college enrollment rate was higher for female students (70%) as opposed to males (62%) (USDOE, 2021). College students are immersed in a transition period called “emerging adulthood” during which they feel in between adolescence and adulthood. This stage includes the exploration and development of their adult identities, characterized by the acceptance of personal responsibility, which includes making decisions about their sexual health (Lechner et al., 2013).

The American College Health Association – National College Health Assessment II is a national research survey that collects data regarding college students’ habits, behaviors, and

perceptions on prevalent health topics (American College Health Association [ACHA], 2019). The survey data suggests that although the majority of college students are sexually active and are covered by their parents' health insurance, the uptake of preventive health services is low. Use of contraception is relatively high, though not consistent enough to optimize efficacy, leaving students at risk for unintended pregnancy and sexually transmitted infections (STIs) (ACHA, 2019). Misinformation and fears of side effects reduce the likelihood of contraception usage, and according to the American College of Obstetricians and Gynecologists (ACOG) (2019a) and Kaye et al. (2009), education and communication with young adults should be implemented to reduce and prevent unintended pregnancies and promote sexual health.

The Institute for Women's Policy Research (IWPR) completed a briefing in 2020, *Improving Success in Higher Education through Increased Access to Reproductive Health Services*. Their recommendations include the need to embrace an all-encompassing approach to improving student outcomes, including interventions to connect students with comprehensive reproductive healthcare. Students must have the opportunity to access a range of reproductive health services in order to support students' health needs and support their educational journey at the same time (IWPR, 2020). However, variable access to medically accurate, evidence-based, and age-appropriate sex education before entering college contributes to well-established gaps in the knowledge and self-efficacy of college students related to their sexual health. Withholding or providing misleading information about human sexuality and reproductive health, including contraceptive education and STI prevention, does not equip adolescents entering college with necessary conditions to protect and promote their sexual health (Keller, 2020).



## **Problem Statement**

Gaps in knowledge overlap with barriers accessing contraception and reproductive health care making women in college a vulnerable, underserved population with increased risk for unintended pregnancy, STIs and the variety of social and emotional outcomes associated with each. The need for medically accurate, evidence-based, contraceptive education coupled with access to care is clear.

## **Purpose**

Community based participatory research was used to develop and implement a peer education program targeting sorority women on a college campus in the Southeastern United States in the fall semester of 2021. This project engaged and empowered nursing students as peer educators using The University of California San Francisco Beyond the Pill framework, to facilitate group contraceptive counseling sessions for their peers through the shared social network of their sorority. Beyond the primary objective of providing access to evidence-based contraceptive counseling to college women in and through the sorority network, the project's secondary objective was to build capacity and infrastructure for disseminating a broader range of women's health promotion content to this underserved and vulnerable population.

## **Review of Evidence**

### **Access to Knowledge**

Numerous studies highlight the variability in sex education standards and models throughout the United States (Guttmacher Institute, 2017b; Planned Parenthood, 2016; Shapiro & Brown, 2018). While 11 states have curriculum standards requiring healthy relationships, consent, and sexual assault in their sex education programs, the majority of public-school students do not receive information through a formal program (Shapiro & Brown, 2018). Many

states have little guidance on what should be addressed in sex education courses, especially regarding discussions of pregnancy prevention and sexually transmitted infections (Guttmacher Institute, 2017b; Shapiro & Brown, 2018). According to the 2009 National Survey of Reproductive and Contraceptive Knowledge representing 1800 unmarried adults 18-29 years old, 78% of respondents reported they have had a class on sex education of some sort; however one quarter of the sample was last exposed to sex education programming before the age of 15 (Kaye et al., 2009).

Abstinence-only programs have not met the health needs of young people, and evidence suggests they have caused harm by contributing to social stigma, shame and guilt that in turn may impede women from seeking counseling, care, or support from healthcare professionals (Djamba et al., 2012; Guttmacher Institute, 2017a; Guttmacher Institute, 2017b; Hall et al., 2016; Planned Parenthood, 2016; Kingsberg et al., 2019). Longitudinal research suggests that when adolescents who have attempted to abstain from sex end up engaging in intercourse, many do not use condoms (Keller, 2020). Abstinence-only programs not only are ineffective at their goal of preventing young people from becoming sexually active before marriage, but the strategy also creates barriers for young adults in making informed decisions regarding their health (Boyer, 2018). “Failing” abstinence creates feelings of judgment, fear, guilt, and shame, contributing negatively to the mental health of young women and impeding access to care (Boyer, 2018; Keller, 2020; Kingsberg et al., 2019). Conversely, teens who report having positive conversations about sex are more likely to delay first sex, have fewer partners, and use condoms and other forms of birth control to prevent infection and pregnancy (Planned Parenthood, 2016). Sexual health education programs that incorporate youth-centered positive messages, rights-based content, and interactive learning and skill building have been effective in equipping teens

with not only the knowledge, but healthy habits, practical skills and communication tools that inform sexual health and wellbeing (Hall et al., 2016).

According to findings from the Centers for Disease Control and Prevention (CDC) National Survey of Family Growth 2017 through 2019, the mean age at first vaginal intercourse was 17.1 years for women aged 15 to 49 (CDC, 2021a). Entering college without foundational knowledge about human sex and sexuality, or knowledge about the risks and unintended consequences of unsafe sexual activity leaves students at risk for myriad poor physical and mental health outcomes, not to mention threats to their educational and professional goals. Thus, understanding how and where they access information and resources is an important step toward designing public health interventions to promote student's sexual health.

In a recent survey completed by 258 college students at a public university in New Jersey, students reported they were "most likely to or always" use the internet for health information, followed by a medical professional, and friends or family (Basch et al., 2018). With the continued rapid growth of social media and technology, the internet is a common place for adolescents, teens, and young adults to seek information (ACOG, 2016; Guttmacher Institute, 2017b; Hall et al., 2016). Those with limited access to care, such as busy schedules and financial issues were also more like to search for and access information online and reported using the internet as a tool to know when and why to seek healthcare (Basch et al., 2018). Although most stated they use the Internet, they rarely or never use social media, in favor of gathering information from several web sources to evaluate the accuracy of information, but over half said they were unlikely to verify with a medical professional (Basch et al., 2018). One hundred thirty-five respondents stated they would access information from friends or family. While healthcare providers were mentioned as individuals who facilitated access to sexual health

resources on and off campus, more often participants pointed out other people they would seek out for access to information including professors, academic advisors, and peers as resources for sexual health information. This suggests the importance of relationship and trust as facilitators to health seeking behavior.

I think if younger people taught us about this stuff [sexual health], like maybe RAs, and hall directors instead of older doctors or therapists, I think it [would] get across more...someone who can relate more to sexual health in the 2000's. (Garcia et al., 2014).

More than one student stated their choice would also be utilizing an RA or hall director to teach students about sexual health information, since they seem more relatable and age-appropriate. These thoughts were represented by both genders of participants (Garcia et al., 2014).

### **Access to Care**

The American College Health Association (ACHA) 2020 Sexual Health Services Survey completed by 152 institutes of higher education (IHE), found that the impact of the COVID-19 pandemic brought the number of visits down, less than half of what it had been over the last several years (ACHA, 2021). Most visits at participating student health services were among women. Specific to sexual health services, almost all institutions offered pregnancy testing (98%), STI/HIV screening (89%), and contraception services (89%). Eighty-nine percent of student health centers stated they provide clinical sexual health services. Interestingly, 233,411 female patients under 25 were seen at the health centers, and 17% were tested for chlamydia (ACHA, 2021). While the ACHA stated this survey doesn't directly examine how many of those females were sexually active or screened elsewhere, according to recent results from the National College Health Assessment, over 50% of female undergraduates reported being sexually active in the past year (ACHA, 2021).

A study conducted by The Division of General Pediatrics and Adolescent Health at the University of Minnesota examined college students' perceptions of healthcare providers, specifically when accessing sexual health resources, and recruited participants from five colleges in a Midwestern state (Garcia et al., 2014). The sample size of 52 undergraduate students in 2014 stated they wanted their on-campus healthcare providers to be knowledgeable, warm, and welcoming (Garcia et al., 2014). Specifically, a respondent shared, "I would want to talk to somebody that has a decent background in that, a nurse or a doctor of some sort, or a psychologist that deals with sexual-type things" (Garcia et al., 2014).

But another respondent's opinion highlighted a perceived reluctance to being cared for by campus-based providers:

Well, I usually go to a regular doctor, because I trust them more... I guess if you want a real, real doctor that works in an actual hospital or clinic, I would go there. Here, it's pretty much the same, but just in the college community, so it feels different. When I go in there, I just feel like they don't have the technology that real doctors do, so they have to send stuff out and then bring it back. (Garcia et al., 2014)

A 2014 study explored demographic, financial, and psychosocial barriers to using or not using reproductive health services in 212 college students from a public university in Northern California (Bersamin et al., 2017). Participants rated the extent to which the following acted as barriers in obtaining reproductive healthcare: transportation, cost, disapproval from parents, disapproval from friends, embarrassment, concerns about privacy/confidentiality, inconvenient hours, distrust of health care providers, gender of provider, and fear of test results. These college students were most likely to receive reproductive healthcare from a primary care setting or school-based setting. Predictors for receiving care among females included having sexual

intercourse, but for males the strongest predictor was the knowledge of services available. Participants that visited a reproductive healthcare setting were more likely to have lower levels of perceived social disapproval, fear of results, and cost barriers, while also having higher knowledge of reproductive healthcare access than those who had not visited a reproductive healthcare setting (Bersamin et al., 2017). Bersamin et al. (2017) emphasized the opportunity that exists for colleges and universities to enhance student engagement in information campaigns to increase access to health seeking and risk reduction.

### **Peer Education and Sexual Health**

Recognizing that adolescents and young adults are actively seeking and accessing information about sexual health through peers and online suggests that health promotion messaging and public health content should leverage social networks in order to meet people where they are with the information they need and want. A systematic review by Wong et al. (2019) evaluated eight studies that conducted peer-led education programs to disseminate sexual health information to college students. Peer-led sexual health education among college students was effective in increasing knowledge regarding sexual health topics: HIV prevention, changing sexual health behaviors including HIV testing and condom use, saying no to sex without a condom, and effective communication with partners about sex (Wong et al., 2019). A previous peer sexual health education program investigated topics of postponing sexual involvement, preventing unintended pregnancy, limiting transmission of HIV and other STDs, avoiding sexual decision-making when under the influence of alcohol and other drugs, and improving parent-teen communication (Layzer et al., 2014). Implementation of this study took place over one semester and participants claimed to have increased knowledge and changed behavioral intentions and attitudes regarding their sexual health after the program (Layzer et al., 2014). Peer educators

obtained training to facilitate five, 90-minute workshops to high school peers throughout the semester, with the supervision of program advisors. Debriefing occurred after each session between advisors and peer educators. Some participants in this study stated this was the first time they were exposed to a peer education model, and reported finding it easier to receive information about sexual health from peers than adults (Layzer et al., 2014). Challenges included recruiting peer educators that were representative of the community and ensuring educators were fully prepared for their small-group activities (Layzer et al., 2014). Data was collected utilizing notes from observations, focus groups and interviews and in post-session debriefing, participants reported their peer educators were organized, prepared, and preferred to receive sexual health content from their peers as opposed to adults (Layzer et al., 2014).

According to Layzer et al. (2014) and Wong et al. (2019) teenagers and college age students may be more receptive to receiving sexual health information through peer education. Wong et al. (2019) specifically stated peer-led education programs with a focus on increasing self-efficacy to empower students with the knowledge to refuse sex without a condom, communicating with partners about sex, and using condoms for sex have been effective at increasing these sexual health behaviors.

### **Environments that Foster Sexual Health**

The understanding of social networks is key to identifying access points for health promotion messaging (Garcia del Castillo et al., 2020; Latkin & Knowlton, 2020; Wright, 2016). Another important aspect of emerging adulthood for many college-aged women is participation in Greek life: large, organized social networks providing academic support, community service engagement, and friendships (Recruitment Guide, 2021). A large social network offers a source of peer influence and becoming a member of a Greek organization begins that relationship.

According to The Hechinger Report (2021), there is an estimated 750,000 current sorority and fraternity members in college, with membership ranging from under five percent on some campuses to more than 50% on others. Greek life is known to be especially popular in the Southern United States (Barshay, 2021).

Numerous studies have focused on the bias, social critique, high-risk behaviors, and negative health behaviors attributed to affiliation with Greek sororities and fraternities (Goldsberry et al., 2016; Harrington et al., 1999; Russett & Oates, 2019; Scott-Sheldon et al., 2008). Studies have evaluated interventions promoting harm-reduction, STI knowledge, alcohol education, and alcohol-specific risk reduction for several decades (Abadi et al., 2020; Goldsberry et al., 2016; Harrington et al., 1999; Russet & Oates, 2019). However, studies examining the opportunity to engage Greek members in peer education models have largely focused on risk reduction rather than on community empowerment through peer engagement. One peer education study focused on alcohol use and misuse among Greek students, while another focused on increasing organ donor designation among members (Abadi et al., 2020; Loughery et al., 2017). Previous studies have also explored the distribution of sexual health information among college students, but no studies have prioritized the Greek community as recipients of contraceptive counseling through peer education. A similar peer education study delivering sexual health information to high school students found participants preferred to learn sexual health information from peers, rather than adults (Layzer et al., 2014). Through the use of peer-led education, female college students in sororities can benefit from the reinforcement and encouragement of previously presented evidence-based sexual health content (Layzer et al., 2014 & Wong et al., 2019).



## **Theoretical Model**

Community based participatory research (CBPR) is a collaborative research approach in which researchers, community members, and organizational representatives share power, resources, and decision-making at every level of the research process (Goodman et al., 2017). Not only is there ongoing collaboration, but community members and organizational representatives are included as active members of the research team. These “components” work together creating an action by sharing in decision making, expertise, and ownership of the project at hand. There is continuous interaction, as shown in Figure 1. Based on these exchanges, it determines how interactions occur and decisions are made moving forward. Including community members as active members of the research team offers a unique perspective into the community, permitting increased understanding and knowledge of the population at hand. The integration of knowledge with action is the cornerstone of CBPR, with the goal of improvements in health and well-being of the population at large (Goodman et al., 2017).

## **Project Design**

Community based participatory research was used to develop and implement a peer-education program targeting sorority women at Western Kentucky University (WKU) in Bowling Green, Kentucky in the fall semester of 2021. The project was approved by the Belmont University Institutional Review Board in June of 2021 and the Western Kentucky University Institutional Review Board in July of 2021.

### **Phase 1: Assembling a Community Stakeholder Group**

The project leader began the formation of a community stakeholder group by reaching out to WKU School of Nursing (SON) faculty, specifically course coordinators for the Maternal Child Health course to pitch the project. Assistance with engagement of nursing students began

through Dr. Diana Wooden, DNP, FNP-BC and continued with Dr. Miranda Peterson, DNP, RN, CNE, previous and current Maternal Child Health course instructors, respectively. After engaging Dr. Peterson as a team member, the project leader, faculty advisor, and WKU SON faculty member planned the project pitch to nursing students. The undergraduate population at WKU is 15,895 (WKU Office of Institutional Research, 2019). The Greek community at WKU includes 2,175 active members, with 1,336 sorority women (WKU Greek Affairs, 2020a). A total of 15 sororities are active on WKU's campus, containing two organizations, The National Pan-Hellenic Council and The Panhellenic Council (WKU Greek Affairs, 2020b). Western Kentucky University SON offers numerous degree options, including the traditional Bachelor of Science in Nursing (BSN) program (WKU, 2021a). The BSN program is a full-time, four semester option for students who have successfully completed at least 63 credits of required pre-requisite courses (WKU Office of Institutional Research, 2019). Currently, the BSN program accepts up to 120 students per semester, with a present average of 90 students per semester (WKU Office of Institutional Research, 2019). During the third semester, students are enrolled in a Maternal and Child Health course, incorporating curriculum on providing care to women, infants, and children with alterations in health (WKU, 2021c).

Employing a peer education contraceptive counseling initiative within this unique network of college students, specifically sorority women, offered an opportunity for increased knowledge and a long-term goal of better health outcomes in this vulnerable population. Inviting the WKU SON students enrolled in a women's health curriculum course, in the third out of four-semester program was strategic. This was an important time in the BSN education at WKU, as the transition from student nurse to registered nurse will occur within six months. Essential VII, Clinical Prevention and Population Health, in *The Essentials of Baccalaureate Education for*

*Professional Nursing Practice* (2008), was also accomplished by the student nurses (American Association of Colleges of Nursing (AACN), 2008). Their experiences in providing health promotion and disease prevention at the individual and population levels align with the essentials for nursing practice and achieved the goal of improving population health (AACN, 2008). These women nursing students also overlap as sorority members, aiding in the facilitation of the relationship between their peers and the distribution of materials.

### **Phase 2: Recruitment of Peer Educators**

After the Fall 2021 semester began, the project leader presented the project, describing the opportunity in detail and inviting students to engage. This invitation was presented to the Maternal Child Health class, with an enrollment of 82 students, overviewing the project's significance, purpose, and expectations of peer educators. Members who were active in the university's Greek system and were also enrolled as full-time third semester nursing students were offered the opportunity to complete a 90-minute web-based training module developed by University of California San Francisco (UCSF) to improve the quality of contraceptive counseling available to reproductive-age individuals. The Maternal Child Health course faculty assisted in introducing the project to the class and allowed honors students who chose to participate credit towards their semester honor's project. The nursing students were introduced to how they would function as peer educators, offering their sorority peers evidence-based content on contraception as an extension of their course learning in Maternal and Child Health, and under the close supervision of the project advisor and WKU Maternal and Child Health faculty.

This project was designed to be nested within current curriculum during the BSN program to augment current course content on family planning and patient education. The

course faculty followed up the invitation from the project leader with an email of invitation and program description. See Appendix A and Appendix B. Students filled out a Qualtrics survey expressing their interest in participating as peer educators, why they would make a good peer educator, professional interests, experiences, and what motivated them to participate. The project leader followed up via email, inviting them to a Zoom meeting to further discuss project plans.

### **Phase 3: Stakeholder Engagement and Session Planning**

The project leader partnered with her Belmont faculty advisor, and WKU course faculty to provide structure and support to the CBPR process. The project leader, under the direct supervision and collaboration with the project advisor and WKU SON faculty met with the community stakeholder group, via Zoom, in October of 2021 to introduce the UCSF Beyond the Pill (BTP) framework and online module. Beyond the Pill offers a free, online training module, *Improving Access to the Full Range of Contraceptive Methods, Including IUDs & Implants*, geared towards contraceptive method education for healthcare providers and support staff (UCSF, 2021). Women who were active in the University's Greek life and also enrolled as third semester nursing students were empowered as content champions, preparing to actively engage their sorority sisters in evidence-based contraceptive counseling content under the supervision of the project leader, project advisor, and their course faculty. As shown in Figure 1, the three "components": the researchers, community members, and organizational representatives, collaborated in decision-making regarding planning, implementation, evaluation, and specific outcomes of the project sessions. The project leader and community stakeholder group discussed project session plans, including input on where, when, and how to host the sessions. Being sorority members of Delta Zeta, and nursing students, insight into the flow of chapter meetings

and the presentation of materials as peer educators were supported by the community stakeholder group. The decision was made to host sessions after the completion of weekly chapter meetings, occurring on Sundays on campus at WKU. After successful completion of the module, the community stakeholder group gave input and feedback regarding session outcomes and session plan outlines to the project leader.

In addition to the online module, BTP uses downloadable educational materials including charts, posters, and a video, designed for community members to utilize, understand, and disseminate information to peers (UCSF, 2021). See Appendix C and Appendix D. *Birth Control for Your Life*, is an 18-minute educational video featuring young women discussing their experiences with numerous birth control methods and providing comprehensive, evidence-based education regarding each (UCSF, 2021). A session outline and PowerPoint were created in collaboration with the peer educators and project advisor to guide the informational sessions. See Appendix E. The session outline included:

- overviewing expectations during session
- pre-session survey link
- ice breaker activity
- video and time for post-video discussion
- how to access additional information and contraceptive options on WKU's campus
- post-session survey

The opportunity to receive input from the nursing students, who were a piece of the target population, granted further customization of the sessions and outcomes, and aligned with the community being served. These exchanges determined how further interactions occurred and

decisions were made regarding session planning and content presentation. Specifically, actions through CBPR included informational session planning, the development of session outcomes, and the creation of evaluations of peer education.

#### **Phase 4: Creation of Data Collection Instruments**

The eight question pre-informational session survey was adapted from the 2009 National Survey of Reproductive and Contraceptive Knowledge, conducted by the Guttmacher Institute (Kaye et al., 2009). The purpose of the pre-session survey was to learn how many participants have received sex education in the past, and information about and access to knowledge of various contraceptive methods. The survey began with a brief introduction of the project and consent was implied by completing the survey. The first section of the pre-session survey captured information regarding age, whether a participant had a previous class that included information on sexual health and/or reproduction, and where the class occurred in multiple choice and select all that apply formats. The next section gauged the extent of access one had to different subjects pertaining to sexual health in a Likert scale format, with one representing “far too little” and five representing “far too much”. The third section captured information on where participants had received women’s health, STI screening, and prescription/method for birth control within the last year in a matrix table format. The fourth section captured information, in a Likert scale format, on the extent to which participants experienced a challenge in accessing women’s health services, with one representing “strongly agree” and five representing “strongly disagree”. The fifth section detailed the extent to which cost, time, place, fear, and shame/judgement limited their access to information and/or healthcare. Finally, the last question captured information regarding where a participant would go first to learn more about a birth control method. See Appendix F for adapted survey.

The ice breaker activity utilized an anonymous, live polling application addressing common myths and misinformation regarding sexual health and contraception. Materials regarding additional information and access included:

WKU offers sexual health supplies including male condoms, female condoms, lubricant, dental dams, pregnancy tests, and menstrual hygiene products in the Health Services Building on campus free to all students. WKU Graves Gilbert Clinic is the campus clinic students may utilize to schedule an appointment with a provider to discuss birth control options. (WKU, 2021b).

The five question post-informational session survey was adapted from the Center for Applied Linguistics (CAL) network (CAELA, 2016) and the ORTHO birth control satisfaction assessment tool (Mathias et al., 2006). The purpose of the post-session survey was to evaluate the learning structure of the peer-led sessions and to capture data regarding the participants satisfaction with their current method of contraception, as well as desire to access future women's health information using a peer education format. The first section addressed participants satisfaction with the content presented in the session, in a Likert scale format with one representing "strongly agree" and five representing "strongly disagree". The second section applied a matrix table, and captured information regarding participants' level of satisfaction with their current birth control plan, how likely one was to make changes to the plan after the content presented, and where one would go to gain access to services. The survey ended with an open-ended item gauging interest in other women's health topics participants may find valuable or interesting to access in a peer-led format and an anonymous question box for questions or comments. See Appendix G for adapted survey.

The adapted surveys were reviewed for content validity in conjunction with the project advisor and project team member. The surveys were adapted from other surveys and for this project were intended to explore the timing and perceived quality and utility of past sex education, information about and access to knowledge of various contraceptive methods, evaluation of the learning structure of the peer-led sessions, capture data regarding the participants satisfaction with their current method of contraception, and gauging their desire to access future women's health information using a peer education format (CAELA, 2016; Kaye et al., 2009; & Mathias et al., 2006). They cannot be deemed valid or reliable. The survey instruments were piloted with ten DNP students at Belmont University.

#### **Phase 5: Pilot of Sessions Led By Peer Educators**

During November and December 2021, the community stakeholder group led two informational sessions, with the project leader present, about contraception and family planning with their sorority peers. The content and materials were directly from the BTP framework and implementation described above. See Appendix E. Session participants had access to a Quick Response (QR) code and the survey link within the session PowerPoint and could use their mobile device or laptop to gain access to each survey. The surveys were taken in the session room and each survey took no more than five minutes to complete. Participation in both surveys was voluntary and no identifying information was collected. An introduction within the first survey contained implied consent for the completion of the pre-session and post-session surveys. The pre-session survey was offered to all Delta Zeta members during a regularly scheduled chapter meeting to allow for more data collection regarding previous sex education and access to knowledge of various contraceptive methods.



The sessions were led by the Session Outline, see Appendix E. Each session began with the project leader introducing herself and the peer educators as team members, overviewing expectations during the session including time and session participants engagement in open discussion, as they felt comfortable. The ice breaker activity began and open discussion as initiated by peer educators and session participants occurred. The BTP video was shown and post-video discussion and questions transpired. The peer educators, along with the Registered Nurse project leader, led discussion and answered questions. The sessions closed with a slide detailing how to access additional information and contraceptive options on WKU's campus and the post-session survey was given to session participants. Donuts were offered at the completion of the session and survey completion. Eight participants joined the first session. Ten participants joined the second session.

## **Results**

The pre-informational session survey was taken by 63 sorority members during a regularly scheduled chapter meeting. Some survey respondents did not complete the entirety of the survey; therefore, the total response rates vary between categories. Their ages ranged from 18 to 23, with 98% falling between the ages of 18 and 21.

### **Sexual Health Education**

Ninety percent ( $n = 56$ ) of the 62 respondents who answered the question "yes" to previously having a class that included content on sexual health and/or reproduction. Of those 56, 11 of those respondents hadn't had sexual health and reproductive education since middle school, 30 were offered the information in high school only, and the 13 whom engaged a healthcare setting for information also had middle school and/or high school sexual health and reproduction content.

## Sexual Health Content

Eighty-nine percent ( $n = 54$ ) of 61 respondents stated they have received “about right” or “too much” content regarding *the importance of waiting until marriage to have sex*. Ninety percent ( $n = 56$ ) of the 62 sorority women respondents felt they have received “about right” or “too much” content regarding *the importance of using birth control if you have sex*. Twenty-three of those 56 that felt they had received “about right” or “too much” content regarding *the importance of using birth control if you have sex*, then said they have received “too little” content pertaining to *the demonstration on how to use a condom*. Nine others also stated they received “too little” content on *how to use a condom*. See Table 1. Nineteen percent of respondents ( $n = 12$ ) stated they have received “too little” content on *how to say no to sex*, while 61% ( $n = 38$ ) identified they have received “about right” amount of information regarding this topic. Thirty-nine percent ( $n = 24$ ) of the 62 respondents felt they have received “too little” access to content pertaining to *the availability of different types of birth control methods*. Forty-nine percent ( $n = 30$ ) of the respondents felt they have received “too little” information on *support on where and how to access different birth control methods*. Similarly, 50% ( $n = 31$ ) of respondents felt they have received “too little” content on *the risks and benefits of a variety of birth control methods*. Fifty-one percent ( $n = 31$ ) felt they have received “too little” content focused on *the safety and efficacy of various birth control methods*.

## Access to Care

Sorority women were asked to identify where they have received women’s health services within the past year at WKU. See Table 2. Fifty-eight percent ( $n = 36$ ) of 62 respondents have never received a well-woman exam. Seventy-seven percent ( $n = 47$ ) of 61 respondents have never received STI screening. While 19 respondents have never received a

prescription or method of birth control, none of the respondents reported utilizing student health for the service. Of fifty-seven respondent completions, 39% ( $n = 22$ ) agreed they have experienced a challenge in accessing “good women’s health information”, while 42% ( $n = 24$ ) experienced a challenge in accessing care, specifically concerning STI testing and women’s health. Forty-one percent ( $n = 24$ ) of 58 respondents reported experiencing a challenge accessing birth control since starting college. See Table 3 for a summary of the challenges respondents felt limited their access to the birth control of their choice. These include *cost, time, place, fear, and shame/judgement*. Forty-five percent ( $n = 25$ ) of 56 respondents identified they would choose the Internet as the first place they would go to obtain more information regarding a new birth control method. Thirty-four percent ( $n = 19$ ) of 56 respondents chose a healthcare provider, followed by mother or father ( $n = 6$ ), friends ( $n = 5$ ), and siblings or other relatives ( $n = 1$ ).

### **Post-Session Satisfaction**

The post-informational session survey was completed by 18 session participants. All participants agreed the topics were relevant, the content was organized and easy to understand, peer educators were knowledgeable and well prepared, and the session topics were enjoyable. Seventeen participants agreed they would like to attend more sessions regarding women’s health promotion material in this format, specifically stating the costs of birth control, mental health and sexual assault, menstrual hygiene, cancer screenings, and general women’s health promotion information, would be interesting and valuable to them.

### **Current Contraceptive Satisfaction**

Respondents then answered a series of questions regarding satisfaction with their current birth control plan. See Table 4. Of the 18 session participants, 10 indicated they were

“extremely or somewhat likely” to make changes to their current contraceptive plan after the session content. Sixteen of 18 respondents identified a private healthcare office as the place they would utilize to access contraceptive services for their change, one chose student health, and one identified a public health clinic as their choice.

## **Discussion**

### **Education**

It was clear the majority of respondents reported exposure to sexual health education of some format, but the content and value was variable and outdated. In fact, 11 college women respondents hadn't received any since middle school. The components of empowerment and self-efficacy related to sexual health education were lacking. Although 90% of the college women stated they have received enough or too much content regarding the importance of using birth control if having sex, 53% felt they have received too little content pertaining to the demonstration on how to use a condom. This supports a clear gap between knowledge and self-efficacy within this group of college women. Sexual health content and information related to values and self-efficacy, including negotiating safe sex and condom use, were requested by respondents. According to ACOG, comprehensive sexuality education must incorporate information on healthy sexual and nonsexual relationships, communication strategies, consent and decision making, recognizing and preventing sexual violence, and healthy relationships (ACOG, 2016).

These women have been taught, and perhaps overemphasized regarding:

- waiting until marriage to have sex;
- to use birth control if having sex.

These women have not been adequately taught:

- how to use a condom;
- how to say no to sex;
- the availability of different types of birth control methods;
- support on where and how to access different birth control methods;
- the risks and benefits of a variety of birth control methods;
- the safety and efficacy of various birth control methods.

Entering college without being armed with adequate and accurate sexual health education raises concern for one's ability to make the correct decisions when engaging in sexual activities.

Identifying this gap highlights an opportunity for targeted health promotion to augment knowledge with skills and confidence.

### **Access to Care**

Seventy percent of respondents reported accessing birth control within the past year, and while this doesn't presume sexual activity, it does proxy for access to reproductive health care. Respondents reported challenges in accessing the birth control they wanted including cost, time, place, fear, and shame/judgement. There is a clear high uptake of accessing a birth control method, but a lack of understanding regarding the efficacy of different methods has a high risk of failure. Of note, the high uptake of oral contraceptive pills in this population should not be interpreted as evidence that they are accessing methods that reflect their preferences. After the informational sessions, ten of 18 participants stated they were likely to make a contraceptive plan change. What these women are accessing reflects what is easily obtainable, not necessarily one's preferred method. Therefore, when the opportunity is presented and they learn more, informed choices can be made that reflect each woman's preferences and not just what she can afford or

easily access. These women also reported a challenge in accessing both women's health information and access to care, specifically including STI testing and well woman care. Although 70% of respondents reported accessing birth control within the past year, zero respondents utilized Student Health Services (SHS) to obtain a prescription or method. While the access to birth control is high, 58% have never received a well-woman exam and 77% have never received STI screening. A tremendous opportunity awaits WKU Student Health to provide evidence-based contraceptive care, including counseling. This can and should be not only offered, but actively promoted, at Student Health Services on campus and through the grassroots communication channel established through this project.

### **Peer Education**

All 18 session participants reported that their participation in the session was a good experience, including relevant, easy to understand content with well-prepared peer educators. The nursing students functioning as peer educators said leading the sessions was a positive experience, even helping them study for upcoming test content when discussing different forms of contraception. An opportunity exists for continuation of the innovative partnerships between the WKU SON and Student Health Services. It is a "win-win" for health promotion material for students, and practice experience, empowerment, and experiential education for nursing students. This peer education format can be leveraged for a variety of women's health topics. Research has shown the strategy of peer education can improve the quality of sexual and reproductive health services being offered to adolescents and young adults (ACOG, 2016; Briggs et al., 2021; Holtzman et al., 2019; Layzer et al., 2014).

### Implications for Practice

The successful implementation of peer-led contraceptive counseling sessions between WKU SON students their sorority peers created a structure – specifically the building and development of a pathway for providing women’s health information that did not exist before now. Ideally, through the use of CBPR, this project serves as a pilot to use this channel in the future to present women’s health promotion through peer education. The maintenance of this infrastructure is a future goal.

If the creation of a culture that promotes sexual health is sought, the services available to college students need to be designed with education, access, and culture in mind. This includes quality services, non-judgmental, inclusive, and the promotion of autonomy to increase student receptiveness. College women are accessing care away from their parents for the first time, thus making an effort to empower them with information and putting resources where they can and want to access them is pertinent. One of these strategies includes peer education.

Partnering with the WKU SON students and offering the chance to be trained as peer educators allows for an innovative and cost-effective approach to shift cultural norms of campus sexual health. Referring to *The Essentials of Baccalaureate Education for Professional Nursing Practice* (2008), Essentials III, VII, and VIII are accomplished by future nurses practicing as peer educators. Essential III, Scholarship for Evidence Based Practice, is accomplished through the use of evidence-based contraceptive information, which translates to the use of evidence-based health promotion for peer education (AACN, 2008). Essential VII, Clinical Prevention and Population Health, is providing health promotion and disease prevention at the individual and population levels with the goal of improving population health (AACN, 2008). Nursing students as peer educators provided evidence-based contraceptive materials and information to

their peers, who were college-age women, gaining firsthand experience in population health education. Essential VIII, Professionalism and Professional Values, refers to the fundamental values within the discipline of nursing (AACN, 2008). Nursing students gained the opportunity to experience altruism, human dignity, and social justice during their peer education teaching role.

Universities offer a unique opportunity to reduce barriers in accessing reproductive health services by promoting available services, utilizing technology, and incorporating sexual and reproductive information in to classes (Bersamin et al., 2017 & Garcia et al., 2014). Ensuring students are aware of the availability to resources, the providers at the clinic, the low cost, flexible hours, and patient confidentiality that should be traits of the student-based center, could result in an increased use of services (Bersamin et al., 2017 & Garcia et al., 2014). This group of women endorses experiencing barriers to access including cost, convenience, and shame which highlights an opportunity for SHS to extend their outreach and access to meet students where they are with access to care and services that they're telling providers they need. This outreach may include SHS employees having one on one discussions with sorority chapters on campus to better advertise available services, including costs, location, and hours. Future steps might also include better mapping of resources on campus with the idea of convenience and privacy in mind for students to increase utilization. Having discussions with sorority chapters would allow SHS access to large populations of college women, and would also prompt the opportunity for students to ask questions in a group discussion format.

While ACOG recommends the first gynecologic visit should occur between ages 13 and 38 of 62 pre-session respondents had never received a well-woman exam (ACOG, 2019b). The prevalence rates of certain STIs are highest among adolescents and young adults and ACOG



recommends yearly STI screening for sexually active women younger than 25 (ACOG, 2021; CDC, 2021b). Forty-seven respondents had never received STI screening. The opportunity exists for SHS to promote routine screening for STIs as a standard of care, a marker of self-care, and wellness in support of whole person health and wellness. Health promotion and empowerment from a wellness perspective should be advertised to increase adherence to guidelines, and more importantly, increase access to care for college women.

### **Strengths, Limitations, and Future Directions**

One of the greatest strengths of this project was the utilization of the CBPR framework. Within the CBPR framework, power and control is given to the participants and community members themselves (Community Tool Box, 2014). This called for iterative processes of reflection, action, and collaboration between participants, sharing in decision making, expertise, and ownership. A unique perspective was gained from including participants as active members of the research team, including reaching tailored solutions for a unique grounded population. This strength, and cornerstone of CBPR, also means the findings discussed above are not highly generalizable to other populations. The CBPR process can be replicated in a variety of social contexts within the university system, using the SON and BSN curriculum as a resource for recruiting and empowering peer educators. Although the CBPR process can be replicated, this project was formatted and implemented based on specific characteristics within the WKU sorority and SON groups. However, this tailored project to a unique population is very valuable to WKU SHS. By using peer educators who were offering contraception information, but also were familiar with the women they were offering information to, allowed for enhanced experiences and trust between the participants in small group settings. The nursing students who were also sorority members, knew the intimate functioning of the sorority chapter, allowing

access to setting up meetings at the best timeframe available based on convenience and number of participants. The small sample size of this pilot project is another limitation. As a pilot project this was expected, and the decision to offer the pre-survey to all members present at chapter was decided upon. It should be noted that this project was largely heteronormative and did not include men. The importance of including men in discussion of contraception and sexual health are of critical importance to women's health and campus health (Davis et al., 2016; Hardee et al., 2017; Kriel et al., 2019). Contraception is not just a women's health issue, however, empowering women with knowledge and access to resources is critically important to women's health.

This peer education model could be replicated in alternative social networks beyond the sorority, but the sorority, on this campus, was an access point to many women on campus. Future opportunities from this project include the utilization of the channel created between the WKU SON and sorority women on campus. A future direction would include engaging a WKU SHS team member to engage in the channel, offering a direct communication to the place students can access sexual healthcare at WKU. This engagement would also allow SHS to realize the barriers WKU women may be facing to accessing care on campus.

### **Conclusions**

The successful implementation of this pilot project presented evidence based contraceptive information to sorority women in a peer-led setting. Many positive impacts can come from this project, including informing college women with information and access to choosing a method of contraception based on their needs and wants. The peer educators also began to function in their role as future healthcare providers, practicing health education in a small group setting. There also exists a possibility to positively impact the utilization of SHS on

the WKU campus by detailing the underutilization within this group of women, and recognizing the need for interventions to assist in developing health promotion initiatives that are responsive to the gaps identified by this project. The structure that was created by this project should be utilized to provide additional women's health promotion material and information through peer education. Future projects should also engage SHS as a member of the research team, allowing a direct contact regarding access to care discussion, questions, and engagement. Future research should further focus on barriers related to SHS underutilization for women's healthcare as well as the effects of contraceptive peer education on one's likelihood to pursue and go through with a contraceptive plan change.

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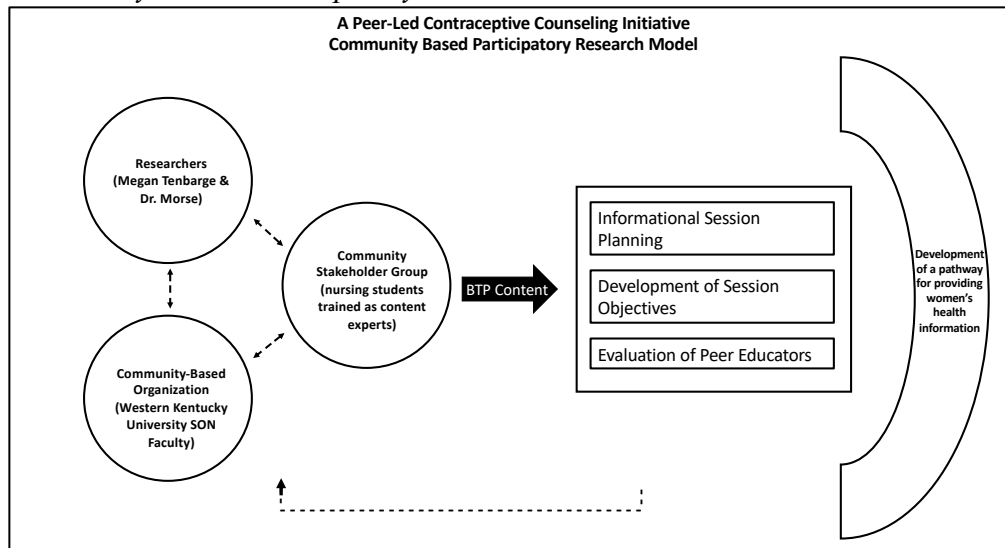
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Figure

Figure 1

*Community Based Participatory Research Model*



## Tables

Table 1

*Amount of access participants have received regarding sexual health education*

	<b>“Extent to which you have had access to the following content”</b>				
	<b>Far too little</b>	<b>Too little</b>	<b>About right</b>	<b>Too much</b>	<b>Far too much</b>
<b>How to say no to sex.</b> N = 62	4	8	38	9	3
<b>Importance of waiting until marriage to have sex.</b> N = 61	1	6	29	11	14
<b>The availability of different types of birth control methods.</b> N = 62	8	16	29	6	3
<b>Support or tips on where and how to access different birth control methods.</b> N = 62	9	21	27	2	3
<b>The risks and benefits of a variety of birth control methods.</b> N = 62	10	21	28	3	0
<b>The safety and efficacy of various birth control methods.</b> N = 61	6	25	27	2	1

**Table 2***Location of Services Within Past Year at WKU*

Service	Location of Service					
	Student Health	Private Healthcare Office	Community/ Public Health Clinic	Family Planning Center/ Planned Parenthood	Urgent Care/Hospital	Never Received
<b>Well-Woman Exam</b> N = 62	2	22	0	1	1	36
<b>STI Screening</b> N = 61	1	10	1	0	2	47
<b>Prescription or method for birth control</b> N = 62	0	40	2	1	0	19

**Table 3***Challenges in Accessing Birth Control*

	Degree of Challenge					
	Strongly Agree	Somewhat Agree	Neither	Somewhat Disagree	Strongly Disagree	
<b>Cost</b> N = 58	10	8	16	12	12	
<b>Time</b> N = 58	7	14	22	7	8	
<b>Place</b> N = 58	7	18	15	9	9	
<b>Fear</b> N = 58	12	15	19	4	8	
<b>Shame/Judgement</b> N = 58	8	10	16	7	17	

**Table 4***Current Contraceptive Satisfaction*

<b>Statements regarding current contraceptive</b>	<b>Degree of Satisfaction</b>				
	<b>Strongly Agree</b>	<b>Somewhat Agree</b>	<b>Neither</b>	<b>Somewhat Disagree</b>	<b>Strongly Disagree</b>
<b>I like my current contraceptive plan.</b> N = 18	8	2	4	4	0
<b>My plan is safe.</b> N = 18	10	3	3	2	0
<b>My plan is effective at preventing pregnancy.</b> N = 18	8	5	3	2	0
<b>My plan is effective at preventing STIs.</b> N = 18	8	2	2	3	3
<b>My plan is easy to use.</b> N = 17	7	5	3	2	0
<b>My plan is easy to access.</b> N = 18	8	7	3	0	0
<b>My plan is affordable.</b> N = 18	12	4	1	1	0
<b>My plan works for me.</b> N = 18	8	3	3	4	0
<b>My plan works for my partner(s).</b> N = 18	10	2	5	1	0

## Appendix

### Appendix A

#### *Letter of Invitation*

Hello WKU SON Students!

Are you a WKU SON student who is also a *sorority member* or are you an *Honor's College student*?

Megan Tenbarga is a graduate of this program and was also a sorority woman and she is now at Belmont University in Nashville, finishing her DNP. She has designed a project to improve access for college women to evidence-based counseling on contraception.

She is interested in partnering with sorority members in the school of nursing, to cofacilitate educational sessions with peers in their sorority. You would work with Megan to complete an online training module containing experiential content that includes therapeutic communication strategies and best practices for contraceptive care.

If you are in the Honor's College, this could qualify as your honor's project.

This semester we have capacity to prepare up to 10 students as peer educators. Please review the attached project description, which outlines expectations and attendance requirements. By volunteering, you are consenting to participate in Megan's Belmont University DNP Scholarly Project.

[CLICK HERE](#) if you are interested in participating.

The survey can also be reached by following this link:

[https://belmont.az1.qualtrics.com/jfe/form/SV\\_1S8IAkt2But5fjo](https://belmont.az1.qualtrics.com/jfe/form/SV_1S8IAkt2But5fjo)

If you have further questions, please contact Megan at [megan.tenbarga@pop.belmont.edu](mailto:megan.tenbarga@pop.belmont.edu).



## Appendix B

### *Program Description Email*

#### **A Peer-Led Evidence-Based Contraceptive Counseling Initiative Program Description**

To participate you must:

- Attend a zoom call with Dr. Wooden and Megan Tenbarga over the course of the semester detailing the project.
- Complete 90-minute Beyond the Pill web-based training module by UCSF by October 8, 2021 and upload completion certificate.
- Collaborate with Megan Tenbarga and Dr. Wooden to decide how best to engage their sisters in contraceptive counseling sessions.
- Coordinate and host at least 1 educational session for sorority peers who want to attend.
  - The session will include an [18-minute informational video](#) reviewing different methods of contraception.
- Complete a discussion board format reflection by the end of the fall semester.

Note: no grades will be given for participation. As long as project requirements are met, 6 hours of clinical credit will be given.

We estimate your participation in this project will take about the time of a 6-hour clinical day, through which you may earn up to 6 clinical hours. You may withdraw your participation at any time, however early withdrawal may limit the number of clinical hours you receive.

Megan Tenbarga, RN, BSN will co-facilitate, and be present via Zoom, to provide both supervision and support to nursing students and sorority members during the sessions.

If you have further questions, please contact Megan at [megan.tenbarga@pop.belmont.edu](mailto:megan.tenbarga@pop.belmont.edu).

## Appendix C

### *Birth Control for Your Life*



# Appendix D

## How Well Does Birth Control Work?

### HOW WELL DOES BIRTH CONTROL WORK?

**Really, really well**

- The Implant**: Works, hassle-free... Up to 5 years
- IUDs**: Up to 7 years
- Copper IUD**: Up to 12 years
- Sterilization**: Forever

**What is your chance of getting pregnant?**

Less than 1 in 100

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**Pretty well**

- The Pill**: For it to work best, use it... Every. Single. Day.
- The Patch**: Every week
- The Ring**: Every month
- The Shot**: Every 3 months

6-9 in 100, depending on method

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**Not as well**

- Pulling Out**
- Fertility Awareness**
- Internal Condom**
- Condom**

Use a condom with any other method for protection from STDs.

For each of these methods to work, you or your partner have to use it every single time you have sex.

12-24 in 100, depending on method

**FYI, without birth control, over 90 in 100 young people get pregnant in a year.**

**Logos:** BEDSIDER, Bisby Center for Global Reproductive Health, Beyond the Pill, CC BY-NC-ND

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## Appendix E

### *Session Plan Outline*

## Peer-Led Informational Session Plan

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### Overview

Each informational session will ideally begin with completion of a pre-survey by all participants. The participants will then view the screening of “Birth Control For Your Life”, the 18-minute module video developed by UCSF BTP. Next, the peer educators facilitate discussion with participants based on the educational video, allowing for feedback, things learned, and possible questions. This will be facilitated with the materials from the BTP framework, including the poster “How Well Does Birth Control Work”. The session will close with the post-survey for participants to complete. A question box will be utilized for anonymous questions and the peer educators will be able to provide answers to the questions in a group setting at the next session. I estimate the sessions to last 30-45 minutes.

### Materials

- Surveys
- BTP Video
- BTP posters
- Question Box

### Activities

- Complete Pre-Survey
- “Birth Control For Your Life” video
- Utilize BTP educational materials for discussion
- Post-Survey completion
- Question box utilization

### Evaluation

- Peer educators follow-up with Megan Tenbarga post session for debriefing on what went well and what needs improvement

## Appendix F

### *Adapted Pre-Session Survey*

*Hello! You are being invited to participate in a peer-led education session on contraception. This session is part of Megan Tenberge's DNP project, the goal of which is to make high-quality information about birth control accessible to people who are interested in talking and learning more about the full range of methods, including birth control pills, patches and the long-acting methods including implants and IUDs. You will be invited to complete a short survey both before and after the session today. Each survey will take no more than 5 minutes. Your responses are completely anonymous. By completing the surveys, you are consenting to have your answers recorded and analyzed. We hope the content is helpful to you and appreciate the opportunity to learn more about how to improve information and access to quality contraceptive care.*

How old are you?

- 17
- 18
- 19
- 20
- 21
- 22
- 23

Have you ever had a science or health class that included content on sexual health or reproduction?

- Yes
- No
- Don't Know
- Prefer not to say

Where were you offered information on sexual health and reproduction? Select all that apply.

- Middle School
- High School
- Church/Youth Group
- Healthcare setting
- Other \_\_\_\_\_
- I have not been offered information on sexual health and reproduction.

**The next section includes several statements about the extent to which you have had access to any of the following content. Please answer based on how much access you have received for each statement.**

	Far too little	Too little	About right	Too Much	Far too much
The importance of using birth control if you have sex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A demonstration on how to use a condom.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to say 'no' to sex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The importance of waiting until marriage to have sex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The availability of different types of birth control methods.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support or tips on where and how to access different birth control methods.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The risks and benefits of a variety of birth control methods.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The safety and efficacy of various birth control methods.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In the past year at WKU, please indicate where you have received each of the following services.

	Student Health	Private Doctor's Office	Community or Public Health Clinic	Family Planning/Planned Parenthood Services	Urgent Care/Hospital	Never received these type of services
Well-Woman Exam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
STI Screening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prescription for birth control or a method of birth control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The next questions are going to ask about your access to information and care. Since you started college, to what extent have you experienced a challenge in accessing the following:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Good Women's Health information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to care (STI testing, Women's health)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to birth control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following may limit access to information and/or healthcare for college students. To what extent do each of the following contribute to any challenge you experience in accessing the birth control you want?

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Place	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shame/Judgement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you heard about a new method of birth control, like from social media, TV, or from someone you knew, and you wanted to learn more about it, where would you go first for more information?

- Your friends
- Your partner (current or past)
- Your mother or father
- Siblings or other relatives
- A healthcare provider (Doctor, Nurse Practitioner, Nurse)
- A teacher or counselor
- A minister, priest, or rabbi
- The internet
- Books, magazines, or pamphlets
- TV or radio
- Don't know

## Appendix G

### *Adapted Post-Session Survey*

The following questions are a measure of your satisfaction with the content presented today, including your experience accessing this content from peer educators. Please indicate your level of agreement with the statements listed below.

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
The topics covered were relevant to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The content was organized and easy to understand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My peers were knowledgeable about the topics.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My peers were well prepared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participation and interaction were encouraged.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoyed that the topics were covered by my peers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to attend more sessions regarding women's health promotion material in this format.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your level of agreement with the following statements regarding your current birth control plan.

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I like my contraceptive plan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My plan is safe.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My plan is effective at preventing pregnancy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My plan is effective at preventing sexually transmitted infections.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My plan is easy to use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My plan is easy to access.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My plan is affordable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My plan works for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My plan works for my partner(s).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

After today's content, how likely are you to make changes to your contraceptive plan?

- Extremely likely
- Somewhat likely
- Neutral
- Somewhat unlikely
- Extremely unlikely

If you wanted to make changes to your current contraceptive plan, where would you go to access services?

- Student Health
- Private Doctor's Office
- Community or Public Health Clinic
- Family Planning/Planned Parenthood Services
- Urgent Care/Hospital
- Other \_\_\_\_\_

This particular session included content specific to contraception and specific methods. What other women's health topics would you find valuable or interesting to access in this format?

\_\_\_\_\_

\_\_\_\_\_

Here is an anonymous space to leave a question or comment you may have. It will be addressed and answered next session as able. Thank you!

\_\_\_\_\_