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PREVENTING UNPLANNED PREGNANCIES: THE IMPACT OF PREVENTION EDUCATION

A DNP Project Submitted to the Graduate Faculty of Jacksonville State University in Partial Fulfillment of the Requirements for the Degree of Doctor of Nursing Practice

By

ELIZA DUDLEY

Jacksonville, Alabama

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ABSTRACT

Teenage pregnancy and unplanned parenthood are social issues in many communities, states, and developed and undeveloped countries. The impact of early, unplanned pregnancy is detrimental to the adolescent's health, mental health, and physical wellbeing. Teenage pregnancy may be considered a social issue that is often the result of inadequate sexual and reproductive education, both in adult parents and teenagers. Despite recent reductions in teenage pregnancies, in recent years, more than 20 million teenagers experienced parenthood before graduating from high school. Programs are needed to prevent the possible stigma, physical and emotional risks of unplanned teenage pregnancy, lower adolescent pregnancy rates, and increase pregnancy prevention education. The purpose of the Preventing Unplanned Pregnancies (PUPs) program is to evaluate the effectiveness of educational interventions through multiple educational approaches, which include coping with peer pressure, abstinence, and birth control methods. The PUPs program focused on ninth-grade male and female students, age 14-16, and included 15 female and 10 male students. The workshops for the PUPs program occurred in a virtual classroom over 12 weeks. The PUPs program included an initial Parent Symposium focused on improving communication between teenagers and parents, building relationships, abstinence, family planning, and emotions. A total of 25 male and female adolescents participated in the program, 10% of the parents attended the initial

Parent Symposium and less than 5% of the male and female participants reported knowledge of teenage pregnancy and the correct use of contraceptives. The initial PUPs Parent Symposium indicated some parents were in support of teenagers using contraceptives. Ten percent of the participants reported knowing the risk of sexual intercourse, including pregnancy and sexually transmitted diseases. None of the students identified themselves as being at high risk for becoming pregnant or contracting a sexually transmitted disease. The data analysis also indicated that fears, myths, and misconceptions of sexual promiscuity exist with birth control during adolescence.

Keywords: Teenage pregnancy prevention, parent involvement, school-based

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Preventing Unplanned Pregnancies: The Impact of Prevention Education

Introduction

Teenage pregnancy is a local, national, and global concern that may produce adverse effects and substantial consequences for the mother and baby. Countries, states, communities, and public and private agencies have taken initiatives to reduce teenage pregnancy rates and eliminate its associated health disparities. Female teens living in the United States are two times more likely to become pregnant than in other developed countries (Danawi, Bryant, & Hasbani, 2016). According to Health and Human Services, in 2017, there were 18.8 births for every 1,000 adolescent females ages 15-19 or 194,377 babies born to females in this age group. Births to teens ages 15-19 account for 5% of all births (2017). Young people in urban areas are often the focus of pregnancy and sexually transmitted infection (STI) prevention programs because of their high risk of unwanted pregnancy and contracting an STI (Hill, Lynne-Landsman, Graber & Johnson, 2016). Reducing adolescent pregnancy rates is an essential policy outcome in many countries, partly because of the high economic cost that early childbearing can cause both teenagers and their offspring and broader society (Paton, Bullivant & Soto, 2020). In 2016, Alabama ranked number nine out of 51 on final teen birth rates among females age 15-19 (2017). Pregnancy can also significantly impact the physical, mental, spiritual, and financial well-being of teenagers.

Background

The teenage years are a period of growth, excitement, and enthusiasm for many. It is typically not viewed as a time that teenagers plan prenatal visits, determine the delivery method, give birth, or make long-term adult decisions. The definition of teenage pregnancy is pregnancy occurring between 13 and 19 years of age; however, girls as young as 10 are sexually active and occasionally become pregnant and give birth (Cherry & Dillon, 2015). Due to the lack of proper pregnancy prevention education, often, teenagers participate in risky behaviors that may lead to unplanned pregnancies. Roughly half of the sexually transmitted infections in the United States are among youth, highlighting the importance of consistent condom use (Brady, Gruber & Wolfson, 2016). Adolescents are less likely to use contraceptive methods than adult women. This difference is most likely due to insufficient knowledge and experience concerning contraceptives and a lack of autonomy in decision-making by teenage women (Mardi et al., 2018). Pregnant adolescents may experience stigma, physical health risks, and challenging social environments. In 2017, adolescent pregnancies were responsible for nearly 195,000 births (Centers for Disease Control & Prevention, 2019). The rate of teenage pregnancies has declined in many other countries; however, teenage pregnancy remains an issue of concern in the United States (Parks & Peipert, 2016).

Teen pregnancy in the United States has become a pressing public health concern, increasing rates surpassing other developed countries such as Canada, Japan, and Switzerland (Danawi, Bryant, MPH, & Hasbini, 2016). According to the Centers for

Disease Control and Prevention (CDC), adolescence is a transitional stage characterized by psychological, biological, and social changes (2019). Pregnancy and parenting during this critical period interfere with normative developmental processes, and the dual natural transitions of adolescence and pregnancy may increase individuals' psychological and physical vulnerability (Laurenzil et al. 2020). In low-income countries, approximately three million girls under the age of 16 give birth annually (Mardi et al., 2018).

Pregnancy during the teenage years may have an irreversible holistic impact. In attempting to reduce the prevalence of adolescent pregnancies and the long-term effects on teenagers' lives, it is essential to understand the impact that social influences, self-efficacy, and communication have on preventing teenage pregnancies and the inherent gender differentials which may exist (Naidoo & Taylor, 2021). Adolescent pregnancy is associated with short- and long-term health risks and consequences. The mortality risk in infants born to teenage mothers and among teenage mothers themselves is far higher than in other groups (Naidoo & Taylor, 2021). Teenage mothers and their children are at increased risk for infantile and childhood mortality and morbidity, abortion, stillbirth, low birth weight, congenital anomalies, pre-eclampsia, anemia, hemorrhage, fistulas, and dystocia (Mardi et al., 2018).

Unplanned pregnancies reduce educational and career opportunities and contribute to socioeconomic deprivation and widening income disparities (Parks & Peipert, 2016). Teenagers who get pregnant are more likely to drop out of school, affecting their future economic status. Research concerning teenage mothers found that adolescent pregnancies have poorer social and economic outcomes in adulthood,

affecting their children (Naidoo & Taylor, 2021). Alcohol consumption amongst young people has resulted in earlier sexual initiation, increased sexual partners, and an increased likelihood of teenage pregnancy. Beyond alcohol consumption, marijuana and cigarette use also have independent effects on teenage pregnancy (Farrell, Clyde, Katta, & Bolland, 2017). The consequences of childbirth in girls under the age of 14 years are destructive and include puerperal endometritis, the possibility of episiotomy, postpartum hemorrhaging, operative vaginal delivery, and anemia. Also, the maternal death rate in young girls is four times higher than for women aged 20-24 years (Mardi et al., 2018).

Problem Statement

Due to the lack of proper pregnancy prevention education, often, teenagers participate in risky behaviors that may lead to unplanned pregnancies. Unintended pregnancy and teen pregnancy continue to be significant public health challenges in the United States (2016). Teen mothers have lower levels of socioeconomic attainment than their childless peers. They are less likely to complete high school, attend college, or earn a bachelor's degree, and they tend to make less and are more likely to experience poverty (Diaz & Fiel, 2016). Pregnant adolescents may experience stigma, higher rates of unplanned pregnancies, more physical health risks, and challenging social environments. Despite knowing the dangers of adolescent pregnancy, there is limited understanding of how best to support this vulnerable group (Laurenzi et al., 2020). In many instances, teenage pregnancy rates decrease by improving education through a teenage pregnancy prevention program. This DNP project strived to answer the following question: in six

months, what impact does implementing a pregnancy prevention program geared towards ninth-grade students, age 14-16, have to reduce and prevent teenage pregnancy?

Organizational Description of Project Site

In 2019, the Alabama Department of Public Health reported 6,009 induced terminations of pregnancies, of which 22 were of the females were age 10-14 years and approximately 530 were age 15-19 (ADPH, 2019). African Americans have the secondhighest teen birth rate among 15–19-year-old and the highest among 10–14-yearold(Wright, Maness, Branscum, Larson, Taylor, Maxey & Cheney, 2020). Unplanned pregnancies reduce educational and career opportunities and contribute to socioeconomic deprivation and widening income disparities (Parks & Peipert, 2016). The implementation of the project occurred at a public secondary education institution in Uniontown, a city in Perry County, located in rural West Central Alabama. The institution has been providing educational opportunities to students within the rural area of Uniontown, Alabama, since the 1970s. It is also one of the two secondary education institutions in the county after the elementary schools merged with high schools due to a decrease in enrollment. According to the most recent data reported by the United States Census Bureau (Census, 2010), there are approximately 1,775 residents in the rural area; 90% are African American, 9% are Caucasian, and less than 1% as Hispanic.

Review of the Literature

The literature review for the DNP project included a search of numerous articles using search engines and databases. The Cumulative Index to Nursing and Allied Health

Literature (CINAHL) resulted in 132 articles for teenage pregnancy prevention, education, and Alabama. The search criteria included full-text, peer-reviewed articles from 2015-2020. The results of the literature review support the DNP project in multiple areas. The increase in the rates of teenage pregnancy implicates a need for pregnancy prevention education. According to statistics, female teens living in the U.S. are more likely to end up pregnant than teens in other developed countries. For example, U.S. teens are twice as likely to give birth than teens in Canada and ten times as likely as teens in Switzerland (Danawi, Bryant, MPH, & Hasbini, 2016). Though adolescents are knowledgeable about contraceptives, they encounter some barriers regarding accessibility. Many teenagers who have access to contraceptives refused to use contraceptives due to myths, such as becoming infertile, having an irregular menstrual cycle, gaining weight, getting cancer, and waiting for about seven years before being able to conceive (Okine & Dako-Gyeke, 2020). At times, contraceptive failure leads to pregnancy. However, the use of contraceptives can reduce the maternal mortality rate by 44%. In addition, the use of contraceptives helps reduce unplanned pregnancies and subsequent unsafe abortions (Mardi et al., 2018).

Evidence-Based Practice: Verification of Chosen Option

The intervention implemented by the Preventing Unplanned Pregnancies (PUPs) program was a school-based pregnancy prevention project focused on family planning, peer pressure, social pressure, adolescent health, sexually transmitted diseases, and risky behaviors. The program aims to enhance understanding of the impact of teenage pregnancy, encourage attitudes to delay sexual activity, and reduce dangerous behavior

patterns through education and communication. The program aimed to reduce the incidence of pregnancy by improving education through the utilization of monthly workshops, parent involvement seminars, and community service projects.

Theoretical Framework/Evidence-Based Practice Model

Adolescent health and development researchers have established the importance of teenage self-regulation in health promotion (Erbe, Middlestadt, Lorhmann & Beckmyer, 2018). Theoretical models were used to assess, implement, monitor, and review the Pregnancy Prevention Program. Understanding what factors predict health behaviors is an essential first step in developing interventions to change those behaviors (Conner & Sheeran, 2019). The Theory of Reasoned Action Model enhances students' and stakeholders' knowledge and understanding of teenage pregnancy, abstinence, reproductive health, birth control methods, and peer pressure. This theory determines the level of knowledge of the male and female reproductive systems, the impact of teenage pregnancy on the adolescent's health, and the adolescent's mental health. According to the Reasoned Action approach, an individual's perceptions about a health behavior must be explored before enhancing the adoption of that behavior (Erbe, Middlestadt, Lorhmann & Beckmyer, 2018). Degree of reasoned action refers to the extent to which intentions are well thought through or grounded in relevant beliefs about the behavior; behaviorrelevant cognitions strongly predict well-reasoned preferences, whereas cognitions only modestly predict poorly reasoned choices (Conner & Sheeran, 2019). As depicted in Appendix C, the pre-intervention survey determined the behavior before implementing strategies to improve education and understanding.

Goals, Objectives, and Expected Outcomes

The adverse pregnancy outcomes caused by teenage pregnancy are major public health problems with significant social impact (Zhang et al., 2020). As the development of romance and sexuality begins to emerge, young people need to develop skills for dealing with new challenges and social interactions. To handle these relatively new situations, young people may talk to their parents for support and guidance (Dalenberg, Timmerman, Kunnen, & Geert, 2016). Research shows that increased parental communication decreases risky sexual behavior among adolescents (Naidoo & Taylor, 2021). In addition to the gender differences, understanding the impact social influences, self-efficacy, and communication have on preventing teenage pregnancies is very important in developing interventions to address teenage pregnancies (Naidoo & Taylor, 2021). The goal of the PUPs program was to decrease the incidence of risky teenage behaviors, prevent unplanned pregnancy and enhance knowledge. The aim of the DNP project was to prevent teenage and adolescent pregnancy through the provision of learning strategies to male and female students in the ninth grade. An additional goal was to increase the knowledge of behaviors that ultimately lead to teenage pregnancy and change the behavior patterns. The expected outcome of the DNP project is to decrease the high-risk behaviors by 25%.

Furthermore, the program's purpose was to increase awareness and understanding of male and female reproductive health, improve strategies to manage peer pressure, promote life-sustaining skills, enhance communication strategies, and increase awareness of abstinence and contraceptive methods. Though adolescents know about contraceptives,

barriers regarding accessibility often exist. Due to myths and misconceptions and the feared physical effects of many birth control methods, many teenagers may face difficulties with the utilization of birth control.

Project Design

Adolescent pregnancy generates risks to biological (maternal-fetal threats), psychological (insecurity, fear), and social (socioeconomic compromise, family breakdown, school dropout) development. The onset of early sexual initiation makes the growing increase in the representation of children and adolescents aged 10-14 (Silva, Trindade, Franca, Oliveira, & Lages, 2020). The DNP project is a program to prevent teenage pregnancy by improving education. A quantitative experimental method monitored and evaluated the impact of monthly workshops. The Preventing Unplanned Pregnancies (PUPs) Program, based on a quantitative approach, was designed to impact the education, and understanding of male and female ninth-grade students, age 14-16. Before the program's implementation, a pretest was be administered to each teenage participant during the initial symposium to determine the level of understanding about the male and female reproductive systems. A post-test was issued after the final workshop to assess the effectiveness of monthly pregnancy prevention workshops. The discussion topics were abstinence, sexually transmitted diseases, birth control methods, self-love, social pressure, peer pressure, and effective communication.

Project Site and Population

The implementation of the project occurred at a K-12 public school located in the Southeastern United States. The area's population is less than 2,000, as reported by the

United States Census Bureau (Census, 2010). Ninety percent are African American, 9% are Caucasian, and less than 1% as Hispanic. The male and female ninth-grade students currently enrolled at the high school were the participants of the DNP project. The school is in a rural community that consists of a Rural Health Medical Program, which provides medical and dental services to residents. The nearest hospital and emergency service provider is 30 miles away. Despite the lack of sufficient medical resources, the community consists of a resource center that provides tutoring and after-school services for children ages 3-18. The district also includes a faith-based organization that supports the school by providing resources that prepare the students for various academic tests and certifications. The participants of the PUPs program, local organizations, school board, school nurse, administrative staff, teachers, and parents are considered stakeholders for the DNP project. The DNP project was incorporated into the physical education program; therefore, the Board of Education, Superintendent, administrators, school nurse, and teachers are stakeholders. The initial seminar was inclusive to parents; therefore, parents are stakeholders also.

Setting Facilitators and Barriers

The PUPs project was implemented in a virtual classroom setting at a public school. Parental consent, internet access, electronic devices, and proper seating arrangements were needed to implement the project successfully. Unsatisfactory internet access and chronic absenteeism are specific barriers to the project's implementation. In addition, the community is in a rural area, and internet access is often insufficient. The

community's resource center provided space and internet access to overcome the obstacles.

Measurement Instruments

A pre-survey, post-survey, and follow-up survey questionnaires measured the outcomes of the DNP project. The pre, post, and follow-up surveys are voluntary. The pre-intervention survey was distributed to students during the initial seminar to determine the participant's understanding of teen pregnancy and the participants' perception of teenage pregnancy. The post-intervention survey after the final workshop evaluated knowledge and changes in behaviors.

Data Collection Procedures

Due to the incidence of pregnancy among the selected age group, the participants of the DNP project will include ninth-grade students. For many women in the United States, adolescence marks the initiation of sexual intercourse, which may place them at risk for teenage pregnancy (Vafai, Thomas & Steinberg, 2020). The purpose of the DNP project aims to improve the participants' knowledge of adolescent pregnancy through monthly workshops focused on risky behaviors, pregnancy myths, open communication with parents, peers, pressure, and abstinence. Parental consent was obtained during the pre-intervention phase. Upon the receipt of parental consent, a pre-intervention survey assessed the participants' prior knowledge. During the intervention phase, monthly workshops focused on risky behaviors, pregnancy myths, open communication with parents, peer pressure, and abstinence. After the final seminar, the post-survey measured

the participants' level of understanding. One month after the conclusion of the DNP project, a follow-up survey assessed the debt of knowledge retained.

Data Analysis

The PUPs assessment tool consists of 27 questions on various factors, such as attitude and beliefs about sexual intercourse, health and safety, and communication patterns. A pre-intervention assessment was disseminated to 10 male and 15 female ninth-grade students. The participants' understanding of teenage pregnancy, pregnancy outcomes, pregnancy prevention, abstinence, contraception, peer pressure, and risky behaviors was analyzed. Ten male and 11 female ninth-grade students completed the post-intervention assessment. Missing data in the post-intervention assessment included absences of four students; their questions were not included. The quantitative analysis was utilized to determine the survey results and determine the depth of knowledge and the capacity to deliver the interventions. The pre-intervention survey was completed by 25 participants: fifteen female students and ten male students. The results indicated that 90% of the participants were unfamiliar with teenage pregnancy, risky adolescent behaviors, effective communication patterns, and domestic violence among teenagers.

Results

The goals of the Preventing Unplanned Pregnancy program were to obtain parents' knowledge of communication patterns with their teenagers about healthy relationships, change the patterns of behaviors of teenagers that lead to an unplanned pregnancy, and decrease the incidence of risky teenage behaviors. The PUPs program took place at a public school in a rural community over three months. The demographic

information for the PUPs program included 60% female, 40% male, 100% African American and the age of the participants ranged from 14-16 years old. Statistical analysis included pre-and post-intervention surveys with paired samples t-tests for comparison. The pre-intervention survey consisted of 27 combined multiple choice, true and false and open-ended questions. The questions focused on behaviors that lead to unplanned teenage pregnancy and included intimacy, sexual intercourse, birth control methods, contraceptives, peer pressure, substance abuse and abstinence. The results of the preintervention survey indicated 10% of the participants were knowledgeable of the relationship between teenage pregnancy, alcohol consumption, and drug abuse, and 90% of the participants lacked the appropriate knowledge. The results of the survey also indicated 33% of the participants contributed myths and misconceptions to the misuse of contraception. Data was also obtained from the parents of the participants. The questions focused on communication between parents and teenagers, the age of onset for birth control usage and sexually transmitted diseases. The results of the parent survey were significant and included:

- Eight five percent of the parents contributed sexual promiscuity to adolescent females aged 14-16 on oral contraceptive pills and contraceptive injections.
- Seventy percent of the parents indicated early use of contraceptives results in infertility, primarily for the female.

 Ninety five percent of the parents acknowledged the lack of understanding of the effects of sexually transmitted diseases on reproductive organs.

A total of 25 students and nine parents completed the pre-intervention survey. Twenty-one students and seven parents completed the post-intervention survey. At the completion of the PUPs program, the post-intervention survey indicated 90 of the participants understood the behaviors that lead to unplanned teenage pregnancy. The female students reported statistically significant differences in understanding the importance of abstinence, open communication with parents, and contraceptives. No significant differences were found in the male participants.

Interpretation/Discussion

Both participant and parent surveys revealed the effectiveness of the PUPs program in understanding the behavior that results in unplanned teenage pregnancy. The pre-intervention survey assessed student behavior risks for unplanned pregnancy. The results of the pre-intervention survey suggested a significant need for enhanced education related to communication, sexual activity, abstinence, sexual orientation, sexual conduct, and contraceptives. One drawback of the pre-intervention survey is that the participants and parents answered the same questions, which limited the participants in answering truthfully due to the fear of the results being revealed to the parents. The post-intervention survey revealed a significant decrease in sexual risk factors, sexual activity, and behaviors that lead to unplanned teenage pregnancy. The initial Parent Symposium

was a virtual session held for the participants and their parents or guardians. Despite the virtual option, parent participation was at an unexpectedly low rate.

Cost-Benefit Analysis/Budget

All costs incurred for the successful implementation of the project were the responsibility of this author. The total cost was determined by the number of participants and included cost for copy paper, ink (black and color), pens, pencils, utilization of the local resource center, time, hand sanitizer, disinfectants, masks, and gloves.

Timeline

The recruitment process for the Preventing Unplanned Pregnancies program began in October. The process involved selecting male and female ninth-grade students currently enrolled in and attending high school and continued throughout November. The eligible students were selected, the consent forms were reviewed with the student(s) and parents, and the required signatures were obtained. The pretests administered in December determined the level of understanding of teenage pregnancy. The intervention took place during January, February, March, and April. The post-tests were distributed in May, followed by notification of results to school administrators and the school nurse.

Ethical Considerations/Protection of Human Subjects

The Jacksonville State University Institutional Review Board (IRB) granted approval before the project was initiated. Before the implementation of the project, participants provided written consent to participate in the program. All participants were

protected by HIPAA, and confidentiality was maintained. Ethical issues could arise from situations involving consent, distributive justice, or personal integrity (Moran, Burson, & Conrad, 2020). Once the information was collected, all identifying data was removed from the surveys, and no identifying information is visible. Participation in the DNP project was voluntary; participants were allowed to withdraw from the project at any time.

Conclusion

Every year, an estimated 21 million girls aged 15 to 19 years and two million girls aged less than 15 years become pregnant (Chirwa-Kambole, Svanemyr, Sandoy, Hongoma & Zulu, 2020). Understanding the impact social influences, self-efficacy, and communication have on preventing teenage pregnancies is essential. The gender differences between these elements among students are very important in developing interventions to address teenage pregnancies (Naidoo & Taylor,2021). The use of contraceptives or the prevention of teenage pregnancy is a significant step toward achieving sustainable development goals, including healthy lives, and promoting well-being for people of all ages, gender equality and empowerment of women, high-quality education to all, and eradicating poverty. Unfortunately, many women rely on myths and misconceptions about contraceptive methods' side effects and negative consequences. This lack of knowledge is associated with poor use of contraceptives (Mardi et al., 2018). The Preventing Unplanned Pregnancies program sought to assess the impact of pregnancy prevention education in delaying sex and increasing sex refusal skills,

understanding contraceptives, and improving communication between teens and parents.

The PUPs program saw improvements in knowledge of changes during puberty,
contraception, health, wellness, decision making, communication, and sexual health.

Findings suggest that the PUPs program is beneficial at enhancing the understanding of teenage pregnancy.

REFERENCES

- Brady, S.S., Gruber, S.K., & Wolfson, J.A. (2016). Positive and negative aspects of relationship quality and unprotected sex among young women. *Sex Education*, 16(6), 586-601. https://doi.org/10.1080/14681811.2016.1141286
- Bryant, Z., Danawi, H., & Hasbini, T. (2016). Targeting unintended teen pregnancy in the United States. *International Journal of Childbirth Education*, 31(1), 28-31.
- Burson, R., Conrad, D. & Moran, K. (2020). *The doctor of nursing practice project: a framework for success*, Burlington, MA: Jones & Bartlett Learning
- Chirwa-Kambole, E., Svanemyr, J., Sandoy, I., Hangoma, P., & Zuly, J. M. (2020).

 Acceptability of youth clubs focusing on comprehensive and reproductive health education in rural Zambian schools: a case of Central Province. *BMC Health Services Research*, 20, 1-9. https://doi.org/10.1186/s12913-020-4889-0
- Collins, M.R. & Matthews, J. (2018). A unique community pregnancy prevention program. *Journal of Obstetrics, Gynecology & Neonatal Nursing*, 47(2), 310. https://doi.org/10.1016/j.jogn.2018.04.020
- Conner, M. & Sheeran, P. (2019). The degree of reasoned action predicts increased intentional control and reduced habitual control over health behaviors. *Social Science & Medicine*, 228(1), 68-74.

 https://doi.org/10.1016/j.socscimed.2019.03.015
- Dalenberg, W.G., Timmerman, M.C., Kunnen, E.S. & Geert, P.L (2016). Young people's everyday romance and sexual experiences in relation to sex-related conversations

- with parents: a diary study in the Netherlands. *Sex Education*, *16*(6), 692-706. https://doi.org/10.1080/14681811.2016.1192026
- Danawi, H., Bryant, Z. & Hasbini, T. (2016). Targeting unintended teen pregnancy in the United States. *International Journal of Childbirth*, 31(1), 28-31.
- Diaz, C.J. & Fiel, J.E. (2016). The effect(s) of teen pregnancy: reconciling theory, methods, and findings. *Demography*, *53*(1), 85-116. https://doi.org/101007/s13524-015-0446-6
- Erbe, R.G., Middlestadt, S.E., & Lohrmann, D. K. (2018). A salient belief elicitation was examining adolescents' meditation beliefs using the reasoned action approach.

 *Health Promotion Practice, 21(4), 633-641.

 https://doi.org/10.1177/1524839918811803.
- Farrell, C.T., Clyde, A., Katta, M. & Bolland, J. (2017). The impact of sexuality concerns on teenage pregnancy: a consequence of heteronormativity. Culture, Health, Sexuality, 19(1), 135-149. Retrieved from https://doi.org/10108013691058.2016.1212405
- Hill, J.C., Lyme-Landsman, Graber, J.A. & Johnson, K. J. (2016). Evaluating a pregnancy and STI prevention program in rural, at-risk, middle school girls in the USA. *Health Education Journal*, 75(7), 882-894.
 https://doi.org/10.1177/0017896916644845
- Kuzma, E.K. & Peters, R.M. (2015). Adolescent vulnerability, sexual health, and the NP's role in health advocacy. *Health Policy*, 28(7), 363-381. https://doi.org/10.1002/2327-6924.12331

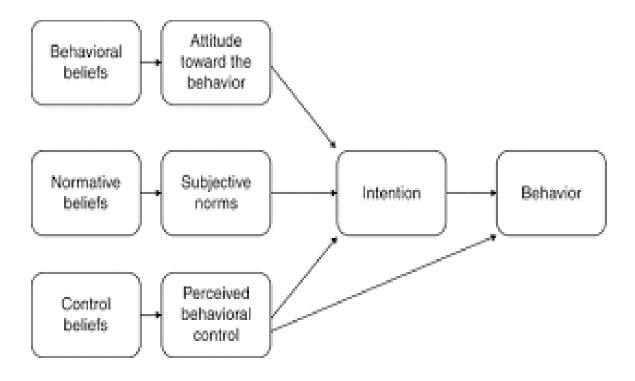
- Laurenzi, C.A., Gordon, S., Abrahams, N., Toit, S., Bradshaw, M., Brand, A., Melendez-Torres, G.J., Tomilson, M., Ross, D., Servill, C., Carvajal-Aguirre, L., Lai, J., Dua, T., Fleischmann, A., & Skeen, S. (2020). Psychological interventions targeting mental health in pregnant adolescents and adolescent parents: a systematic review. *Reproductive Health*, *17*(1), 1-12. https://doi.org/10.1186/s12978-020-00913-y
- Mardi, A., Ebadi, A., Shahbazi, S., Esmaelzade, S., & Moghadam(2018). Factors influencing the use of contraceptives through the lens of teenage women: a qualitative study in Iran. *Biomed Central Public Health*, *18*, 202-209. https://doi.org/10.1186/s12889-018-5116-3
- Naidoo, S. & Taylor, M. (2021). The association of social influences, modeling behavior, self-efficacy, and communication with teenage pregnancies among school students in South Africa. *Journal of School Nursing*, *37*(2), 128-138. https://doi.org/10.1177/1059840519855372
- Okine, L. & Dako-Gyeke, M. (2020). Drivers of repeat pregnancy among teenage mothers in Accra, Ghana. *Children and Youth Services Review*, 113(1), 105002. https://doi.org/10.1016/j.chidyouth.2020.105002
- Paton, D., Bullivant, S. & Soto, J. (2020). The impact of sex education mandates on teenage pregnancy: international evidence. *Health Economics*, 29(7), 790-807. https://doi.org/10.1002/hec.4021
- Parks, C. & Peipert, J.F. (2016). Eliminating health disparities in unintended pregnancy with long-acting reversible contraception (LARC). *American Journal of*

Obstetrics and Gynecology, 214(6), 681-688. https://doi.org/10.1016/j.ajog.2016.02.017

- Silva, C., Jessica, A., Trindade, C., Franca, R., Oliveira, F., & Lages, L. (2020).
 Presumption of sexual abuse in children and adolescents: vulnerability of pregnancy before 14 years. *Revista Brasileira de Efermagem*, 73(4), 1-7.
 https://doi.org/10.1590/0034-7167-2019-0143
- Vafai, Y., Thoma, M.E., & Steinberg, J.R. (2020). Association between first depressive episode in the same year as a sexual debut and teenage pregnancy. *Journal of Adolescent Health*, 67(2), 239-244.

 https://doi.org/10.1016/j.jadohealth.2020.02.001
- Zhang, T., Wang, H., Wang, X., Yang, Y., Zhang, Y., Tang, T. & Wang, L. (2020). The adverse maternal and perinatal outcomes of adolescent pregnancy; a cross-sectional study in Hebei, China. *BMC Pregnancy and Childbirth*, 20, 339. https://doi.org/10.1186/s12884-020-03022-7

Appendix A Theory of Reasoned Behavior Model



APPENDIX B

Timeline

Table 1
Simplified Project Timeline

Task	October	November	December	January	February	March	April
Recruitment of eligible participants	X	continued	X				
Intervention Evaluation Toolkit	X	X	X	X	X		
Post-test and Analysis of outcomes				X	X	X	X
Results presented to local providers							X

APPENDIX C PRE-INTERVENTION SURVEY

Teenage Pregnancy Pre-Intervention Survey

reen	age Pregnancy Pre-intervention Survey
1.	Do you think pregnant teenagers become isolated by their peers?
	Yes
	No
	No opinion
2.	Do you think teenage parents have difficulties completing school work?
	Yes
	No
	Sometimes
3.	Do you think unprotected sex is risky?
	Yes
	No
	No Opinion
4.	Do you think teenagers should get permission from their parents before
	using birth control?
	Yes
	No
	No Opinion
5.	At what age do you think individuals become sexually active?
	Before age 15
	Between age 15-19
	After age 19

APPENDIX D

PARTICIPANT CONSENT FORM

Informed Consent

TITLE OF THE STUDY: Preventing Unplanned Pregnancies: The Impact of Prevention Education

THE PURPOSE OF THE RESEARCH: The purpose of the program is to reduce the incidence of pregnancy by improving education through the utilization of monthly workshops, parent involvement seminars and community service projects.

EXPLANATION OF PROCEDURES: An overview of the PUPs program will be provided in the health science classroom. Students will be given opportunity to enroll in the Preventing Unplanned Pregnancies (PUPs) program. A survey will be given before and after the workshops.

LOCATION WHERE THE RESEARCH WILL TAKE PLACE: Robert C. Hatch High School Health Science Department, 470 West Avenue, Uniontown AL, 36786.

LENGTH OF TIME: One day per month, during one 90-minute block of class time, for four months.

RISKS AND DISCOMFORTS: You will be asked to complete a survey and participate in education about how to prevent unplanned teenage pregnancy. The risk to you is minimum. The questions and discussions maybe personal and may produce a small level of discomfort. After education you will be asked to complete another survey and then again one month after the completion of the program.

BENEFITS: The Preventing Unplanned Pregnancies (PUPs) program is aimed at reducing the incidence of teenage pregnancy through multiple educational approaches which includes coping with peer pressure, abstinence, and birth control methods.

CONFIDENTIALITY: Informed consent for this will be kept private to the extent allowed by the law. The information obtained from this survey will be published but no names or identity will be shared. Research information that identifies your child may be shared for ensuring compliance with the Jacksonville State University (JSU) Institutional Review Board (IRB) and others who are responsible for ensuring compliance with law and regulations related to research. The computer used for the research will be password protected, all other documents will be maintained in a locked file cabinet. All information will be kept confidential. You will be provided a copy of this consent form. The information will be maintained until the student graduates from high school.

REFUSAL OR WITHDRAWAL WITHOUT PENALTY: If you agree, you will be taking part in the survey and education at different stages. Participation in the program is voluntary. There will be no penalty if you decide you do not want to participate. You may choose not to be in the program or you may decide to withdraw at any time without penalty. You may notify the investigator and it will not affect your grades.

COST OF PARTICIPATION: There is no cost to participate.

Payment to Participate: There will be no payment exchanged.

QUESTIONS: If you have any questions, concerns, or complaints about the research, please contact Eliza Dudley, RN, MSN. She will be glad to answer your questions. Mrs. Dudley's number is (334) 341-3621. If you have questions about your rights as a participant, concerns, or complaints about the research, you may contact the Dr. Allison Newton. Dr. Newton is the Chair of the Institutional Review Board for Jacksonville State University. Dr. Newton can be reached at (256)782-5108.

LEGAL RIGHTS: You are not waiving any of your legal rights by signing this consent form.

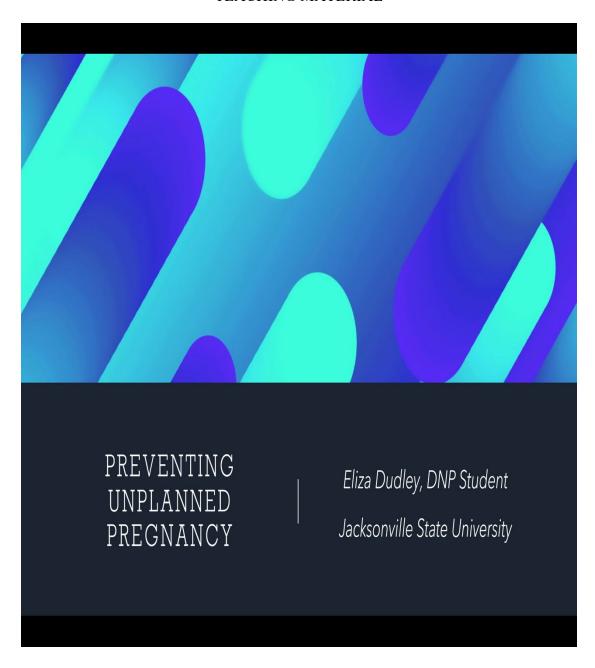
APPENDIX D

Permission Form for Research on

Preventing Unplanned Pregnancies: The Impact of Prevention Education

\boldsymbol{I} have read a description of the program, and \boldsymbol{I} understand the procedu	ure described on the attached pages.
I also have received a copy of the description. I,	agree
to participate in the PUPs program. I understand that I may withdraw find penalty	rom the PUPs program at any time, without
Student's Signature	Date

APPENDIX E TEACHING MATERIAL



APPENDIX F POST-INTERVENTION SURVEY

PUPs Program Post-Intervention Survey

- 1. True or False: It is impossible to pregnant the first time you have intercourse.
- 2. True or False: All birth control methods damage the reproductive organs and make it hard for adult females to become pregnant.
- 3. True or False: If a male drinks Mountain Dew before intercourse, that prevents pregnancy
- 4. True or False: If parents allow teenagers to take birth control, that gives permission to have sexual intercourse
- 5. True or False: It is easy to communicate with parents about sex.
- 6. True or False: <u>STD's</u> cannot be transmitted through oral sex
- 7. True or False: Teenage boys don't abuse their girlfriends

APPENDIX G IRB APPROVAL LETTER



October 7, 2020

Dear Eliza Dudley:

Your proposal submitted for review by the Human Participants Review Protocol for the project titled: "Preventing Unplanned Pregnancies: The Impact of Prevention Education" has been approved as exempt. If the project is still in process one year from now, you are asked to provide the IRB with a renewal application and a report on the progress of the research project.

Sincerely,

Jøe Walsh

executive Secretary, IRB

JW/dh

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