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Knowledge, Attitudes, and Beliefs About Preconception Care Among American Adolescent Females

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Walden University

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Lynette Collins

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Walden University
2016

Abstract

Knowledge, Attitudes, and Beliefs About Preconception Care Among American

Adolescent Females

by

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BSN, Loyola University, 1992

MN, Louisiana State University Health Sciences Center, 1996

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

August 2016

Abstract

Despite an initiative to provide preconception care (PCC) and reproductive life planning (RLP) for all women of childbearing age, many women, especially those with low incomes, are not receiving it. As a result, there continues to be a high rate of infant morbidity and mortality in this population. Furthermore, low income adolescent females have not been adequately studied regarding this phenomenon. The purpose of this phenomenological study was to explore low income adolescent females' knowledge, attitudes, and beliefs about PCC and RLP in order to serve them more effectively. Five low income adolescent females, aged 18 to 21, were recruited through criterion sampling and they each engaged in 2 individual in-depth interviews. The health belief model, social cognitive theory, and adolescent affective and cognitive theory were the conceptual frameworks used to develop the interview guide, conduct the interviews, analyze the data, and formulate the recommendations for future studies. Moustakas's phenomenological interview process was used as a guiding framework to prepare and conduct the interviews. Qualitative data were analyzed using Moustakas's modified version of the Stevick-Colaizzi-Keen method of analysis. Findings were that participants (a) had no experiences with PCC or RLP, (b) lacked knowledge about preparing for pregnancy, (c) had negative interactions with medical personnel, and (d) wanted more information about PCC and RLP. Further research is recommended to examine current PCC/RLP practices, conduct additional PCC studies of adolescents, and develop culturally- and age-appropriate PCC programs. Findings from these studies could improve both the lives of the adolescents and the health of their offspring.

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May 2015

Dedication

I would like to dedicate my doctoral study to the most important people in my life, my family. Thank you to my supportive husband who has encouraged me through this very long process. I also want to thank my children and grandchildren who have also encouraged and been a source of joy between revisions.

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I would like to express my deep gratitude to my committee members for sharing their knowledge and insight through this endeavor. I especially would like to thank my Chairperson, Dr. Carol Philips, whose mentoring and guidance has helped me to complete this doctoral study. I would also like to thank the participants who shared their experiences and made this study complete.

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Section 1: Introduction to the Study

Background

The death rate for infants in the United States is high, despite the advanced level of healthcare available. The mortality rate in the United States is 6.05 deaths per 1,000 live births, higher than in most developed countries (Hoyert & Xu, 2012). The mortality rate for Black infants is more than two times higher than White infants in the United States (Hoyert & Xu, 2012).

Several initiatives have been implemented to increase healthy pregnancies and decrease infant morbidity and mortality. Despite these initiatives, such as increased access to healthcare for high risk groups, increased awareness of prenatal care, and increased access to Medicaid benefits, infant morbidity and mortality rates continue to be a problem. Examination of some of the contributing factors (e.g. teen pregnancy, unintended pregnancies, characteristics of adolescents, lack of prenatal care or late entry into prenatal care) may help to understand the complex problems that contribute to infant morbidity and mortality.

Teen pregnancy and childbearing is one factor that contributes to a high morbidity and mortality rate (Centers for Disease Control and Prevention (CDC, 2016b; Fogel & Woods, 2008; Hoffman & Maynard, 2008; Lowdermilk, Perry, Cashion, & Alden, 2016; United States Department of Health & Human Services, 2006). This complex problem has far-reaching educational, social, and economic costs that may affect many in the country, particularly teen parents and their children (Fogel & Woods, 2008; Hoffman & Maynard, 2008; Lowdermilk et al., 2016). Birth rates in the United States among women

were 31.3 per 1,000 women in 2011 (Hamilton, Martin, & Ventura, 2012). Over 329,000 children were born to mothers aged 15 to 19 and over 3,900 children were born to mothers aged 10 to 14 years of age in 2011 (Hamilton et al., 2012).

Women pregnant during the teen years are at higher risk for preterm labor, and their babies are at higher risk for low birth weights and death (Burns, Dunn, Brady, Starr, & Blosser, 2013; Lowdermilk et al., 2016; Hamilton, Martin, & Ventura, 2012). Children of teenage mothers are more likely to have detrimental social and medical problems such as chronic medical conditions, behavior problems, high dropout rates, and becoming teen parents themselves (Hoffman & Maynard, 2008).

Unintended pregnancies continue to be a major factor in high infant morbidity and mortality rates in the United States (Guttmacher Institute, 2015; Mosher, Jones, & Abma, 2012; U.S. Department of Health Resources and Services Administration, 2011). According to the CDC (as cited in Mosher et al., 2012), approximately 37% of all pregnancies in the US are unplanned. It is estimated that up to 82% of adolescent pregnancies are unintended (U.S. Department of Health & Human Services, n.d.). Unintended pregnancies may place the woman at an increased risk of being in less than optimal health. Furthermore, she may not know she has preexisting medical conditions that could adversely affect her health or the health of the fetus (Guttmacher Institute, 2015; Mosher et al., 2012; U. S. Department of Health Resources and Services Administration, 2011). Whether a pregnancy is unintended or planned but not discovered until after a missed menstrual cycle, there remains a vulnerable time during which critical growth and development of the fetus occurs. During this vulnerable time the fetus is at

risk for detrimental effects from the mother's unhealthy lifestyle behaviors such as drug abuse, drinking alcohol, and poor diet.

Characteristics and tendencies that are common in adolescence may contribute to a high infant morbidity and mortality rate for adolescents who become pregnant (CDC, 2016b; Lowdermilk et al., 2016). Adolescence is a dramatic period of cognitive, social, physical, developmental, and emotional changes (Burns et al., 2013; Kendall, 2006; Steinberg, 2013). Adolescents tend to engage in high risk behaviors such as substance abuse, unprotected sexual activity, alcohol abuse, poor eating habits, and violent behaviors (Hoffman & Maynard, 2008; Lowdermilk et al., 2016). Since adolescents tend to rely on peers and the media for their source of health information they are often uninformed or misinformed (Lowdermilk et al., 2016). All of these characteristics and behavioral tendencies place the adolescent at higher risk for not seeking preconception care, getting pregnant, and either not participating in prenatal care or late entry into prenatal care.

Sexually active adolescents under 15 years of age are particularly at risk for pregnancy due to the high number (46%) who do not use any contraception during their initial episode of intercourse (Burns et al., 2013). Adolescents, who do become pregnant and decide to have the baby, are more likely to initiate prenatal care late or receive no prenatal care compared to older women who become pregnant (Ford et al., 2002; Lowdermilk et al., 2016). Since adolescents tend not to recognize their own vulnerability, they often need assistance navigating a complex social, emotional, and physical environment and dealing with risk behaviors through preventative strategies that enhance

healthy decision making and increase protective factors including building resources, skills, strengths, coping skills, and problem solving skills. (Blum, McNeely, & Nonnemaker, 2002; Nightengale & Fischhoff, 2002).

Many believe that two of the major factors that contribute to a high infant morbidity and mortality rate are lack preconception care (PCC) and late entry into prenatal care (Howse, 2008; Johnson, Atrash, & Johnson, 2008; Posner, Johnson, Parker, Atrash, & Bierman, 2006). Providing PCC is one strategy to improve preconception health and decrease infant morbidity and mortality. PCC is not a new concept but has primarily only been targeted at populations with chronic health conditions and women with known detrimental lifestyle behaviors such as alcohol abuse and drug abuse (Sanders, 2009).

The CDC, in 2006, released a set of 10 recommendations and four goals for implementing PCC beyond the usual target group and recommended providing PCC for all women of childbearing age. Expanding the population is especially important since many women do not perceive themselves to have detrimental behavioral issues that would warrant seeking PCC (CDC, 2006; Delgado, 2008; Elisinga et al., 2008; Hillemeier, Weisman, Chase, Dyer, & Shaffer, 2008; Lowdermilk et al., 2016).

One way to mitigate these problems is through PCC, a comprehensive “set of interventions that aim to identify and modify biomedical, behavioral, and social risks to a woman’s health or pregnancy outcome through prevention and management” (CDC, 2006). An essential part of PCC is having a woman develop a reproductive life plan (RLP). Setting personal goals about having (or not having) children and being informed

of how to successfully fulfill those goals is an important part of an RLP. For an RLP to be successful and sustainable the woman needs appropriate information to make and implement choices. A woman's RLP is an evolving plan that changes as the woman desires change.

Based on the unique characteristics of adolescents, a PCC program for adolescents should be developed that addresses their particular educational, social, and medical needs (Bearinger, Sieving, Ferguson, & Sharma, 2007; Daley, Sadler, Leventhal, & Cromwell, 2004; Tylee, Haller, Graham, Churchill, & Sanci, 2007). In order to develop an effective, culturally-appropriate PCC program targeted for adolescent women, researchers must identify the reasons why some adolescent women choose to seek PCC and some choose not to seek PCC. I conducted a qualitative research study to investigate the reasons why adolescents do or do not seek PCC.

This study fulfills Walden University's mission for achieving teacher leadership and social change by helping to understand perceptions of PCC from the perspective of adolescents. The findings from this study have the potential to increase the body of knowledge about PCC, give voice to a vulnerable population on the subject, and give guidance to developing effective PCC programs for adolescents.

Problem Statement

The problem addressed in this study is that many women are not receiving preconception care prior to pregnancy (CDC, 2006; Hillemeier et al., 2008; Maryland PRAMS: Pregnancy Risk Assessment Monitoring System, 2013; Wilensky & Proser, 2008). As a result, many women are not prepared for pregnancy prior to conception, a

situation that contributes to high rates of unintended pregnancies, infant morbidity and mortality, and preventable birth defects (CDC, 2016b; Howse, 2008; Johnson, Atrash, & Johnson, 2008; Maryland PRAMS: Pregnancy Risk Assessment Monitoring System, 2013; Posner et al., 2006). Because adolescents are at a higher risk for unintended pregnancies, delayed or lack of prenatal care, and maternal and fetal morbidity and mortality providing adequate PCC for this age group is essential (Lowdermilk et al., 2016; U.S. Department Of Health & Human Services, 2013). It is important to identify and consider the unique needs of adolescents to be able to provide adequate PCC services to them (Bearinger et al., 2007; Daley et al., 2004; Tylee et al., 2007). It would be helpful to understand the adolescents' perspectives to successfully design and implement an effective, culturally-appropriate PCC program for this age group.

Nature of the Study

I explored adolescent females' knowledge of, attitudes, and beliefs about preconception care. A qualitative phenomenological approach was chosen because it “identifies the essence of human experiences about a phenomenon as described by participants” (Creswell, 2014, p. 13). Moustakas (1994) explained, “phenomenology seeks meanings from appearances and arrives at essences through intuition and reflection on conscious acts of experience, leading to ideas, concepts, judgments, and understandings” (p. 58). This approach allowed full exploration of the phenomenon.

I collected data through multiple in-depth phenomenological interviews with each of the five participants. I conducted two to three interviews with each participant depending on the amount of information gathered at each interview. I recruited

participants from a low income housing development and low income apartment complex. I recruited participants until saturation was achieved. Saturation was considered achieved when the information collected from participants became repetitive and validated the data I had previously collected (Streubert & Carpenter, 2010). I utilized Moustakas' (1994) phenomenological interview process as the guiding framework to prepare and conduct the interviews. Interview questions (Appendix A) were prepared prior to the interviews.

Interview questions were open-ended and designed to capture the participant's attitudes, beliefs, and knowledge about PCC and RLP. All interviews were conducted in person, audio-taped with two recorders, and then transcribed verbatim. After the tapes were transcribed, I reviewed them for accuracy and corrected any inaccuracies. I also recorded personal impressions and observations in a journal immediately following each interview, in addition, I used a journal throughout the process to identify and address researcher bias.

I analyzed each of the participant's transcribed interviews using Moustakas's (1994) modified version of the Stevick-Colaizzi-Keen method of analysis. The first step included reflecting on my own personal experiences with PCC in a journal. My goal was to identify and put aside any judgments, biases, typical understandings of PCC in order to have a fresh open view during analysis of the interviews. Writing out, reviewing, and labeling my previous experiences of preconception care, then reviewing them prior to analyzing the interviews regularly helped me achieve a less biased perspective.

The second analytical step involved organizing the content of the verbatim transcripts (Moustakas, 1994). I considered each statement and put it in context of its significance to the experience. This process, known as horizontalization, was done by grouping statements, phrases, and sentences together into different groups that represented different aspects of the phenomenon. I also had a peer review the transcribed statements to verify that the data was accurate and grouped correctly. Overlapping repetitive or vague statements were then eliminated leaving only invariant constituents. It was important to glean rich detail from participants rather than generalizations such as good or bad experiences.

I placed each relevant statement on a separate paper and then into common categories. All of the categories were then reviewed to identify and group clusters of statements with common themes. I also had a peer review the category themes to verify that the data were appropriately categorized. Each of the themes was then synthesized to formulate a rich description of the experience. The textural description included verbatim examples.

I then used reflection and imaginative variation to develop a structural description. Imaginative variation means “to seek possible meanings through the utilization of imagination, varying the frames of reference, employing polarities and reversals, and approaching the phenomenon from divergent perspectives, different positions, roles, or functions” (Moustakas, 1994, p. 97-98). Structural description helped to identify factors or influences that may have led to an individual participant’s experience (e.g., participants who had Medicaid may have had more access to healthcare

than those without Medicaid). Imaginative variation required that I reexamine the textural and structural description in terms of what other meanings or influences could affect the data and identify the invariant structural themes that represented the true phenomenon.

I then developed a textural-structural description for each participant that described the meaning and experience of PCC. I completed this step for each of the participants. In the final step I synthesized all of the descriptions into a composite of all of the participants. This synthesized description represents the combined lived experience of PCC for adolescent participants.

Research Questions

1. What are the differences and similarities between adolescent females' knowledge, attitudes, and beliefs regarding preconception care?
2. What are the differences and similarities between adolescent females' knowledge, attitudes, and beliefs regarding participating in a reproductive life plan?

Purpose of the Study

The purpose of this phenomenological study was to understand preconception care and reproductive life planning from the perspective of adolescent females. I sought to identify barriers to seeking preconception care and reproductive life planning. PCC was defined as “a set of interventions that aim to identify and modify biomedical, behavioral, and social risks to a woman's health or pregnancy outcome through prevention and management” (CDC, 2006).

Conceptual Framework

The conceptual framework of this qualitative study consisted of three components: the health belief model (HBM), social cognitive theory (Bandura 1978, 1986, 1997), and adolescent affective and cognitive theory (Brown, 1990; Ginsburg & Opper, 1988; Steinberg, 2005, 20013; Wadsworth, 1971; Zelazo, Chandler, & Crone, 2010).

Health Belief Model

The HBM is the first component of this study's theoretical framework because it emphasizes how and why people adopt or reject health-related behaviors. The HBM has been widely used in research to "explain change and maintenance of health-related behaviors and as a guiding framework for health behavior interventions" (Champion & Skinner, 2008, p. 45). The theory was developed in the 1950s and originated from classical stimulus response theory (Watson, 1925) and cognitive theory (Lewin, 1951; Rosenstock, Stretcher, & Becker, 1988; Tolman 1932). Important contributors to the HBM include Bandura (1997), Becker (1974), Hochbaum (1958), and Rosenstock (1974). Stimulus response theory posits that reinforcement determines the frequency with which an individual will engage in a behavior, but the quicker the reinforcement following the behavior, the more likely the behavior would be repeated.

The HBM is based on the understanding that a person will participate in behaviors that will prevent a detrimental health outcome if they believe it will successfully work. Key factors influencing the HBM that were utilized to guide the collection and

interpretation of data during the study included perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy.

Perceived susceptibility, the first key factor of the HBM, is concerned with whether an individual believes they will contract a particular condition. Perceived susceptibility, for this study, was whether participants believed they were at risk for getting pregnant or needed to plan ahead for healthy pregnancies. Interview questions were developed to determine perceived susceptibility by questioning as to whether they have ever had sex, if they ever had unprotected sex, if they have taken a home pregnancy test, whether they used contraception each time they had sex, and whether they thought they would be pregnant in the next 2 years.

Perceived severity, another key factor of HBM, is concerned with whether an individual believes a condition has associated serious effects or consequences. Perceived severity in this study referred to whether participants believed that being pregnant was a serious condition that could have serious effects or consequences. Interview questions were developed to determine participants' perceived severity by asking questions such as whether they knew any medical conditions or lifestyle behaviors that could negatively affect a pregnancy or a baby.

Perceived benefits, an HBM key factor, is concerned with whether an individual believes that actions could be taken to decrease or prevent risks or lessen serious effects of a condition. Perceived benefits for this study were whether participants believed participating in PCC could help prevent risks or lessen detrimental effects of pregnancy. Interview questions were developed to determine participants' perceived benefits by

asking questions such as whether they planned to do anything to prepare for a pregnancy or did they know any lifestyle behaviors that should be adopted prior to pregnancy that would have a positive effect for the woman or fetus.

Perceived barriers, a fourth HBM factor, is concerned with whether an individual believes there are physical or psychological reasons present that would prevent them from engaging in a behavior. In this study, perceived barriers were defined as whether the participants believed there are physical, financial, psychological, medical, or family barriers present that would prevent them from engaging in PCC. Interview questions were developed to determine participants' perceived barriers by asking questions about the last time they went to a doctor and how they got there, who went with them, and how they paid for it.

Cues to action, an HBM factor, is concerned with how an individual would actualize a changed behavior. In this study, cues to action were defined as the participant's ability to verbalize how to participate in PCC. Interview questions to ascertain the participants' ability to participate in PCC included asking the participants to describe where and how they could receive PCC.

Self-efficacy, the last of the six HBM key factors, is concerned with whether individuals believe they can successfully execute the desired changed behavior. I defined self-efficacy as the participants' belief that they can successfully participate in PCC. Interview questions to determine the participants' belief that they will participate in PCC included inquiring as to when was the best time for a woman to seek PCC, whether the

participant planned to make an appointment for PCC, and if the participant intended to engage in PCC prior to a pregnancy.

Social Cognitive Theory

Social Cognitive Theory (SCT) is the second component of this study's theoretical framework because it emphasizes how a person's behavior and thought processes influence future behavior. SCT was built on the theory and research of Miller and Dollard (1941), Rotter (1945), Vygotsky (1978), Bandura (1986), and Lave (1988). They all postulated theories that emphasize the central role of social learning. Initially Bandura (1986) called his theory observational learning or social learning theory. As concepts from cognitive psychology were integrated into the theory, Bandura (1986) renamed it SCT. One of Bandura's (1997) most recent and important expansions of SCT is the inclusion of self-efficacy.

SCT is based on the understanding that human behavior is influenced by many factors including environmental, personal, and behavioral experiences (Bandura, 1986). These experiences influence all types of learning including learned health behaviors. It also recognizes that people are capable of reshaping their own physical and social environments to change their health behaviors (Bandura, 1986). Three key concepts of SCT that were utilized to guide the collection and interpretation of data during the study included reciprocal determinism, observational learning, and facilitation.

Reciprocal determinism, a key concept of SCT, is concerned with understanding the influence of social, personal, and environmental factors on individual and group behaviors (Bandura, 1978). In this study, reciprocal determinism was defined as

understanding the influence of social, personal, and environmental factors on a participant's knowledge and participation in PCC. Interview questions to identify social, personal, and environmental factors included inquiries as to whether the participants or anyone they knew undertook PCC; whether the participants talked to anyone about what to do to plan a pregnancy or prevent a pregnancy; and their views on how their mothers would respond if told the participants wanted to talk to someone about how to prepare for a pregnancy or how to prevent a pregnancy.

Observational learning, an SCT key concept, is concerned with the multiple ways we learn about performing new behaviors including from peers, formal classes, multimedia, and the like (Bandura, 1986). I defined *observational learning* as influences from multiple sources that form knowledge about PCC and pregnancy. Interview questions were developed to identify the participant's knowledge of PCC and pregnancy as well as the sources of information that helped to form the knowledge and beliefs. Interview questions included direct questions about what the participants have learned about PCC, RLP, and pregnancy and where they learned it.

Facilitation, another SCT key concept, is concerned with provision of support to enable an individual to implement a new behavior (Bandura, 1986). I focused on having the participants identify resources, tools, and changes that they think would help educate and enable other adolescents to participate in PCC. Interview questions included asking from whom would be the best person to receive such information, what age would be best to start PCC, and what is the best way to deliver the information about PCC.

Adolescent Affective and Cognitive Theory

Adolescent affective and cognitive theory (AACT) is a third component of this study's theoretical framework because it may help explain why adolescents make the decision to seek PCC or not to seek PCC. I also used AACT to help understand how adolescents' form and acquire knowledge about PCC (Ginsburg & Opper, 1988; Wadsworth, 1971). It also helped explain varied perceptions and attitudes of PCC and RLP. AACT was built on the theory and research of Piaget (Wadsworth, 1971; Zelazo et al., 2010). The theory has been widely used in psychology and educational research of children to help "understand how and why children behave as they do" (Wadsworth, 1996, p. IX). Initially, Piaget turned his attention from biology and epistemology to psychology in 1919. Piaget's work was influenced by the work of psychoanalysts Freud and Jung and initially guided by psychologist Binet (Ginsburg & Opper, 1988; Wadsworth, 1971). Piaget's cognitive theory developed over 60 years and was based on extensive studies of children. AACT posits that intellectual development is accomplished with a combination of cognitive, affective, and social aspects (Wadsworth, 1971).

AACT is based on belief that brain development of emotional, behavioral, and cognitive systems mature at different rates and are influenced by many factors including social, biological, and cultural factors (Casey & Jones, 2010; Piaget, 1970; Steinberg, 2005). These researchers believed that different parts of the brain may mature at differing rates during development. Although early, middle, and late adolescence can be defined by age, these strategies do not indicate whether the adolescent's brain has matured equivalently to their biological age (Casey & Jones, 2010; Piaget, 1970). An adolescent's

chronological age may not be correlated with the brain's maturity. This study drew on Piaget's third and fourth states of cognitive and affective development: concrete operations and formal operations to help understand why adolescents make the decision to seek PCC or not to seek PCC and understand how adolescents' form and acquire knowledge about PCC. Key concepts also included defining the affective and cognitive components of AACT.

Concrete operations, the third stage of Piaget's AACT, is characterized by an individual's ability to think and solve problems in a concrete manner (Ginsburg & Opper, 1988; Piaget, 1970; Wadsworth, 1996). This stage is generally accomplished in the 7 to 11 year old age group. Characteristics of this stage include advancing from the preoperational stage of being able to solve problems only through representation to being able to determine logical solutions to problems. This is accomplished through maturity of affective and cognitive domains of the individual. Individuals are not able to progress to the next stage until they have accomplished this stage (Ginsburg & Opper, 1988; Piaget, 1970; Wadsworth, 1996).

Formal operations, the fourth stage in Piaget's AACT, is characterized by an individual's ability to successfully solve real or perceived problems (Ginsburg & Opper, 1988; Piaget, 1970; Wadsworth, 1996). This stage is generally accomplished in the 11 to 15 year old age group but may not be accomplished well into adulthood. An individual may only advance to this stage if they have completed the previous stage. This stage is accomplished through the highest level of maturity of both the affective and cognitive domains of an individual (Ginsburg & Opper, 1988; Piaget, 1970; Wadsworth, 1996).

The affective component of AACT addressed the feelings and emotional aspect of an individual's experience with a phenomenon (Wadsworth, 1971). Interview questions were developed to collect information about the affective component, which included prompting the participant to describe in detail what their medical experiences have been, asking them to describe their feelings about past experiences, inquiring as to whether they feel PCC is important, and questioning what they believed were barriers to getting PCC. The affective component of AACT complemented the cognitive component, which addressed what individuals, believed they knew of a topic and what they were capable of doing (Wadsworth, 1971).

Interview questions were developed to collect information about the cognitive component as well. These questions included prompting the participants to share what knowledge and beliefs they had about PCC and what barriers they experienced in seeking medical care. The AACT component was also utilized during data analysis to help understand why adolescents' knowledge, attitudes, and beliefs regarding PCC and RLP varied widely. This component also helped explained why adolescents in the same age group varied in their ability to seek and participate in PCC.

Utilization of Theories

The HBM, SCT, and AACT provided comprehensive and well-supported conceptual frameworks for understanding positive and negative factors that influence adolescents' participation in PCC. The HBM, SCT, and AACT were essential to every part of the study including formulation of the interview guide, analysis, and recommendations for future studies.

Operational Definitions

Adolescent: Children between 12 and 20 years of age. Adolescence is characterized as a period of rapid psychological, social, physical, and secondary sexual characteristics growth and development (Kliegman, Behrman, Jenson, & Stanton, 2015).

Adverse birth outcomes: Births that occur without optimal health or physical outcomes including fetal distress, infant deaths, low birth weight, premature births, and birth defects (Dunlop, Jack, & Frey, 2007, p. 81).

Behavioral health issues: Detrimental behaviors associated with maternal or fetal complications. Examples include cigarette smoking, alcohol use, and drug abuse (Sanders, 2009).

Bracketing: A process where the researcher places the research in brackets and extraneous factors are removed so that the research process is focused only on the phenomenon and research questions (Moustakas, 1994, p. 97).

Chronic health conditions: Medical conditions diagnosed prior to pregnancy that could adversely affect maternal fetal outcomes. These include diabetes, hypertension, cardiac disease, HIV, and endocrine and autoimmune diseases (Aaron & Criniti, 2007; Biermann, Dunlop, Brady, Dubin, & Brann, 2006; Lampe, 2006).

Early Adolescence: Children 15 to 17 years of age (Burns et al., 2013).

Facilitation: “Providing tools, resources, or environmental changes that make new behaviors easier to perform” (McAlister, Perry, & Parcel, 2008, p. 171).

Late Adolescence: Children 18 to 21 years of age (Burns et al., 2013).

Late entry into prenatal care: When a pregnant women's first prenatal visit occurs after the 12th week of gestation (Lowdermilk et al., 2016).

Low birth weight (LBW): An infant birth weight of less than 2,500 grams (Lowdermilk et al., 2016).

Middle Adolescence: Children 15 to 17 years of age (Burns et al., 2013).

Modified Stevick-Colaizzi-Keen Method: A method of organizing and analyzing phenomenological data. Moustakas modified the original method developed by Stevick, Colaizzi, and Keen (Moustakas, 1994).

Neural tube defect: Improper development of the brain and/or spinal cord during pregnancy (Lowdermilk et al., 2016). Folic acid deficiency is one of the known causes of neural tube defects occurring during pregnancy.

Observational learning: Learning new ways to do things through observation, such as interaction with peers or multimedia sources (McAlister et al., 2008, p. 171).

Preconception Care (PCC): "A set of interventions that aim to identify and modify biomedical, behavioral, and social risks to a woman's health or pregnancy outcome through prevention and management" (CDC, 2006).

Pregnancy Trimesters: The three periods of a human pregnancy. The first trimester of pregnancy is comprised of weeks 1 to 12. The second trimester of pregnancy includes weeks 13 to 24. The third trimester of pregnancy spans week 25 until the baby is born, usually at 40 weeks (Lowdermilk et al., 2016).

Reciprocal determinism: How environmental factors may influence individuals and groups and individuals and groups can also influence their environments by regulating their behavior. (McAlister et al., 2008)

Reproductive Life Plan (RLP): “A set of personal goals about having (or not having) children. It also states how to achieve those goals. Everyone needs to make a reproductive plan based on personal values and resources” (CDC, 2014).

Self-efficacy: “A person’s beliefs about her capacity to influence the quality of functioning and the events that affect her life” (McAlister et al., 2008, p. 172).

Assumptions

I assumed that participants interviewed for the study were honest and accurately portrayed their knowledge, attitudes, and beliefs about preconception care and reproductive life planning (Creswell, 2013; Moustakas, 1994). I assumed that all participants had experienced the phenomenon and answered all questions openly and honestly (Creswell, 2013; Moustakas, 1994). I also assumed that data gleaned from the interviews was comprehensive and reflected the phenomenon accurately. It is assumed that the three conceptual frameworks selected were suitable to guide and analyze this study (Creswell, 2013). I assumed the data were interpreted and analyzed to accurately reflect the data collected.

Limitations

Limitations of a study refer to the factors that may affect the findings of the study or how the findings are applied or interpreted (Baltimore County Schools, n.d.; Baron, n.d.; Creswell, 2013; Marshall & Rossman, 2015; Northern Arizona University, n.d.;

Patton, 2014). Limitations of this study included sampling size, limited variation in racial representation, no variability in socioeconomic status represented, and only female participants. Due to the small sample size with female participants being from a one racial-cultural low socioeconomic status group the generalizability of the findings is decreased. In addition, my own bias as a medical provider may have influenced my interviewing techniques and interpretation of interviews.

As a nurse practitioner who provides prenatal care and healthcare to teens and women I hold the bias that every childbearing woman needs to receive preconception counseling. My professional experiences of seeing infants with preventable birth defects and poor maternal outcomes due to late or no prenatal care also inspired me to do this study. I employed the strategies of self-reflection, member checking, and using full rich descriptions to convey the findings, as recommended by Creswell (2014), in order to avoid researcher bias and bolster the validity of the study. I also maintained a journal throughout the study to help with self-reflection. There are also possible interview data limitations that are a result of distortions of participants' responses due to a labile emotional state of the participant during the interview such as anger, sadness, or anxiety (Patton, 2014). Another possible limitation may be that the participants who were selected may not have entirely represented or related the phenomenon adequately (Patton, 2014).

Scope and Delimitations

The delimitations of a study are characteristics limiting the scope of the inquiry. These characteristics are determined by the decisions that were made throughout the

development of the proposal. (Baltimore County Schools, n.d.; Creswell, 2013; Marshall & Rossman, 2015; Patton, 2014). This qualitative study was delimited by the selection of participants from one city in the southern part of the United States. Additional delimitations of this study included recruiting participants from a one housing community and adjacent apartment complex located in an economically depressed area and the majority of participants represented by one racial group, Black women. The use of multiple in-depth interviews instead of surveys limited the number of participants' views collectively used for interpretation.

Significance of the Study

This study may be significant for medical providers, educators, and policy makers for multiple reasons. First, this study will contribute to the body of knowledge on PCC. It will provide insights into adolescent females' knowledge, beliefs, and attitudes regarding PCC and RLP. Both positive factors that promote entry to PCC and barriers that may prevent adolescents from seeking PCC were identified. This study may make medical providers more aware of the educational needs of pregnant adolescents. Second, this study may encourage nurses, nurse practitioners, and physicians to make changes to PCC services delivered to adolescents in their practices. Finally, this study will be significant by laying the foundation for further study and ultimately development of an age-appropriate PCC program for adolescents.

Social Change

An important goal of this study was to effect a positive social change, an "improvement of human and social conditions." (Walden University, 2010, para 4) A

goal of this study was to provide improved PCC services for adolescents. Identification of knowledge deficits of adolescent women regarding PCC may assist medical providers, educators, and policy makers to develop and implement PCC services to address these needs. This study may also contribute to social change by describing adolescent experiences and gaining information about barriers, beliefs, attitudes and factors that may be helpful in identifying new and effective ways to deliver PCC services to adolescents. These newly designed PCC programs may ultimately reduce poor maternal and fetal outcomes.

Conclusion

Providing PCC to adolescents is one way to decrease teen pregnancy, increase knowledge about contraception, and increase participation in prenatal care. Before developing and implementing a PCC model for adolescents, we need to know more about what barriers must be overcome in order to be successful. This phenomenological study will help identify these barriers. An introduction to the phenomenon and need for study was presented in Section One. A review of literature that explores research documenting PCC and RLP will be provided in Section 2. Section 3 is an explanation of the qualitative research design methodology including research questions, description of the participants, and role of the researcher. Section 4 is the research findings. The summary, conclusions, recommendations for further research, and researcher reflections will be presented in Section 5.

Section 2: Literature Review

Introduction

Section 2 is a review of research about the subject of the study, PCC, and conceptual frameworks used for this study, and examines similar studies that, like this one, uses phenomenological methodology. Due to the limited number of studies published on routine PCC in adolescent women, the review draws on literature about adults and includes both routine care and care for women with known medical diseases.

Research for this literature review began using four strategies: review of relevant book chapters, online journal searches, Cochrane Review searches, and seminal published manuscripts and relevant dissertations. Both electronic and print sources were employed. Multiple electronic databases were used in the literature review including ProQuest, ERIC, SAGE, Cochrane Review, and Walden University Dissertations and Theses. The following key words were used to help identify potential resources: *preconception care, preconception health, pregnancy + adolescents, pregnancy + adolescence, pregnancy planning, health promotion + adolescence, health promotion + adolescents, and reproductive life planning*. Identification of relevant resources also helped to identify more relevant resources, a process that expanded the literature review.

Review of Related Research

PCC has evolved from trying to prevent poor outcomes in high risk women who have diseases known to likely cause birth defects such as diabetes, to providing the benefits of preconception care for all women of child bearing age. In this section, I reviewed the current state of research on preconception care in these four situations: (a)

women with diabetes, (b) routine care for college aged women, (c) routine care for childbearing women, and (d) routine care for adolescent women.

Medical Conditions Known to Affect Pregnancy

Preconception care for women with pregestational diabetes has been studied for decades to try to identify ways to decrease poor maternal and fetal outcomes due to maternal hyperglycemia (Lu, 2007; Wahabi, Alzeidan, Bawazeer, Alansari, & Esmacil, 2010). Multiple studies dating from Fuhrmann's 1986 study to Galindo, Burguillo, Azriel, and Fuente's 2006 study have supported that preconception care in women with Insulin-Dependent Diabetes Mellitus (IDDM) has significantly reduced the frequency of congenital malformations. These extensive studies have helped establish the need for childbearing women with IDDM to receive PCC so that they achieve good glycemic control prior to attempting a pregnancy and throughout the pregnancy (Fuhrmann, 1986).

Researchers in this area have moved from focusing on whether or not PCC should be implemented to defining what type of insulin will achieve the best glycemic control in women with diabetes during PCC (Mathiesen et al., 2007; Temple, Aldridge, & Murphy, 2006). This section will include examples of research studies, including the most recent, that have examined the effect of providing PCC to women with IDDM to decrease the incidence of poor maternal or fetal outcomes. Due to the large number of studies examining PCC versus no PCC in childbearing women with IDDM, selection criteria were employed. I selected three studies based on their having a large cohort, control and self monitoring of blood glucose, and a clear description of the participants and PCC intervention. One additional study will be reviewed as an example of the most recent

research being done on childbearing women with IDDM and the direction current studies are evolving.

A landmark study, conducted by Fuhrmann (1986), is one of the earliest and largest retrospective studies examining the effect of good glycemic control through PCC in childbearing women with IDDM compared to childbearing women with IDDM without PCC. One strength of this study was that the PCC intervention was well described and could be easily replicated. Of the 620 participants 184 received PCC and 436 did not receive the PCC intervention. Findings from this study indicated a significantly lower rate of congenital malformations in the PCC group than the group without PCC. One criticism of this study is the lack of consideration of possible confounding variables to explain the differences in the findings.

Steel, Johnstone, Hepburn, and Smith (1991) examined the incidence of congenital malformations in women who received PCC aimed at good glycemic control before and during a pregnancy in childbearing women with IDDM compared to childbearing women with IDDM who do not receive PCC. Of the 239 participants 143 received PCC and 96 participants did not. The PCC used was the same intervention as Fuhrmann's (1986) study and included contraception education. Steel et al. found a significant decrease in the number of congenital defects in the group who received PCC compared to the group that did not receive PCC.

Temple et al. (2006) examined the incidence of congenital malformations in childbearing women with IDDM who received PCC to childbearing women with IDDM who did not receive PCC. Although the main PCC intervention was glycemic control it

also included other confounding factors such as smoking and folic acid supplementation. There were 290 participants, 110 received the PCC intervention and 180 received no PCC. Findings were that participants who participated in PCC had a significant decreased incidence of congenital malformations, spontaneous abortions, and preterm deliveries than the group with no PCC. A logistic regression analysis was used to examine the association between PCC and the outcomes.

Mathiesen et al. (2007) provided an example of how research of PCC in women with IDDM has moved away from whether or not they would benefit from PCC using tight glycemic control to examining which type of insulin should be used in PCC to achieve the best glycemic control. This randomized study had 322 participants; 157 used insulin aspart and 165 used regular human insulin as meal time insulin. The objective of this study was to assess the two types of insulin in women with IDDM with regards to their safety and efficacy. Although the findings were not statistically significant, they did find a lower risk of severe nocturnal hypoglycemia when using insulin aspart. They also found both types of insulin were equally safe and effective during preconception and pregnancy.

Routine PCC in College Women

This section includes examples of research studies from the literature examining the efficacy of PCC in college aged women. Both of these research studies focused on PCC in undergraduate students. I selected these two studies based on their having a large cohort, a clear description of the participants, the process, and the findings.

The Colorado Undergraduate PCC study (Corbett, 2011) evaluated undergraduate students' knowledge and attitudes of PCC health and wellness. This quantitative research study used a convenience sample of 203 female undergraduate students enrolled in an introductory psychology course at a university in the Western U.S. The majority of participants were White, families earned over \$30,000 per year, and the students were in their first 2 years of college. Exclusion criteria included participants could not have received prenatal care prior to the study or given birth to a child. The information, motivation, and behavioral skills (IBM) model for preventative health was the guiding theoretical framework for her study.

The Colorado undergraduate PCC study (Corbett, 2011) utilized a background information form, a modified reproductive health attitudes and behaviors (RHAB) questionnaire, and the reproductive health knowledge scale for women (RHKS-W) as the three instruments to evaluate the participants' degree of knowledge, motivation, and ability to maximize preconception health. The background information form, a 40-item form, was constructed to gather participant demographic information, assess knowledge about PCC and risk factors that would dictate increased need for PCC, and identify perceptions of where to receive information on PCC and pregnancy prevention. The background information form also assessed participants' knowledge, motivation, and behaviors regarding PCC and pregnancy prevention.

The RHAB was initially developed to assess reproductive health issues in adolescent females with diabetes (Charron-Prochownik et al., 2006). The RHAB questionnaire was modified by the researcher to exclude questions about diabetes. The

RHAB incorporates constructs from SCT, the HBM, and the theory of reasoned action (TRA). The modified RHAB questionnaire, a 52-item Likert scale was used to assess reproductive issues in undergraduate women. The RHKS-W, the third instrument, was developed by the researcher and used to gather information regarding the extent participants were informed on issues related to pregnancy prevention and PCC. Half of the items on the RHKS-W assessed PCC and half assessed pregnancy prevention.

The eight research questions were addressed using five steps of data analysis to evaluate all eight research questions (Corbett, 2011). Analysis included multiple approaches including frequency and descriptive statistics, classical item analysis, exploratory factor analysis, statistical analysis, and comparative and inferential statistical methods.

Corbett (2011) demonstrated significant knowledge deficits in regard to PCC. Although the participants had an overall increased understanding of pregnancy prevention, they still engaged in several health-risk behaviors that could result in pregnancy. One concern in replicating this study with adolescents is the length and difficulty of the questionnaire. College students usually have a higher grade vocabulary and reading ability than adolescents. One shortcoming of this study was that the participants were highly motivated to complete the lengthy questionnaires by receiving academic credit to complete the study. A major implication from the findings of this study is the need to expand PCC and develop new strategies to meet the needs of different populations.

The University of Miami undergraduate PCC study by Delgado (2008) examined undergraduate students' awareness of PCC and whether there were differences between the awareness of males and females. Delgado used a convenience sample of 241 male and female undergraduate students enrolled in an introductory psychology course at the University of Miami. The majority of participants were White, aged 18 to 24 years old, did not have children but previously had a course that had information on pregnancy and/or child development. A 20-item self-scoring questionnaire with multiple choice and checklists was used to gather data on students' awareness of preconception health and pregnancy. Both positive and detrimental health behaviors were included in the questionnaire.

The key finding was that students had a low to moderate level of PCC and pregnancy awareness. A significant percentage of female participants had a higher awareness of pregnancy and PCC than the male participants. Overall the majority of participants scored low to moderately aware of PCC. Within the scores the majority of participants scored low with regard to different aspects of PCC including folic acid use, fetal development, and proper spacing between pregnancies. Participants who had previously taken a course with child development or pregnancy content tended to score better than those participants who had not had a course. The majority of participants (87%) also reported they took that previous course in high school. Implications of this finding are that although participants with a previous course did score better some still scored low to moderate awareness in multiple areas, thus further education is needed. Several important implications emerged from the findings of this study including that

new PCC strategies need to be developed and expanded to meet the educational needs of both males and females.

Routine PCC in Childbearing Women

This section includes an example of research studies from the literature examining the efficacy of routine PCC in childbearing women. The research study selected focused on routine PCC in a vulnerable population of Hispanic women of low socioeconomic status. I selected this study based on it having a large cohort, a clear description of the participants, and the overall purpose and findings of the study.

Coonrod, Bruce, Malcolm, Drachman, and Frey (2009) evaluated knowledge and attitudes regarding PCC in a public health clinic in Phoenix, Arizona. Coonrod et al. employed a cross-sectional survey with a convenience sample of 305 women of childbearing age. The majority of participants were Hispanic, low socioeconomic status, had a high school education or less, and either were currently pregnant or previously pregnant. Participants ranged in age from 18 to 45 with the majority (45%) in the 26 to 35 year old age range.

A self-administered five point Likert scale questionnaire was used to identify knowledge, attitude, and interests/preferences regarding PCC in the Arizona Mexican-American PCC study (Coonrod et al., 2009). The majority of preconception knowledge questions focused on detrimental behaviors that could affect pregnancy. Prior to the study a pilot study was completed using the questionnaire, in English and Spanish, to establish readability.

Multiple findings from the Arizona Mexican-American PCC study (Coonrod et al., 2009) validated the need to provide routine PCC to adolescent women. Coonrod et al. demonstrated that the younger the age of the woman the less knowledgeable she was regarding positive and negative health behaviors affecting pregnancy. This finding is even more significant if one considers that the over 88 % of participants were either currently pregnant or were previously pregnant. Since adolescents were the younger participants in this study that means it found that the majority of adolescents were less knowledgeable regarding positive and negative health behaviors affecting pregnancy. It could also be inferred that even younger adolescents aged 13 to 17 would be either equally knowledgeable or even less knowledgeable regarding positive and negative health behaviors affecting pregnancy due to their age. The study also found that the majority of participants (77 %) were interested in PCC and identified the primary care provider as the preferred person to provide PCC. Important implications of this study were that adolescents are in need of routine PCC and would be receptive to receiving it from their primary care provider.

Routine PCC in Adolescent Women

This section includes examples of research studies from the literature examining the efficacy of routine PCC in adolescent women. The first research study focused on identifying positive and detrimental health-risk behaviors adolescents were engaging in during their pregnancy. The second research study focused on PCC in adolescent women. These two studies based on their having a large cohort of adolescent women of low socioeconomic status, a clear description of the participants, and the focus of the studies.

The Midwestern pregnant adolescent health-risk behaviors study conducted by Kaiser and Hays (2005) was to evaluate the frequency of health risk behaviors in first-time pregnant adolescents. This nonrandom convenience sample consisted of 145 first-time pregnant adolescents aged 15 to 18 years old and represented 47 sites in seven Midwestern cities. The majority of participants were of low socioeconomic status. Ethnically the participants represented a diverse population with over 1/2 White, approximately 1/3 Black, and approximately 1/10 Hispanic.

Kaiser and Hays (2005) used a questionnaire to identify the frequency of detrimental and positive health-risk behaviors participants were engaging in during this pregnancy. The questions focused on smoking cigarettes, alcohol use, illegal street drug use, sexual activity, condom use, prenatal visits attended, and if she had attended childbirth, parenting, or breastfeeding classes.

Kaiser and Hays (2005) found that adolescents are engaging in detrimental health-risk behaviors during pregnancy at higher rates more than previously documented through surveys on birth certificates. Another important finding in this study was that the majority of participants quit engaging in detrimental health-risk behaviors once they knew they were pregnant. These findings help establish the need to provide adolescents with routine PCC. One shortcoming of this study was not identifying if the participants knew or how they knew which health-risk behaviors were detrimental or positive during a pregnancy. Another shortcoming of this study is that not all detrimental and positive health-risk behaviors in PCC were addressed. An important implication of this study is that we need further research to better understand adolescents' knowledge, attitudes, and

beliefs about health-risk behaviors that affect pregnancy to identify better ways to educate this vulnerable population.

In the New York urban PCC study, Heavey (2010) examined outpatient medical charts of pregnant adolescent females to determine if they had a previous clinic appointment prior to pregnancy where PCC could have been provided. Heavey also reviewed the medical charts to identify PCC Health risk behaviors and interventions prior to pregnancy and at the clinic visit where they had a positive pregnancy test. A retrospective chart review identified 81 participants between the ages of 14 to 19, had a positive pregnancy test, and completed the normal nurse-assisted health information questions. The nurse-assisted questions were completed on the day of a positive pregnancy test and included whether this pregnancy was desired. The participants were drawn from a public health clinic in upstate New York that offers family planning and primary care. The majority of participants were low socioeconomic Black adolescents who were not attending school.

Multiple findings from the Heavey (2010) study emerged that helps give direction to adolescent PCC. Significant finding of Heavey's study included establishing a need for routine PCC and that opportunities to provide PCC did occur for the majority of adolescents during healthcare visits before pregnancy occurred. In addition, findings emerged that adolescents have unique needs that would benefit from PCC designed to meet their needs. This study found that routine PCC could help address adolescents' multiple risk factors at the time they are identified instead of waiting until they are pregnant. It also found that PCC knowledge deficits could be addressed in healthcare

visits prior to a pregnancy to encourage healthy behaviors before conception and early in their pregnancy. The fact that the majority of adolescents who were pregnant stated they did not desire a pregnancy, emphasized the need to provide PCC to all adolescents at every healthcare visit.

Conceptual Frameworks

Conceptual models and theories can provide guidance in many aspects of a qualitative study. Guidance can include helping a researcher determine what information needs to be learned to effectively develop and organize an intervention program, help formulate questionnaires, and explain or interpret behavior (Glanz, Rimer, & Viswanath, 2008; Patton, 2014). In this section, I examined the several examples of current research using each of the three conceptual frameworks used for this study. The studies were selected to match as closely to the characteristics and topic of my study.

Health Belief Model

The HBM has been used as a guiding conceptual framework extensively in health behavior research for over 60 years (Glanz et al., 2008). It has served many purposes including helping “explain health behavior change and maintenance of health-related behaviors and as a guiding framework for interventions” (Glanz et al., 2008, p. 45). The theory was developed in the 1950s and originated from classical stimulus response theory (Watson, 1925) and cognitive theory (Lewin, 1951; Rosenstock, Stretcher, & Becker, 1988; Tolman 1932). Important contributors to the HBM include Bandura (1997), Becker (1974), Hochbaum (1958), and Rosenstock (1974). Stimulus response theory posits that reinforcement determine the frequency with which an individual will engage in a

behavior but the quicker the reinforcement following the behavior the more likely the behavior would be repeated.

A literature review of PCC using the HBM as a conceptual framework resulted in two studies available for review (Quillin, Silberg, Board, Pratt, & Bodurtha, 2000; Wang, Charron-Prochownik, Sereika, Siminerio, & Kim, 2006). In this section, I examined two studies that used the HBM to guide their research studies. The first study was selected because the study used the HBM as a guiding conceptual framework, the topic was PCC, and the majority of the female sample was aged 17 to 24 (Quillin et al., 2000). The second study was selected because both the HBM and SCT were used as conceptual frameworks, the topic was PCC, and the sample were adolescents which closely aligns my study (Wang et al., 2006).

Quillin et al. (2000) used an exploratory approach to examine college-aged women's vitamin consumption, knowledge of the cause of neural tube defects as related to preconception deficient folic acid, and related behavioral factors. Participants were recruited by posting flyers and class announcements at a Virginia college. All 71 participants were females aged 17 to 50 years of age with the majority aged 17 to 24 (94%). No details regarding participants race, socioeconomic status, or marital status was reported. All the participants were enrolled in an undergraduate psychology course at the time of the study.

Quillin et al. (2000) used a pretest, intervention, post-test method to collect data. Both the HBM and the Fetal Health Locus of Control Scale (FHLCS) were used as conceptual frameworks to guide the study. The HBM was used in constructing the

pretest, posttest, and during analysis. During analysis the HBM was used to help analyze participant behaviors and perceptions. The main constructs from the HBM used for this study were perceived susceptibility, perceived seriousness, perceived benefit, and perceived barriers. Quillin et al. clearly stated that the HBM was modified during analysis to combine perceived seriousness and perceived susceptibility into a new construct called perceived threat. An advantage of reviewing this study was the written sample test questions with the correlating HBM constructs presented to readers. Although Quillin et al. did not support the use of an educational intervention to increase folic acid consumption it was beneficial in identifying a lack of knowledge of preconception care. In addition, this study clearly described how the HBM and FHLCS was utilized and supported this study.

Wang, Charron-Prochownik, Sereika, Siminerio, and Kim (2006) used an exploratory case-control design, using cross-sectional data, to compare the ability of three theories to predict reproductive health decision-making in adolescents with Type 1 diabetes. Another objective of this study was to combine the strongest predictors of the theories to develop a composite model. This study will be further discussed under SCT since it uses both the HBM and SCT as guiding conceptual frameworks.

Social Cognitive Theory

SCT has been used as a guiding conceptual framework extensively in health behavior research for over 30 years (Glanz, Rimer, & Viswanath, 2008). It can serve many purposes including “understanding the factors that influence human behavior and the processes through which learning occurs, offering insight into a wide variety of

health-related issues” (Glanz et al., 2008, p. 175). SCT was built on the theory and research of Miller and Dollard (1941), Rotter (1945). Vygotsky (1978), Bandura (1986), and Lave (1988) postulated theories that all emphasize the central role of social learning. Initially, Bandura (1986) called his theory observational learning or social learning theory. As concepts from cognitive psychology were integrated into the theory Bandura (1986) renamed it SCT. One of Bandura’s (1997) most recent and important expansions of SCT is the inclusion of self-efficacy. A literature review of PCC using SCT as a conceptual framework resulted in one study available for review (Wang et al., 2006).

In this section, I examined two studies that use SCT to guide their research studies. The first study was selected because both the HBM and SCT were used as conceptual frameworks, the topic was PCC, and the sample were adolescents which closely aligns my study (Wang et al., 2006). The second study was selected because the study used SCT as a guiding conceptual framework, evaluated knowledge of a health related behavior, the sample of adolescents aged 14 to 19 years of age was similar to the targeted age group in my study, and had varied racial representation.

Wang et al. (2006) used an exploratory case-control design, using cross-sectional data, to compare the ability of three theories to predict reproductive health decision-making in adolescents with Type 1 diabetes. Another objective of this study was to combine the strongest predictors of the theories to develop a composite model. The data for this study were derived from another study where all 87 participants were single females aged 17 to 21. The majority were White (87%), attending high school (66.7%), and Roman Catholic (52%).

Wang et al. (2006) used 1-hour telephone interviews to complete the RHAB questionnaire for this study. The RHAB was formulated using the HBM, SCT, and TRA. Although the actual questionnaire or sample questions were not provided the study cited where the entire questionnaire could be located. Five constructs from the HBM were used in the RHAB including susceptibility, severity, benefits, barriers, and cues to action. Self-efficacy was the construct used from SCT in the RHAB questionnaire. Two constructs from the TRA were used in the RHAB including personal attitudes and subjective norms.

Findings from the Pittsburgh Adolescent Diabetic PCC study supported that the constructs from the HBM and SCT were the strongest predictors of adolescents' reproductive health decision-making in adolescents with type 1 diabetes. In addition, cues to action, perceived barriers, and self-efficacy were the best predictors of the adolescents' planned use of birth control. The findings of this study support the use of both the HBM and SCT in my study of PCC in adolescents.

In an adolescent over-the-counter (OTC) pain medication study by Rogers & King (2013), the researchers used a randomized pretest, intervention, post-test design to determine if an intervention based on SCT could increase students' knowledge and beliefs to more effectively use pain medications. All 203 participants were recruited from 10 classrooms from one rural high school. Participants were both male and female ranged in age from 14 to 19, currently enrolled as a student in the high school, and represented a wide range of ethnicity.

Rogers and King (2013) used a randomized pretest, intervention, posttest design. The SCT constructs of self-efficacy, outcome expectations, behavioral capabilities, and

situational perception were used in this study to develop the intervention and the instrument used in the pretest and post-test. Rogers and King performed a pretest on the instrument which resulted in modification of the tool. An expert panel was used to review the original instrument and the modified instrument. Examples of the instrument were not available to the reader.

Rogers and King's (2013) findings were mixed. There were significant increases in the intervention group for outcome expectations and behavioral capabilities compared to the control group participants. Rogers and King did not find significant changes in self-efficacy, situational perception, or outcome expectancies. An important finding was that prior to the intervention students thought they possessed the skills and knowledge needed to medicate and self-administer OTC medications. Participants also falsely believed they knew the positive and negative side effects of OTC medications.

Adolescent Affective and Cognitive Theory

Affective and cognitive theory has been used as a guiding conceptual framework extensively in psychology and education research for over 60 years (Wadsworth, 1996). It can serve many purposes including helping understand how adolescents' form and acquire knowledge (Ginsburg & Opper; Wadsworth, 1996). AACT is an evolving theory. AACT was built on the theory and research of Piaget (Wadsworth, 1971; Zelazo, Chandler, & Crone, 2010). The theory has been widely used in psychology and educational research of children to help "understand how and why children behave as they do" (Wadsworth, 1996, p. IX). Piaget's work was influenced by the work of psychoanalysts Freud and Jung and initially guided by psychologist Alfred Binet

(Ginsburg & Oppen, 1988; Wadsworth, 1971). Piaget's theory of cognitive theory developed over 60 years based on extensive studies of children.

AACT posits that intellectual development is accomplished with a combination of cognitive, affective, and social aspects (Wadsworth, 1971). A literature review using Piaget's ACT as a conceptual framework resulted in two studies available for review (Drust, 2013; Shaw, 2012). In this section, I examined two studies that used ACT to guide their research studies. The first study was selected because the study used ACT as a guiding conceptual framework, examined perceptions, and it used a qualitative approach (Drust, 2013). The second study was selected because ACT was used as the conceptual framework, utilized a qualitative approach, and the participants were Hispanic, representing a disenfranchised group (Shaw, 2012).

Drust (2013) used a qualitative case study approach to explore how the use of a math coach to provide professional development affected the teachers' instructional practices. Purposeful sampling was used to recruit 12 participants from one school. No details regarding participants' race, socioeconomic status, sex, or marital status were reported. All participants were required to be enrolled in the yearlong math coaching professional development program.

Drust (2013) used questionnaires, interviews, and archival data to collect data. Both Piaget's affective and cognitive theory and Knowles' andragogy theory were used as conceptual frameworks to guide the study. Piaget's affective and cognitive theory was used to help understand the participants' learning processes. Schema, cognitive

disequilibrium, and constructivism were three constructs from Piaget's affective and cognitive theory used in this study.

Although Drust (2013) discussed the use of Piaget's affective and cognitive theory it did not demonstrate or detail how the theory was used in the study. Review of this study did give me the opportunity to learn how Knowles's andragogy theory and Piaget's affective and cognitive theory could be used in combination as a conceptual framework. This review also afforded me the opportunity to identify stronger ways to demonstrate and cite more directly how I will use AACT in my own study.

The Hispanic Parental Involvement Study used a qualitative approach to explore the quality of their children's schools involvement opportunities and support systems and to find new ways to engage Hispanic families in academic and engagement programs (Shaw, 2012). Thirty families of Hispanic students were recruited from one school to participate in this study. Only 13 families completed the questionnaire and only nine participated in the focus group.

The Hispanic Parental Involvement Study used questionnaires, focus groups, and field notes to collect data (Shaw, 2012). Vygotsky's zone (1978) of proximal development theory, Moll's Funds of knowledge theory, and Piaget's ACT were used as conceptual frameworks to guide the study. All three theories were explained in detail and related the relevance to this study. Key constructs of ACT included concrete operations and formal operations. Piaget's ACT was used as a way to understand the participants' stage of cognitive development and gain insights of how to improve conditions to promote the parents' movement to formal operations stage. Facilitating movement along

the stages of cognitive development was found to assist families in helping their child with homework.

Findings from the Hispanic parental involvement study (Shaw, 2012) supported the use of the three theories used to guide this study. This study provided detailed discussion of how the theories were used and how the findings were interpreted and supported by the theories. Since this study used concrete and formal operations stages of cognitive development, just as my study will, it was beneficial to see how this study applied the theory and used it in analyzing the data.

Qualitative Design

There are three important keys to selecting an appropriate research design: understanding the nature of the problem, understanding what research has been done in the past, and knowing the population you are targeting (Creswell, 2014). Qualitative and quantitative research designs have very different approaches and methods. When the nature of the problem is to explore and understand the meaning of a problem of one or a group of individuals, then qualitative research will best serve the research study (Creswell, 2014). If the nature of the problem is to examine variables to test objective theories, then quantitative research would best serve your research study (Creswell, 2014). Mixed methods researchers employ both quantitative and qualitative methods when combining both methods would yield a clearer understanding of the problem (Creswell, 2014). Qualitative research would be the best suited for the study on routine adolescent PCC due to the nature of the problem, lack of research on the subject, and working with a vulnerable adolescent population. The use of a quantitative approach

would not yield a thick detailed rich description that a qualitative research design would provide on the subject.

Narrative research, phenomenology, grounded theory, ethnography, and case studies are five common types of qualitative research approaches available (Creswell, 2013). Each approach has distinct different focuses, units of analysis, data collection forms, data analysis strategies, and type of report generated from the data (Creswell, 2013). One needs to evaluate all of these characteristics to determine the best approach to investigate the phenomenon selected. After examining the five qualitative approaches and their individual characteristics phenomenology would best serve as the research approach to explore adolescent PCC.

Phenomenological Methodology

A phenomenological method to collect data has been used by many to help illuminate the lived experience of a topic. Due to the limited number of studies on PCC and use of adolescent participants phenomenology would best serve as the research methodology. Studies done gathering information about adolescents' knowledge, experiences, perceptions, and attitudes of PCC could lay the foundations to explore other methodology such as mixed method and quantitative. A literature review of PCC using a phenomenological method resulted in no studies available for review.

In this section, I examined three studies that use a phenomenological design that used the modified Stevick-Colaizzi-Keen method (Moustakas, 1994) to interview and analyze the data and studied a phenomenon that included adolescent participants. The first study was selected because the researcher used all adolescents and provided a

detailed description of how the modified Stevick-Colaizzi-Keen method was used to analyze the data (Kerr, 2008). The second study was selected because it also provided a detailed description of how the modified Stevick-Colaizzi-Keen method was used to analyze the data and participants were younger adolescents aged 16 to 19 (Schulz, 2006). The third study was selected because it included five adolescent participants ages 13 to 16 years old, similar to the age group targeted in my study (Gueye, 2012).

Kerr (2008) used a phenomenological approach to understand the experiences of male adolescents of divorced parents and the relationship they had with their father who were not granted custody. Participants were recruited by posting flyers at a Midwestern University. Eight male participants, aged 19 to 23, were recruited to participate in the study. Over 62 % were White, about 32% were Black, and only one participant was multiracial. All of the participants were enrolled in college at the time of the study.

Kerr (2008) used a semistructured interview protocol, developed for this study, with open-ended questions to facilitate collection of data. An initial interview was conducted to gather data and then a follow-up interview was scheduled to review their responses, researcher interpretation, and themes identified. The analysis process was clearly presented including full transcripts of interviews, listing of common themes, an accounting of common themes by each participant, and included additional themes identified by a single participant.

Kerr (2008) found multiple common themes shared by the participants. The use of phenomenology helped to give voice to adolescents to open up about a difficult topic. In addition, findings validated that although common themes could be identified on the

topic that the participants did have individual unique experiences that a survey may not have yielded. The study design was successful in gathering the unique experiences of a vulnerable population, adolescents.

Schulz (2006) used a phenomenological approach to understand the perceptions and experiences of adolescent males who attributed their inability to complete high school to feeling alienated from the educational system. Five participants aged 16 to 19 years old were recruited to participate in the study. The purpose of the study was to discover the essence of alienation from the perspective of the participants.

Schulz (2006) used a series of three semistructured interviews with each participant. The last interview included having the participant reflect on the meaning of his experiences of the phenomenon. The modified Stevick-Colaizzi-Keen method was identified as the process used to analyze the data collected. In addition, the method was explained in step-by-step detail that resulted in identifying common themes among the participants. Schulz accurately followed all five steps outlined in the modified Stevick-Colaizzi-Keen method of analysis including horizontalization, textural description, structural description, textural-structural description and lastly the composite textural-structural description. The last step in the analysis involved the formation of one description of the experience that represented the experience of all five participants.

Schulz (2006) through the use of phenomenology was able to discover the essence of the topic of the five participants. The essence was identified as an interrelationship among disappointment, trust, peer acceptance, and fear of failure. The use of phenomenology helped to give voice to these adolescent participants, a group considered

vulnerable, to open up about a difficult topic. The use of a survey would not have been applicable in this study due to lack of research on the topic. In addition, findings validated that although common themes could be identified on this topic but the participants did have individual unique experiences that a survey may not have yielded. The study design was successful in gathering the unique experiences of a vulnerable population, adolescents.

Gueye (2012) used a phenomenological approach to explore the mentoring experiences from the perspective of adult mentors and adolescent females who were mentored. A total of 17 participants were recruited including five adolescent girls in Grades 7 to 9. A purposeful sampling method was used to identify participants for this study. Participants included mentors aged 39 to 58, mentees aged 13 to 16. The participants' ethnicity or socioeconomic status was not included in the study.

An interview protocol was developed and used to collect data from the participants in the Perceptions of mentoring relationships study (Gueye, 2012). Prior to conducting the interviews the researcher underwent a bracketing interview using a licensed mental health psychologist to help identify and set aside any personal experiences that may cloud her view and help her keep a fresh perspective of the phenomenon under investigation. One interview session was used to collect the data from participants. The modified Stevick-Colaizzi-Keen method was identified as the process used to analyze the data collected. In addition analysis also included using graduate students performing axial coding to help interpret and open code the data to identify

recurring themes. Although all five steps of the modified Stevick-Colaizzi-Keen method were reported as being used they were not provide in explicit detail or labeled as such.

Gueye (2012) found multiple common themes shared by both mentors and mentees. The use of a phenomenological approach to explore the mentoring experience helped identify that both mentors and mentees use multiple strategies to nurture and maintain the relationship. The selected study design was successful in gathering the unique experiences of a group with a wide age range from 13 to 58 years of age.

Implications

This study provides implications for nursing practice, advanced nursing practice, education, and medical practice with considerations for future research. In addition to the CDC (2006) mandating that routine PCC be provided, various researchers and scholars have recommended that new strategies need to be developed and expanded to provide PCC for all women of childbearing women (Howse, 2008; Johnson, Atrash, & Johnson, 2008; Posner, Johnson, Parker, Atrash, & Bierman, 2006). Due to the wide range of ages and varied needs within the group of women of childbearing age more than one approach to PCC should be developed. The educational, emotional, developmental, physical, and psychosocial needs of an adolescent are not necessarily the needs of a young or middle adult. Based on the unique characteristics of adolescents, a PCC program for adolescents should be developed that addresses their particular educational, social, and medical needs (Bearinger et al., 2007; Daley et al. 2004; Tylee et al., 2007). This research study will add to the body of knowledge regarding the knowledge, attitudes, and beliefs about PCC, in

low income Black adolescents, to assist in developing appropriate culturally sensitive PCC programs for adolescents.

Summary

Researchers have consistently has recommended that PCC needs to be provided to all women of childbearing age and should be tailored to their unique educational, emotional, developmental, physical, and psychosocial needs of the individual (Bearinger et al., 2007; Daley et al., 2004; Tylee et al., 2007). Among the themes that emerged from the literature review, were PCC knowledge deficits exist that are not being met (Corbett, 2011; Coonrod et al., 2009; Delgado, 2008; Heavey, 2010; Kaiser & Hays, 2005) the younger the participant the less knowledgeable they were regarding positive and negative health behaviors that affect pregnancy (Coonrod et al., 2009), participants are interested in receiving PCC (Coonrod et al., 2009), there are opportunities to provide PCC that are not being utilized (Heavey, 2013), new strategies need to be developed and expanded in delivering PCC for all women of childbearing women (Corbett, 2011; Delgado, 2008), and that further research needs to be done to better understand the PCC needs of adolescents (Corbett, 2011; Coonrod et al., 2009; Delgado, 2008; Heavey, 2010; Kaiser & Hays, 2005).

The purpose of this phenomenological study will be to understand preconception care from the perspective of adolescent females. I will also seek to identify barriers to seeking preconception care.

To understand preconception care from the perspective of adolescent females, a qualitative phenomenological approach was used to gather information. Interviews were

used to collect data since it is the most common method of collecting data in phenomenological research. In addition in-depth interviews allowed multiple opportunities for clarification and better understanding of the meaning of the data collected from the adolescent participants. The modified Stevick-Colaizzi-Keen method was used to conduct interviews and analyze the data (Moustakas, 1994). Section 3 is an explanation of the methodology and selection of research design, data collection, and data analysis methods employed to conduct this study.

Section 3: Research Method

Introduction

The purpose of this phenomenological study was to understand preconception care from the perspective of adolescent females. I sought to identify barriers to seeking preconception care. I investigated (a) adolescent females' knowledge, attitudes, and beliefs regarding preconception care; and (b) adolescent females' knowledge regarding participating in a reproductive life plan. I used a qualitative phenomenological approach to gather information from adolescents about PCC, conducted two in-depth phenomenological interviews with each of the five participants. This study provides insight as to why adolescents seek or, more importantly, do not seek PCC. This section is a description of the qualitative method, research questions, contexts for the study, measures for ethical protection, role of the researcher, criteria for selecting participants, data collection strategies, data analysis plan, and strategies to ensure reliability.

Qualitative Tradition

One of the most important tasks in preparing for a research study is to determine which research design should be utilized to study the topic. Creswell (2014) identified quantitative, qualitative, and mixed methods as three types of research designs. The nature of the research problem, target population, procedures of inquiry, and specific methods of data collection, analysis, and interpretation are some of the factors which should be considered when selecting a research design.

To evaluate objective theories using quantitative research, the variables of a phenomenon need to be known (Creswell, 2009; Denzin & Lincoln, 2011). Considering

that important variables on PCC have yet to be identified due to lack of research on the subject, a quantitative design would not be applicable for this study. A qualitative method is well suited for an exploratory study aimed at examining and understanding the meaning of an experience (Creswell, 2009). Studies are usually considered exploratory if there is a lack of published research on the topic or on the topic with a particular target population, and when the researcher's objective is trying to understand the subject by listening to the participants' experiences (Creswell, 2013; Marshall & Rossman 2015; Patton, 2014). Since the majority of researchers on PCC have addressed PCC in women with known chronic illnesses rather than healthy women, this study qualifies as an exploratory study. In addition, adolescents have not been a target population of PCC research published in the literature.

Use of a qualitative research design is justified because the proposed study is an exploratory study, will use in-depth interviews to understand adolescent females' experiences of PCC, and little research has been done on this topic or with this population. "Mixed methods research is an approach to inquiry that combines or associates both qualitative and quantitative forms" (Creswell, 2013, p. 4). Since a quantitative approach is not applicable, neither is a mixed method approach for this study.

Ethnography, grounded theory, case studies, phenomenological research, and narrative research are five types of qualitative strategies of inquiry to research a topic (Creswell, 2013; Denzin and Lincoln, 2011). Each of these five strategies is designed to put forth different kinds of questions and use different analytic tools to answer those

questions (Polkinghorne, 2005). “Phenomenology is a complex system of ideas associated with the works of Husserl, Heidegger, Sartre, Merleau-Ponty, and Alfred Schutz” (Denzin & Lincoln, 2011, p. 27). The hallmark of phenomenology is capturing the lived experience or essence of several participants (Creswell, 2013; Denscombe, 2014; Hatch, 2002). The basic purpose of a phenomenological approach is to develop a composite description of the lived experience and uncover a universal essence that represents the participants’ experiences. Both the purpose and hallmark of phenomenology support using this strategy as the best approach to explore PCC attitudes and beliefs with this target population and to allow for adolescents’ voices and experiences to be heard.

There are many forms of phenomenology to guide a researcher during a study. Denscombe (2014) identified two types of phenomenology as the European and North American versions. The North American version is “less concerned with revealing the essence of experience, and more concerned with describing the ways in which humans give meaning to their experiences” (Denscombe, 2014, p. 101). The European version of phenomenology is concerned with “investigating the essence of human experience” (Denscombe, 2014, p. 100). The purpose of European phenomenology is to get a rich description of all the important qualities of the participants’ experiences on the topic. The aim of transcendental phenomenology, a type of European phenomenology, is focused on “discovering underlying, fundamental aspects of experience- features that are universal and that lie at the very heart of human experience” (Denscombe, 2014, p. 100) Transcendental phenomenology is consistent with the aims of my study to explore PCC

and for adolescents' voices and experiences to be heard. I used transcendental phenomenology as the qualitative research design to execute this study of PCC.

Research Questions

1. What are the differences and similarities between adolescent females' knowledge, attitudes, and beliefs regarding preconception care?
2. What are the differences and similarities between adolescent females' knowledge, attitudes, and beliefs regarding participating in a reproductive life plan?

From each of the central research questions, additional sub questions emerged that were used to help narrow the focus and understand more fully the knowledge, attitudes, and beliefs about preconception care.

Contexts for the Study

The context for this study was a public housing development and an apartment located in a large metropolitan city in southeastern U. S. The population for this study was adolescents who lived in a housing development and an apartment complex.

Table 1

Housing Characteristics

Characteristic	Driftwood Housing Development	Bayou Apartments
Type of Housing	Single Family Housing	Apartments
Number of Units	160	450
Number of Bedrooms	2, 3, & 4	1, 2, & 3
Monthly Rent	\$918 to \$1341	\$529 to \$750
Accepts Section 8	Yes	Yes
Paid Utilities Included	No	Yes
Central Air & Heat	Yes	Yes
Washer/Dryer in Unit	Yes	No
24 Hour On-Site Manager	Yes	No
Swimming Pool	No	Yes
Playground	Yes	Yes
Community Center	Yes	Yes

Driftwood Housing Development

Driftwood Housing Development (pseudonym), a low-income housing development located in a suburb of a metropolitan city in southeastern U.S., was used to recruit participants for this study. The 160 single family rental houses were built in the last five years. The residents included traditional, single-parent, and multigenerational families. The majority of residents are African-American. The development has a community center, strictly enforced rules for residents, a curfew, and a manager living on-site. The community center has meeting rooms and a computer room for residents to use. There are plans to open an on-site daycare center in the next few months. Rent ranges from \$918.00 to \$1341.00 per month plus utilities. Residents may use government assistance, Section 8, to assist with the monthly rent.

Each house is furnished with all major appliances including a washer and dryer. The entire housing development is clean, and well maintained, the houses are all modern,

attractive and colorful. The bus stop for all Driftwood school students is located in front of the community center. The housing development is not located near health care centers or hospitals. One public bus line services the area but service is very infrequent. There is a high crime rate in the area surrounding the housing development.

Bayou Apartments

Bayou Apartments (pseudonym), a low-income apartment complex, was also one of the sites used to recruit participants for the study. The apartment complex is located in the same neighborhood as the housing development. There are 450 one, two, and three bedroom apartments in the complex. The residents include traditional, single-parent, and multi-generational families. The majority of residents are African-American. Rent ranges from \$529.00 to \$750.00 per month not including utilities. Residents may use government assistance, Section 8, to assist with the monthly rent if they qualify.

Each apartment is furnished with all major appliances including central air and heat. A manager is on-site only during daytime business hours. The complex has a community center, laundry facility, and swimming pool. The school buses load and unload high school students in front of the community center. The apartment complex is older, maintained, but not attractive. The apartment complex is located within a few blocks of the housing development. The apartment complex is not centrally located near health care centers or hospitals. One public bus line services the area but service is very infrequent. There is a high crime rate in the area surrounding the apartment complex.

Measures for Ethical Protection

“A ‘good’ qualitative study is one that has been conducted in an ethical manner” (Merriam, 2002, p. 29). Informed consent, anonymity, and confidentiality are some of the most important ethical issues to address in qualitative research. First, I received approval from Walden University’s Internal Review Board to perform the study. I obtained permission from the managers of the housing development and apartment complex to recruit and interview the participants.

Informed consent forms were prepared using language that was age appropriate for the participants. Participants received a written description of the study that included contact information for me and my faculty chairperson. A signed informed consent form was obtained from each participant (Appendices B, C, and D).

I employed multiple strategies to protect the participants’ anonymity and confidentiality. I used pseudonyms for the housing development, apartment complex, and all participants to ensure confidentiality. In addition to each of the participants being assigned a pseudonym they also had a code number assigned to them for anonymity. Identifying information that links the participant with their name and demographic information is stored in a locked file cabinet in my home and in a password protected computer file.

Role of the Researcher

“Thinking through and describing the anticipated relationships between researcher and participants is a vital part of designing a qualitative project” (Hatch, 2002, p. 51). Understanding a qualitative researcher’s role as the key data collection instrument,

establishing a researcher-participant relationship, and identifying methods to help build and maintaining researcher-participant relationships should be developed prior to interviewing participants. Defining the researcher's relationship to the participants and identifying strengths and weaknesses of interviewing techniques will also help to establish, build, and maintain researcher-participant relationships.

Researcher as Instrument

A researcher acts as the main instrument to collect data from the participants in a qualitative study (Borbasi, Jackson, & Wilkes, 2005; Creswell, 2013). The use of the four senses of sight, hearing, smell, and touch were utilized during interviews. Active listening, good interviewing skills, participant observation, and interpretation on multiple levels needed to be used during interviews to accurately capture the data (Borbasi, Jackson, & Wilkes, 2005). I used these skills that I, as a nurse and nurse practitioner, have been trained and have actively utilized these for over 30 years.

Researcher-Participant Relationship

In a phenomenological study, it is essential to develop a researcher-participant relationship to encourage participants to openly share their experiences. It is important to present one's self in a nonthreatening role that is generally acceptable to participants such as a student, faculty, or author (Rubin & Rubin, 2005). I developed relationships by recruiting participants in person in the rental offices, community center, and at the bus stops at each site. I briefly introduced myself as a student completing a formal paper for school, explained the proposed study, and what their role as participant involved. I shared with participants that I am trying to gather information to understand what their

experiences with PCC have been. Those interested in participating were invited into a private room, in the community center or rental office, to further discuss the study. I continued to foster an open and trusting relationship throughout each of the multiple interviews. At the conclusion of each interview I thanked each participant for their time and help with the study. I gave a ten dollar gift card to each participant as a thank you gift for participating.

Relationship to Participants

My relationship to participants in this study was as researcher collecting data. My role was not as a nurse, nurse practitioner, medical provider, counselor, teacher, or friend. During this study my relationship to the participants included not having any previous or current personal or professional relationship with them. I have never been employed by the housing development or apartment complex. I do not personally know any of the employees or residents of the housing development. In the past few months I initiated contact with both facilities to introduce myself and discuss the possibility of recruiting participants for my study. Both facilities agreed to allow me to recruit participants for my study at their facilities.

Researcher's Interview Experience

Evaluation of one's interviewing techniques and experiences may help identify ways to improve interview skills and data collection during a qualitative study. As a registered nurse for over 30 years and a nurse practitioner for over 15 years, interviewing is a skill I depend on in every interaction with patients daily. Due to their clinical experience, nurses tend to have a greater ability to successfully actualize the researcher

role of interviewing, establishing and maintaining a researcher-participant role than other social researchers (Borbasi, Jackson, & Wilkes, 2005).

Although I possess strong interview skills, I also have several weaknesses that need to be addressed. My normal roles as caretaker, teacher, and counselor had to be eliminated during my interactions with participants. Nurse practitioners tend to control the information gathered and pace during medical interviews whereas the control shifted more to the participant with a more relaxed pace. Also many of the questions during a medical interview are completed with simple yes or no answers, whereas, during this study rich detailed answers were encouraged. To address these weaknesses, I reviewed a reminder list of 11 common pitfalls prior to every interview (Pope & Mays, 2006). I also carefully listened after each interview using Whyte's (1986) directiveness scale for analyzing interviewing techniques and Patton's (2014) scale to evaluate if control of the interview by the researcher was successfully achieved. Based on what I learned, I made positive changes needed to improve my interviewing skills.

Criteria for Selecting Participants

Selection of a sampling strategy should be guided by the purpose of a research study (Pope & Mays, 2006). Qualitative research sampling methods differ from quantitative because they are not usually random or designed to produce results generalizable to an entire population (Gall, Gall, & Borg, 2014; Polkinghorne, 2005; Pope & Mays, 2006). It is important to choose participants that have the richest experiences of the phenomenon to be able to gather data to better form a clearer understanding of the phenomenon (Merriam, 2002). Convenience, snowballing and

purposeful sampling are all appropriate strategies to select participants for qualitative phenomenological research studies. Each sampling strategy has advantages and disadvantages that may affect a study. Evaluation of the disadvantages and advantages of each sampling method helped determine which strategy was best suited to select participants for this study.

Convenience Sampling

Convenience sampling is a sampling strategy where the main selection criteria are convenient access to the participants (Denscombe, 2014). The advantages of using a convenience sample are that they are less expensive and that it is easy. The disadvantages of a convenience sample strategy are the quality of your information and credibility may be limited (Creswell, 2013; Denscombe, 2014).

Snowball Sampling

Snowball sampling is a participant selection strategy where a qualifying participant recommends one or more others with rich experiences on the topic to participate in the study (Denscombe, 2014, Marshall & Rossman, 2015). Possible advantages of this strategy include quicker identification of participants, faster access to participants, and the ease with which referred participants share their experiences. The ease of sharing experiences by referred participants is probably due to being introduced by a friend of theirs (Denscombe, 2014). Disadvantages of using the snowball sampling strategy are that it may limit socioeconomic, cultural, educational and intellectual variation among study participants.

Purposeful Sampling

Purposeful sampling refers to a strategy where participants are selected who have experienced the phenomenon and are able to provide rich detailed information that will help the researcher understand the phenomenon (Creswell, 2013; Denscombe, 2014).

Advantages of using a purposeful sample include getting participants with rich experiences and the ability to include participants with a range of varied experiences. “A purposeful sample can be used in order to ensure that a wide cross-section of items or people is included in the sample” (Denscombe, 2014, p. 41). A possible disadvantage to using purposeful sampling to select participants is that the researcher needs to be knowledgeable about the phenomenon to be able to utilize the sampling method.

Selection of Sampling Strategies

Participants for this study were selected using a combination of purposeful and snowball sampling strategies. Convenience sampling was not used for this study because although it is relatively cheap and easy to do, it is not worth the risk of limiting the quality or credibility of the study as some scholars suggest it might (e.g., Creswell, 2013; Denscombe, 2014). Participants first identified through purposeful sampling, from one of the two facilities, were asked to nominate additional participants for the study. In this study, purposeful and snowball sampling involved selecting adolescent females who were willing to share their experiences of PCC. It is believed participants selected from the two facilities represent the typical PCC experience of adolescent females. The participants for this study were adolescent females aged 18 to 21 years of age.

Participant Selection

There is not an exact perfect number of participants or a mathematical formula to use to determine the number of participants required to successfully complete a qualitative phenomenological research study (Patton, 2014; Pope & Mays, 2006). A cumulative approach to determining sample size was used. “The cumulative approach is one in which the researcher continues to add to the size of the sample until a point is reached where there is sufficient information and where no benefit is derived from adding any more to the sample” (Denscombe, 2014, p. 40). Although sample size cannot be predicted at the beginning of a phenomenological study, even using a cumulative approach, it is anticipated that at least five participants will be needed to achieve saturation for this study.

Many resources recommend between five to 25 participants to achieve a rich description of the phenomenon (Creswell, 2013; Denzin & Lincoln, 2011). Multiple sources emphasize that sample size should be determined by the research design, purpose, research questions, and available resources (Creswell; Denscombe; Patton, 2014). Marshall and Rossman (2015) found that recent phenomenological health research studies tended to include one to four informants. This sample consisted of five women who meet the age criteria. I interviewed the first five participants of the purposeful/snowball sample who agree to be interviewed. Data from those five interviewed achieved saturation of data and did not require additional participants.

Inclusion criteria for this study is that participants were English-speaking females, aged 18 to 21 years of age, and had not had a previous pregnancy or undergone a

hysterectomy. Females who have had a hysterectomy in their teen years would have had an extreme medical history and not be representative of the typical experience of teens, therefore excluded from the study. Since the study is aimed at gaining the adolescent experience of PCC, females over the age of 21 were excluded from the participant pool. Pregnant participants were excluded from the study.

Data Collection Strategies

In phenomenological research, the interview is the most common method used to collect data on the topic being explored (Moustakas, 1994; Polkinghorne, 2005). “The phenomenological interview involves an informal, interactive process and utilizes open-ended comments and questions” (Moustakas, 1994, p. 114). A set of open-ended interview questions were prepared to guide the interview and help the participants focus on ways to share their PCC experiences (Appendix A). It is important to remember that the prepared interview questions were just a guide not a script (Moustakas, 1994; Patton, 2014). Interview questions needed to be flexible, may need to be changed during the interviews, and many not even be needed during the interviews (Moustakas, 1994).

Capturing participants’ full descriptions and helping to understand and clarify the meaning of the data collected “requires collecting a series of intense, full, and saturated descriptions of the experience under investigation” (Polkinghorne, 2005, p. 139). To achieve this, I conducted two, one-on-one interviews with all participants. I scheduled an initial interview appointment with each participant when the consent was signed. At the beginning of the second interview participants were asked to review the transcripts of the first interview for accuracy. At the close of each interview a follow-up interview time,

date, and location was arranged with each participant. Conducting at least two interviews allowed the participant to reflect on PCC experiences and possibly share more during the second interview. The second interview also allowed an opportunity for participants to clarify their statements, transcribed from the first interview, and validate the researcher's interpretation of their statements. Any participants who do not participate in two interviews were eliminated from the study.

Data Collection Steps

The following steps were used to collect data for this study:

1. Internal Review Board approval was obtained from Walden University.
2. I obtained permission from all recruitment sites. Participants were recruited from the multiple sites using flyers and recommendations from recruited participants.
3. Participant consents were obtained prior to conducting the interviews.
4. I interviewed five participants using in-depth phenomenological interviews with each participant. I interviewed each participant at least twice. Moustakas' (1994) phenomenological interview process was utilized as the guiding framework to prepare and conduct the interviews. An interview guide was prepared prior to the interviews to assist with the interview. Interview questions were open-ended and designed to capture the participant's knowledge, attitudes, and beliefs about PCC. I conducted all interviews in person and audio-taped with two recorders.

Data Analysis Plan

“Data analysis is a systematic search for meaning” (Hatch, 2002, p. 148).

Moustakas’s (1994) modified version of the Stevick-Colaizzi-Keen’s method of analysis was used because it has systematic steps to complete qualitative data analysis and provides guidelines to develop the textural, structural, textural-structural, and composite textural-structural descriptions.

Horizontalization

“Horizontalization is the process of laying out all the data and treating the data as having equal weight; that is, all aspects of data have equal value at the initial data analysis stage” (Merriam, 2002, p. 94). I began by reflecting on my own experience of PCC through writing about it in rich detail. My own data were horizontalized by listing each statement, sentence, or phrase about the phenomenon. This process helped me identify and set aside some of my own biases and allow a fresh perspective while analyzing participant data. Next the same process was completed on each participant’s verbatim transcript. The horizontalized data was reviewed to remove any repetitive expressions leaving only invariant constituents, “nonrepetitive, nonoverlapping statements” also known as “the invariant horizons or meaning units of the experience” (Moustakas, 1994, p. 122). The narrowed statements were then clustered to form themes. These themes and units of experience were cross checked from the original transcripts to verify that they were consistent with the data. I also had a peer review the themes to verify that the data was appropriately clustered.

Textural Description

A textural description was devised from these themes. Moustakas (1994) described the construction of a complete textural description as

An interweaving of person, conscious experience, and phenomenon. In this process of explicating the phenomenon, qualities are recognized and described; every perception is granted equal value, nonrepetitive constituents of the experience are linked thematically, and a full description is derived. (p. 96)

This process of constructing a textural description was completed to illuminate the meaning of the PCC experience of participants. Each participant's relevant expressions, about PCC, were written out verbatim. Each participant's interview statements formed a whole textural description for that participant. I also had a peer review the textural description to verify that the data was appropriately classified.

Structural Description

Structural description requires that the researcher take the data from the textural description and categorize it into different meanings of the experience of the participants. Use of imaginative variation was utilized to develop a structural description of each participant's experience. Moustakas (1994) defined imaginative variation as devising every possible meaning of the experiences by using varying lenses. I sought all possible meaning by using varied lens such as imagination, various roles, and different perspectives. Through this process I developed a structural description of the participants' experiences. I also had a peer review the data to verify that the data was appropriately categorized into accurate meanings of the experience of the participants. An example of a

textural statement was when a participant described what she had experienced during her first gynecological exam. An example of moving the textural description to a structural description was the participant found she was embarrassed by the medical questioning, felt judged by the medical provider, and was scared by the noises made during the Papanicolaou (Pap) smear collection procedure.

Textural-Structural Description

During this part of the analysis each participant's textural and structural descriptions were merged to reflect the meaning and essences of their experience (Moustakas, 1994). The merging of the textural and structural descriptions developed a synthesized description of each participant's personal experiences. Core themes emerged during this stage. I also had a peer review the data to verify that the data was appropriately categorized into accurate core meanings. Peer support is an example of core theme that emerged during the textural-structural description analysis.

Composite Textural-Structural Description

Developing a composite textural-structural description of all the participants is the last step of the analysis. This involved an integration of all of the participants' individual textural-structural descriptions to yield one universal description of the experience that represented the group's experience as a whole (Moustakas, 1994). Lastly, I had a peer review the data to verify that the data accurately reflected a universal description of the experience that represented the group's experience as a whole.

Reliability

Reliability in qualitative research occurs when review of the research data indicates that the results are consistent, dependable, and make sense to readers (Merriam, 2002). Member checking, peer examination, full description of data collection and data analysis are ways to ensure reliability of a qualitative study. I used member checking as a means of verifying the data and ensuring reliability (Busher & James, 2012; Creswell, 2013). I actively engaged in member checking by having the participants review their own comments and my interpretation to validate that the interpretation reflected what was intended during the second interview session. Only participants that completed both interview sessions were included in the study. I asked a colleague, who is also a midwife, to participate in peer examination by reviewing interview narratives and findings to establish whether the findings were accurate or not. I also had the midwife review the categorized data to verify that the data was appropriately categorized. This process known as inter-rater reliability helped to establish “that the category system ‘fits’ the data and that the data had been properly ‘fitted into’ it” (Patton, 2014, p.555). Trustworthiness was upheld by keeping all audio taped interviews and transcriptions (Busher & James, 2012). Full descriptions of the steps used to collect and analyze data were provided to ensure reliability. I included multiple citations of participants’ actual statements in my findings to illustrate my data analysis and interpretation. Lastly, I reviewed my journal as a means of assisting with accurate interpretation of the data and eliminating personal bias.

Summary

I used a qualitative transcendental phenomenological research method to understand adolescents' knowledge, attitudes, and beliefs about preconception care. I recruited five female adolescent participants from a housing development and an apartment complex in a city in the southern U. S. I also recruited participants that lived outside the targeted housing community that have been referred by participants who live in the targeted housing community. Multiple in-depth interviews were conducted to understand the adolescents' perspective on PCC.

Section 4: Results

Introduction

As outlined in Section 3, this study was designed to examine the lived experiences of adolescent females in relation to their knowledge, attitudes, and beliefs about PCC. The aim of this study was to identify themes and essences of adolescents' experiences with PCC. Moustakas's (1994) modified Stevick-Colaizzi-Keen method was used to organize and complete the analysis of data. This section is an explanation of the steps used to review and analyze the data, the participant's biographical information and textural-structural descriptions, a combined composite description of themes, a discussion of significant themes and essences, and the methods utilized to ensure trustworthiness of the findings (See Appendix D for example of participants' individual and structural descriptions.)

Steps of Reviewing and Analyzing Data

Moustakas's (1994) modified Stevick-Colaizzi-Keen method of data analysis was used to complete the data analysis process. Each of the following subsections will describe the processes used to analyze the data. To manage the data, I labeled the files as Participant A through E and created a pseudonym for each participant with the starting letter of the alphabet assigned to the participant. The pseudonyms Abby, Bella, Cici, Deidra, and Elsa were used for participants. Moustakas's (1994) modified Stevick, Colaizzi, and Keen Method of organizing and analyzing phenomenological data was used to process the data:

1. Each participant's statement was considered with respect to significance for description of the PCC experience.
2. Each participants' relevant statements were recorded.
3. Each nonrepetitive, nonoverlapping statement was listed for each participant. These statements were the invariant horizons or meaning units of the experience.
4. Invariant units were related and clustered into themes for each participant.
5. A textural description for each participant was developed. The description synthesized invariant meaning units and themes and included supporting verbatim examples.
6. A structural description was developed for each participant using imaginative variation and reflection of the textural description. Verbatim statements were used to help support the description statements.
7. Textural-structural description of the essences and meanings was constructed for each participant.
8. A composite textural-structural description of essences and meanings from all participants was completed. This composite formed the universal description of the experiences that represented all participants.

Participant A

Biographical Information

Abby is an 18-year-old Black female who lives with her mother and is unemployed. She identified herself as single at this time. Abby shares a two bedroom

apartment with her mother, two sisters, and her two-year-old niece. Her mother is not employed so the family depends on government support to live. Abby did not finish high school but completed the ninth grade. Abby is not in school and does not work. The apartment the family lives in is through government housing where a part of the rent is paid by the government. She has full access to healthcare through her Medicaid coverage.

Textural-Structural Description of Participant A

Abby's experiences with acquiring accurate, thorough PCC and RLP information have been unsuccessful. Due to multiple factors Abby has not gained the knowledge needed to prepare her for a healthy pregnancy. Beginning with Abby's past medical experiences she stated she had one visit with a medical clinic for a sore throat. Limited contact with medical personnel in her adolescent years is one factor that has limited her acquisition of knowledge of PCC and RLP. She did not engage in conversation with the medical personnel during the visit due to feeling unable to speak on her own behalf. Limited contact has also led her to not establishing a rapport with medical personnel who could have provided needed information. Abby's lack of confidence in talking openly with medical staff is also a barrier for her obtaining information on PCC and RLP. Her mother was the person present who spoke to the medical personnel. She depends on her mother to help her make doctor appointments and get her to the clinic.

Abby did not receive any information about PCC at her clinic visit. Her inability to have open communication directly and openly with the medical staff was a barrier for her not receiving more information about PCC during her clinic visit. Abby's formal school sex education classes did not offer the opportunity for her to gain the necessary

knowledge about PCC and RLP. Abby's experiences with PCC were provided by her public school and focused on birth control and how to take care of babies. She said the class was about "how to take care of babies" and "that we should use pills to keep from getting pregnant." Abby's discussion of healthy and bad habits for preparing for a pregnancy were focused on abstract answers such as "get a job" and "get your life together for your child". She was not able to correctly identify one known positive or negative behavior associated with PCC.

Abby's formal school sex education classes did not offer the opportunity for her to gain the necessary knowledge about PCC and RLP. Abby's experiences with RLP revealed that she has not been taught how to make a plan nor has she considered making one. She has thought about how many children she would like but has not considered how to plan her family. Abby does not possess the information necessary to make a RLP.

Abby's discussion of who she turns to for information was contradictory. She readily identified "my friends mostly" as the people she turned to for information about PCC and RLP. Although Abby identified several people she can talk to about PCC and RLP, she reports she does not discuss these topics with them. It would be a logical conclusion that Abby's friends who attended the same schools as she did also lack knowledge about PCC and RLP. Abby did not readily recognize the contradiction in her statements about whom she gets information from about PCC and RLP and the admission that she does not talk to her friends about PCC and RLP.

Abby is sexually active but does not realize that she is at risk for getting pregnant. She is under the impression that because she has not gotten pregnant to date then it

cannot happen. She stated “I don’t think it’ll happen. Cause it ain’t happen in all this time yet.” Abby believes she is not at risk for pregnancy because she does not have unprotected sex. Abby is at risk for pregnancy because she does not use birth control and only uses “condoms sometimes.” She also does not understand that condoms are considered a form of birth control. Abby also does not seem to understand what unprotected sex means. She knew several girls who were pregnant in middle school and “a whole bunch” in high school. Abby reported she does not feel prepared if she gets pregnant. Abby does acknowledge that she is not prepared to get pregnant. Another barrier for Abby is that she does not know what information she lacks regarding PCC and RLP. Despite having full Medicaid coverage, Abby has limited ability to seek accurate sources to gain this knowledge.

Participant B

Biographical Information

Bella is a 19 year-old Black female who lives with her unemployed mother and sister in a two bedroom apartment. Her father is also unemployed and does not live with the family. Bella completed the eighth grade but dropped out of high school. She is currently unemployed. The apartment the family lives in is through government housing where a part of the rent is paid by the government. She has full access to healthcare through her Medicaid coverage.

Textural-Structural Description of Participant B

One-on-one interviews were done to understand this participant’s past experiences with PCC and RLP. Opportunities for Bella to gain PCC and RLP

information have been available through multiple clinic visits. Bella described multiple medical visits with multiple clinics due to problems with her menses and her desire to seek birth control. Her interactions with the first clinic's medical personnel were described as negative because she felt like they did not talk with her or answer her questions. Bella stated:

I really didn't like 'em 'cause they don't never, um, really talk to me about stuff...just told me to, um, take birth control pills to make my menstrual regular. That is what the Planet (sic) Parenthood lady doctor said, I didn't really like going, um, I don't get why they would give me birth control pills didn't make sense to give birth control pills for my menstrual if I wanted to get pregnant.

Bella further described an equally unhappy relationship with the second clinic's medical staff when she stated "yeah, it was about the same as before, they don't really talk nothing 'bout what's going on with you or what they doing. They just tell you do this." She has failed to develop a positive relationship with any medical personnel despite multiple visits. Bella feels the medical personnel do not talk with her or answer her questions but tell you what to do. Initially Bella's mother set up and attended clinic appointments with her. After the first few times Bella made her own appointments and went on her own. Although Bella feels comfortable making and attending her medical appointments she does not feel she has open communication with any of the personnel.

Bella does not recall anyone at the clinic discussing preparing for pregnancy despite multiple opportunities to do PCC counseling. Bella's school experience with PCC was limited due to the fact that she was not allowed to complete her sex education class

in school. She relayed how while starting school sex education classes “I got put out that sex education class ‘cause some boy was cuttin’ up and got me in trouble and got us both put out. So then they stopped the class nobody got the class.” Bella’s experience with PCC during school was incomplete due to being thrown out of the sex education class in school. Bella was unable to identify any of the positive habits to implement prior to getting pregnant or negative behaviors to stop before attempting a pregnancy to help have a healthy baby. She provided abstract answers like “get a job” and “ask my mama for help” when discussing the healthy habits and bad habits to avoid to get ready to get pregnant. Bella did add that her mother told her not to smoke or drink but did not know it was something not to do if you are planning to get pregnant.

Bella denies learning about RLP. Her initial response to whether she has a RLP she said: “I ain’t having kids anytime soon.” Bella does not believe she can control when and how many children she has in her life. When asked whether or not a woman can control when she has children her reply was: “No, I don’t think so, you have kids when you do, it just happens when it happens.” Bella did not understand that a RLP is a means of planning your children. Bella did not understand that a RLP can include planning to not have children until she wants. She reports “it would be good to make a plan?” and does see value in making a plan. Once RLP was discussed Bella did believe it would be valuable to make a RLP.

Bella has not found a reliable source for information on PCC and RLP. Bella’s discussion of whom she turns to for information about PCC and RLP included friends and her sister. During the discussion she reported she has not discussed PCC or RLP with

any of her friends. The only related thing she has talked to her sister about is birth control methods.

Bella does not use birth control but does not believe she will get pregnant in the next year. She does not use birth control 100% of the time. Bella also does not identify condoms as a type of birth control. She reports she uses condoms sometimes. Bella does not understand condoms are a form of birth control when asked. There were several common PCC and RLP terms that Bella did not understand when used in conversation. It would be difficult to get accurate survey information about PCC and RLP from this participant.

Participant C

Biographical Information

Cici is a 21 year-old Black female who lives with her mother, grandmother, and three siblings in a three bedroom apartment. She identified herself as single and not currently in a relationship. Cici completed the 11th grade before dropping out of high school. She is not currently in school or employed at this time. The apartment the family lives in is through government housing where a part of the rent is paid by the government. She has full access to healthcare through her Medicaid coverage.

Textural-Structural Description of Participant C

One-on-one interviews were done to understand this participant's past experiences with PCC and RLP. All but one of Cici's past experiences with different medical personnel has been negative experiences. Cici described multiple medical visits at multiple clinics for different reasons including school shots, a sexually transmitted

diseases check, and once when she thought she was pregnant. Interactions with the staff have been mixed. She had one brief positive interaction with a nurse at one clinic. She reported once while checking in “It was okay, the nurse that checked me in was real nice, but I was worried ‘cause I thought um I might have a STD.” Interactions have been characterized as rushed and limited opportunity to talk to the doctor. She described the interaction as “they always seemed like rushed, the doctor hardly talked to me at all, he seemed like rushed.” CiCi has not regularly attended one clinic in her adolescent years and has clearly not established a patient-client relationship with a medical provider. Although Cici has full access to medical care her visits continue to be negative. Cici does not feel comfortable making her own medical appointments. Her grandmother has always scheduled her appointments.

Despite multiple opportunities to receive PCC through clinic visits Cici has not received the information she needs. Cici’s experience with PCC has not been adequate. She recalled when going to clinic concerned she might be pregnant that they did not discuss PCC only “told me I wasn’t pregnant and um that I should use condoms.” Her formal school class on sex education only focused on childcare and using birth control and did not provide PCC. Cici’s PCC experience in school was described as “um Well, we had sex ed in like the 10th grade. Mostly like how to change diapers, hold babies, and stuff.” We “just talked about STD’s and use condoms and birth control. Just really kept telling us don’t get pregnant before you go to school, get a job stuff like that.” She does not remember any discussion about spacing children or what to do to get ready for pregnancy. When asked about what healthy things could you do to prepare to get

pregnant her responses were abstract and not correct. “Well, um maybe get an apartment, get a job...no, oh yeah get your GED.” She further added “um, No I don’t know of any” when asked what are bad things one should stop doing to prepare for pregnancy. Cici does not know what positive or negative factors could affect a pregnancy.

Cici denied learning about RLP or even hearing the phrase anywhere. Cici’s initially associated RLP only as wanting to get pregnant. Her initial response to hearing the phrase RLP was “I ain’t trying to be pregnant.” When discussing whether or not it would be valuable to formulate a RLP she indicated it would but then commented that it was not in your control if you have children. Cici does not value RLP because she does not believe a woman can control when she will get pregnant. Her statement when referring to whether is valuable to make a RLP that it is not because pregnancy “it is either meant to be or not.”

Cici does not understand the term sexually active. She reported she is not sexually active but then stated “I only have sex maybe two times a week or so.” Cici does not understand common terms associated with PCC and RLP. She does not intend to have children for a few years. Cici does not have an effective plan to wait a few years to have children. Cici does not believe she has unprotected sex but uses condoms “most of the time” as her only means of birth control. Her lack of knowledge makes her more at risk for pregnancy, STD’s, and poor fetal maternal outcomes.

Participant D

Biographical Information

Deidra is a 21 year-old White female who lives with her mother, two siblings, and her boyfriend in a three bedroom house. She identified herself as in a relationship with her boyfriend who also lives with her family. Deidra has two younger sisters ages seven and twelve. She has not had any contact with her biological father in over 6 years. Deidra quit school before high school but is currently enrolled in a GED. She is not currently employed but stated she is looking for a job to help out the family. Deidra's mother and boyfriend both work to support the family. The house they live in is through government housing where a part of the rent is paid by the government. She has full access to healthcare through her Medicaid coverage.

Textural-Structural Description of Participant D

One-on-one interviews were done to understand this participant's past experiences with PCC and RLP. Opportunities for Deidra to gain PCC and RLP information have been available through multiple clinic visits but she has not gained PCC and RLP information that she needs. Deidra could only remember one visit to the doctor for a bladder infection. She reported she has gone for others but can't remember what for. Initially, her mother scheduled the clinic visits and her mother went with her to the clinic visit. "Like the doctor's offices and stuff I go usually with my mom but for the last couple of visits I've been going by myself. But I usually go with my mama." Deidra feels you never see the same doctors and they don't know who you are from one visit to the next. She described the interactions with the medical staff as "I hardly saw the doctor

any...yeah, um but you hardly ever see the same doctor or nurses, every time you go it's someone new, um, different. Then they don't know you or seen you before." She has failed to develop a positive relationship with any medical personnel despite multiple visits. When discussing how comfortable she is talking to medical personnel she felt she could and does ask them questions. Although Deidra feels comfortable making, and getting to her medical appointments she does not feel she has open communication established with any of the medical personnel.

Deidra has had limited experiences with learning about PCC. PCC was not discussed during any of her clinic visits. While discussing whether or not she received any PCC counseling from medical personnel her response was "No, huh, I don't remember any the, um, doctor's office or nothing or anything talking about to me about planning or planning parenthood or nothing like that." She had limited informal school sex education due to dropping out of school in the eighth grade. The majority of Deidra's experiences with PCC were provided by her public school in the seventh grade. Her formal school sex education class focused on prevention of pregnancy and positive and negative behaviors to observe when you are already pregnant. She stated the class did not discuss PCC. Deidra stated, "They just talked about if you have sex use protection, use the pill, stuff like that...just stuff like what to do while you are pregnant, the drinking, smoking, the drugs." Deidra did correctly identify two of the negative behaviors to stop before getting pregnant but was not sure where she learned about that. When discussing healthy habits to prepare to get pregnant Deidra initially said she did not know any but, then added "if they do drugs they should quit the drugs completely. They should get their

life organized before they plan to have a baby or anything. During discussion of her knowledge of bad habits to stop during pregnancy she responded:

Like I said if the people, if the person is doing drugs they should stop before getting pregnant. I live in a neighborhood where I see that a lot. Like the demographics they don't care if they get pregnant and they still they are smoking marijuana and drink and stuff. That's why I get concerned about when they are doing the drugs before and while they are pregnant and even when they have the baby.

Deidra does not have a RLP but would be interested in attending a class to learn how to design one. Deidra denies learning about RLP. Her initial response to whether she has a RLP was: "No, I don't have a plan or anything like that...nobody has never said nothing about making a plan." Discussing whether there is value in making a plan she commented: "Probably so you got your life in order and were ready for kids. I think it would be a good idea to have a plan if you knew something about how." She does not feel she knows what she needs to make an RLP on her own and has not received the information needed to make one. Deidra does see the value in making a RLP but does not feel she has the information needed to make one. Exploring what she would need to make a RLP Deidra stated "You'd need to know lots of stuff...Pretty much about birth control, more about how to not get pregnant." When asked directly if she knows enough to make a RLP her response was "No not me...I would like to go to a pregnancy plan class if I could."

Deidra has not discussed PCC or RLP with anyone she identified as sources of information. When discussing whom she turns to for information about PCC and RLP she readily stated “Parents and doctors would be best.” Deidra’s lack of established positive doctor-patient relationship with a medical provider would be a barrier to successfully getting information on PCC and RLP. She then qualified that talking with “Some of the doctors, my mama. But it wasn’t geared for planning a pregnancy it has been more about preventing a pregnancy.” Deidra had contradictory statements about “my mom and I talk all the time” to state they do not talk about PCC except “just about preventing a pregnancy. She said she would take me for birth control if I needed it.”

Deidra reported she is sexually active. Deidra does not believe she has unprotected sex despite her not always using birth control. She does not believe she has unprotected sex but stated she does not use birth control. Deidra stated she uses condoms most of the time but I’m thinking about going on the pill.” She apparently does not understand that unprotected sex requires she use birth control 100% of the time. Deidra did know girls in middle school who got pregnant. Since she did not attend high school she was not able to address whether she knew girls in high school who became pregnant.

Participant E

Biographical Information

Elsa is a 21 year-old Black female who lives with her mother and sister in a three bedroom apartment. She identified herself as single and not currently in a relationship. Elsa has completed 1 year of college and is currently in school for cosmetology. Her

mother is employed full time and supports the family. Elsa has a part-time job while attending school. She has full access to healthcare through her Medicaid coverage.

Textural-Structural Description of Participant E

One-on-one scheduled interviews were performed to understand this participant's past experiences with PCC and RLP. Elsa could only recall one medical visit to "get birth control and a Pap smear." Elsa had only one medical visit during adolescence. Her experience was a negative experience including feeling scared and not comforted by the medical staff. She described the experience as "Kind of scary that was the first time I had a Pap done. I was scared they might find something bad.... I heard how much it was going to hurt and all." Elsa reported the doctor did not explain what they were doing or spend enough time with you during a visit. She further described how the doctor did not explain how the Pap smear was going to be done he only said "just put your legs here, they didn't talk to me at all while they were doing the Pap." Elsa reported "I feel comfortable talking to both nurses and doctors." When talking about her experience she relayed she did not talk with doctor by stating "They don't spend that much time in the room with you, they um did the Pap and left." She also stated she made her own medical appointment. Elsa feels capable of making her own appointments. Elsa does not have an established positive doctor-patient relationship with any medical personnel.

Elsa's experiences with PCC have not been adequate to provide all the PCC and RLP information she needs to have a healthy baby. PCC was not provided during her medical visit. When asking if anyone at the clinic talked to her about PCC she responded "Not at all, nobody has ever talked about what to do to get ready to get pregnant. Not that

I remember.” Elsa was interested in attending a PCC/RLP class by stating “Yes, I would want to know about how to ready to make a healthy baby. I would participate if they offered it to me, just to find out.” Elsa correctly identified one healthy and one negative behavior to implement before attempting a pregnancy. She responded to whether she knows of any healthy behaviors to do when planning to get pregnant by stating “no not really just take vitamins or something to make everything go smooth.” Elsa identified only one healthy behavior to do before getting pregnant. She did identify one bad habit to stop before attempting a pregnancy when she stated “I know to stop drinking for one. Stop doing a lot of heavy duty (physical) working if you have a job like that.” Other behaviors she identified were not associated with preparing for a pregnancy. Elsa’s formal school sex education did not provide PCC instruction. Her sex education class only provided information on preventing pregnancy. Elsa summed up her PCC education in school as “in school we only talked about preventing it, just about not getting pregnant.”

Elsa was not taught about RLP and does not have a RLP formed. When asked about has she thought about a RLP she stated “no haven’t really thought about it, kinda of think I would like a couple of kids.” She does not know of any source that could help her with learning about a RLP or helping develop one. She responded “Nope I don’t know, not anywhere that I know.” She believed the best time to get PCC/RLP counseling is “If you are looking to have a baby”.

Although Elsa identified multiple sources of information for PCC and RLP she reports she has not discussed PCC or RLP with anyone. Elsa identified multiple sources

of who to turn to get information about PCC/RLP including her aunt, mother, the Internet, and Planned Parenthood. With discussion Elsa revealed “No I haven’t ever talked to my mom about sex or birth control... she tried to talk about how to prevent pregnancy” Although her aunt is an identified source of information she reports “we talk about birth control, boys, and stuff” but no other aspects of PCC or RLP.

Elsa would like to have children, but not in the near future. Elsa does not believe she will be pregnant in the next year but does not use birth control 100% of the time. Elsa does not have an effective means of preventing pregnancy in place to prevent a pregnancy. She does not think she has unprotected sex but her only method of birth control is using condoms. Although Elsa does not use birth control 100% of the time she does not believe she will be pregnant within the next year. When asked about how often she uses condoms she responded “Sometimes we use condoms....No, we don’t use condoms every time but mostly yes.” Elsa would like to have a couple of kids “but not right now.” She knew “a lot of girls got pregnant in high school that were there with me.” Elsa does not feel prepared to get pregnant. She stated “I don’t really know too much about what to do before or when I’m pregnant guess I’ll find out then.”

During the interview, it became obvious that Elsa had misinformation or a lack of communication regarding several issues. Elsa has been misinformed about how long to be off of birth control pills before attempting a pregnancy, saying “Um, well from my aunt I know she told me uh maybe like a year or 2 years to be off that.” Her aunt did not advise her correctly. In addition she reported she stopped taking birth control because “I just didn’t like how the way the pills made me feel, they made my stomach feel bad.”

Elsa did not understand she should return to the doctor if she had side effects from birth control pills. Elsa did not discuss the side effects of her birth control to see if an adjustment could be made to her birth control pills to eliminate the side effects. She did not understand that the pills could have been changed to eliminate the side effects and be able to continue using this form of birth control.

This study's five participants' PCC experiences were presented in this section. Each individual's PCC experience was described from a textural-structural perspective. The following themes emerged from the composite: negative interactions with medical personnel, no experiences with PCC or RLP, inaccurate knowledge about the relationship between unprotected sex and pregnancy, lack of knowledge about preparing for pregnancy, and miscommunication. Multiple participants shared similar themes that will be presented in Section Five to provide "a unified statement of the essences of the experience of the phenomenon as a whole" (Moustakas, 1994, p. 100).

Composite Textural-Structural Description of Themes and Essences

The following themes emerged from the composite: relationships with medical personnel, interactions, and communication; experiences with PCC; experiences with RLP; perceived sources of information; perceptions of ability to get pregnant; perception of being prepared to get pregnant; and miscommunication. Table 2 provides examples of the verbatim statements from the interviews to support each theme.

Table 2

Supporting Statements

Themes/meaning units	Examples of participants statements
Negative Interactions with Medical Personnel	<p>“they don’t really talk nothing ‘bout what’s going on with you or what they doing. They just tell you do this.”</p> <p>“I really didn’t like ‘em ‘cause they don’t never um really talk to me about stuff...just told me to um take birth control pills to make my menstrual regular.”</p> <p>“they always seemed like rushed, the doctor hardly talked to me at all he seemed like rushed.”</p> <p>“I hardly saw the doctor any...yeah, um but you hardly ever see the same doctor or nurses, every time you go it’s someone new um different. Then they don’t know you or seen you before.”</p>
No Experiences with PCC	<p>“Kind of scary they don’t spend that much time in the room with you, they um did the Pap and left.”</p> <p>“No huh I don’t remember any the um doctor’s office or nothing or anything talking about to me about planning or planning parenthood or nothing like that.”</p> <p>“how to take care of babies” and “that we should use pills to keep from getting pregnant.”</p> <p>“Mostly like how to change diapers, hold babies, and stuff.”</p>
No Experiences with RLP	<p>“just talked about STD’s and use condoms and birth control. Just really kept telling us don’t get pregnant before you go to school, get a job stuff like that.”</p> <p>“No, I don’t have a plan or anything like that...Nobody has never said nothing about making a plan.”</p> <p>“it would be good to make a plan?”</p>
Inaccurate Knowledge About the Relationship Between Unprotected Sex and Pregnancy Lack of Knowledge About Preparing for Pregnancy	<p>“I would like to go to a pregnancy plan class if I could.”</p> <p>“I ain’t trying to be pregnant.”</p> <p>“no haven’t really thought about it, kinda of think I would like a couple of kids.”</p> <p>“you have kids when you do, it just happens when it happens.”</p> <p>uses condoms “most of the time” as her only means of birth control.</p>
Miscommunication	<p>“I don’t really know too much about what to do before or when I ‘m pregnant guess I’ll find out then.”</p> <p>“I know some stuff but you know I’m not the smartest person in the world, you know. But I don’t do drugs, I don’t drink, you just drink plenty of water and you know, you know but, I don’t know everything.”</p> <p>“it is either meant to be or not.”</p> <p>“I just didn’t like how the way the pills made me feel, they made my stomach feel bad.”</p> <p>“I am not sexually active, I only have sex maybe two times a week or so.”</p>

Composite Description of Themes

The experience of PCC for these participants has not successfully provided the necessary information needed for them to prepare for the healthiest pregnancy possible. Their lack of knowledge has placed them at risk for poor maternal and fetal outcomes during pregnancy. Multiple common themes and essences have emerged during the compiling of the combined participants' textural-structural descriptions of their experiences.

Negative Interactions with Medical Personnel

All participants except one had experienced numerous clinic visits during adolescence. Despite multiple clinic visits none of the participants received PCC during their medical visits. None of the participants have established a positive working physician-patient or nurse-patient relationship. All participants described significant negative interactions with medical personnel including feeling unimportant, scared, dissatisfied, uninformed, ignored, powerless, and not treated as an adult. Due to participants lack of a positive working physician-patient or nurse-patient relationship puts them at high risk for poor maternal and fetal outcomes with a pregnancy. It is also a barrier for obtaining accurate PCC/RLP information in the near future. Seeking care for women's health issues was the majority of the reasons participants previously visited the clinic including seeking birth control, abnormal menses, Pap smears, and STD checks.

Most participants rely on adult caretakers such as their mother or grandmother to make their clinic appointments and transport them to the visit. All of the participants have access to medical care through Medicaid that fully pays for the medical visit. Only a few

participants have independently and successfully made their own medical appointments and transported themselves to the medical visit.

No Experiences with PCC

Participants did not receive PCC during medical visits despite multiple opportunities. Generally participants reported that they were not given information on any topics. Participants who experienced a formal school sex education class were not taught about PCC or RLP. Participants' experiences in sex education classes were focused on pregnancy prevention, birth control, child care, and limited information on positive and negative behaviors to observe during pregnancy. Many of the participants had negative school sex education classes including feeling uncomfortable when males were included in the class and the information was joked about instead of being discussed seriously.

Participants do not possess the necessary knowledge regarding positive or negative behaviors to observe prior to attempting a pregnancy to maximize maternal and fetal outcomes. Only one participant was able to correctly identify one healthy habit that would prepare them for a pregnancy. The other participants were not able to correctly identify even one healthy positive habit that would prepare them for a pregnancy. Their statements included abstract statements such as getting your life organized, finish high school, and get a job. Most participants were not able to identify any negative behaviors to stop prior to attempting a pregnancy. Drug and alcohol use were the only two negative behaviors identified by two participants. All of the participants' PCC experiences have

not provided them with the necessary information to be optimally prepared to become pregnant.

No Experiences with RLP

Participants acknowledged they were not familiar with the term RLP and were not taught how to develop a RLP in school or at medical visits. Many participants associated with the need to make a RLP only if you are planning to have children immediately. Participants reported value in making a RLP but did not feel they had the tools or information necessary to make one. The reason one participant did not value making a RLP because she did not believe women can control when she gets pregnant. Participants readily identified multiple sources for information on PCC and RLP. Sources included friends, sisters, parents, caregivers, relatives, Internet, and medical clinics. Participants have not discussed PCC or RLP with any of their identified sources of information.

Inaccurate Knowledge about the Relationship Between Unprotected Sex and Pregnancy

Participants did not believe they are at risk for getting pregnant despite being sexually active and not using birth control 100% of the time. Participants associated condoms as having protected sex but did not understand that condoms are a form of birth control. Participants generally described feelings about their perceptions of ability to get pregnant as not believing they can get pregnant since it has not happened yet to believing they have an effective means of birth control to prevent a pregnancy. Participants did know girls who were pregnant in middle and high school.

Lack of Knowledge About Preparing for Pregnancy

Participants did not feel prepared to attempt a pregnancy. Many participants felt they do not even know what information they are lacking. Generally participants have not been able to gain PCC and RLP information necessary to prepare for a pregnancy. They felt they lacked the knowledge and access to gain the knowledge to prepare for a pregnancy. Most participants first learned about PCC and RLP through the interviews they participated in for this study.

Miscommunication

Participants did not know many of the common PCC and RLP terms used during the interview. Many also did not know the correct definition of many common terms such as sexually active, birth control, and unprotected sex. Many of the participants learned definitions of terms and clarification of terms during their interviews for this study. Some participants were given wrong information or misinformation regarding medical issues during medical visits or from relatives.

Methods to Address Trustworthiness

The primary methods used to increase trustworthiness of this study were member checking, peer examination of data and findings, researcher reflection through journaling during data collection, and full description of data collection and data analysis. I used member checking by having each participant review their verbatim transcribed statements for accuracy and validate their statements were what they intended. Member checking is one means a researcher can use to increase reliability and trustworthiness of the study.

I also used peer examination of data and findings to increase trustworthiness. One of my colleagues, a midwife who provides OB/GYN services for adolescent females, participated in peer examination of this study. My colleague reviewed all participants' interview narratives and findings to verify that the findings were accurate. She also reviewed the categorized data and verified that the themes were correctly identified. Inter-rater reliability is the process used to establish that the data themes and essences are accurate by a peer.

Researcher reflection through journaling during data collection was done to increase trustworthiness. Reflection and journaling were a means of decreasing personal bias and assisted with interpreting data accurately. I journaled my feeling prior and after every interview. I also reflected on my journal entries prior to conducting interviews with the participants.

Moustakas's (1994) modified version of the Stevick-Colaizzi-Keen method of analysis is a well known and established method of analysis. This method provided clear detailed steps that guided my analysis. Full description of data collection and data analysis was provided to increase trustworthiness. Textural, structural, and textural-structural descriptions were presented for each participant. Multiple verbatim citations were presented to support and illustrate data analysis and interpretation. The entire composite textural-structural description was presented.

Summary

This section was an overview of the data analysis and findings. The steps used to analyze this study's data were outlined. Next I presented the completed textural,

structural, and textural-structural descriptions of each participant. I then discussed the synthesis of all the participants' textural-structural descriptions to yield one universal description of the PCC experience for these women. Lastly, I described the methods employed to ensure trustworthiness of the study.

Section 5 will include the interpretation of findings, conclusions, implications for social change, recommendations for action, and recommendations for further study.

Section five will also include my reflection of the entire research experience including how my thinking on the phenomenon has changed as a result of this study.

Section 5: Discussion, Conclusions, and Recommendations

Overview

This section includes the interpretation of findings, implications for social change, recommendations for action, recommendations for further study, researcher reflections, personal biases, and personal changes made due to the findings of the study. I interpreted the findings from the perspective of this study's two research questions.

The purpose of this phenomenological research study was to understand PCC and RLP from the perspective of adolescent females. I also sought to identify barriers that these adolescents have when seeking PCC and RLP. My initial interest stemmed from concerns that women are not prepared for pregnancy prior to conception. In addition, despite the CDC mandate to provide PCC, including RLP, many women are not receiving it prior to pregnancy (CDC, 2006; Hillemeier et al., 2008; Maryland PRAMS: Pregnancy Risk Assessment Monitoring System, 2013; Wilensky & Proser, 2008). Previous researchers have focused on PCC in individuals with preexisting medical conditions such as diabetes and alcoholism (Mathiesen et al., 2007; Steel et al., 1991; Temple et al., 2006). Researchers on PCC in healthy females has mostly focused on college and adult women (Corbett, 2011; Coonrod et al., 2009; Delgado, 2008). I chose to focus on adolescents because more information is needed to understand their perspectives (Bearinger et al., 2007; Daley et al., 2004; Tylee et al., 2007) and because of the high rate of adolescent unintended pregnancy (Hamilton et al., 2012). This study has begun to fill in the gap in the literature about PCC and RLP in healthy adolescents females.

Research Questions

1. What are the differences and similarities between adolescent females' knowledge, attitudes, and beliefs regarding preconception care?
2. What are the differences and similarities between adolescent females' knowledge, attitudes, and beliefs regarding participating in a reproductive life plan?

To address these research questions, I interviewed five adolescents using multiple in-depth, one-on-one interviews with each participant. I used Moustakas's (1994) phenomenological interview process to conduct the interviews and the Stevick-Colaizzi-Keen method to organize and analyze the data collected during the interviews. I integrated all of the participants' individual textural-structural descriptions to yield one universal description of the experience that represents the group's experience of PCC and RLP as a whole. Seven major themes and 12 subthemes emerged during data analysis.

Interpretation of Findings

In this section, I will provide a brief summary of findings as they relate to each of the research questions. Findings related to the literature and the conceptual frameworks used to guide the study will also be presented.

Research Question 1

The aim of answering the first research question was to explore the differences and similarities between adolescent females' knowledge, attitudes, and beliefs regarding preconception care. The four major themes that emerged were that the participants had: (a) no experiences with PCC, (b) negative interactions with medical personnel, (c) a

general lack of knowledge about preparing for pregnancy, and (d) desire for PCC. These four themes are interrelated to one another to help address the first research question.

Participants' experiences with PCC. There are multiple ways and sources through which adolescents can gain PCC information. Sources include medical professionals, school sex education courses, and informal personal relationships. Participants' experience with PCC included three subthemes: (a) no discussion of PCC during clinic visits, (b) no PCC during sex education classes, and (c) their own failure to utilize perceived sources of information.

Lack of discussions of PCC during clinic visits. Despite having had multiple clinic visits during adolescence the majority did not recall discussions of PCC during their visits. In contrast, they recalled discussions about other topics such as preventing pregnancy using birth control pills. The finding that participants did not receive PCC information from medical professionals during medical visits was consistent with the findings of multiple studies (Coonrod et al., 2009; Corbett, 2011). Corbett found that more than 80% of their participants reported that they had not talked to a medical professional about PCC. Coonrod et.al found that over 85% of their participants did not receive PCC from their medical providers. Another key finding was that 87% of their participants desired PCC, and they wanted their doctors to provide it.

Lack of discussions of PCC during sex education classes. I found that the majority of my participants were not taught PCC in their sex education classes. The participants' experiences in their sex education classes were focused on pregnancy

prevention, birth control, and child care, and there was limited information on positive behaviors to observe and negative behaviors to avoid during pregnancy.

The finding of not receiving adequate PCC during sex education classes was also consistent with multiple studies (Coonrod et al., 2009; Delgado, 2000). However, in contrast to my study, multiple researchers found their participants were knowledgeable in regard to avoiding illegal substances during pregnancy (Coonrod et al., 2009 & Delgado, 2008). Delgado attributed participants' knowledge to either information obtained through junior or senior sex education classes or the increased media campaign addressing the issue. Although Delgado found that over 87% of participants took a sex education course in high school, they still scored low in knowledge of PCC. Overall both of these studies and my own study suggest that content regarding PCC that was delivered through sex education classes in middle or high school was inadequate.

Failure to utilize perceived sources of information. I found that the majority of participants readily identified multiple sources who could have shared information about PCC, but they did not actually utilize them. These sources included sisters, friends, mothers, parents, grandmother, aunts, and the Internet. Coonrod et al. (2009) found a similar trend in their study of PCC with Mexican Americans. Their survey also found that about 10% of their participants identified families and friends as their preferred source to receive PCC. I found participants identified family and friends as a source of PCC, but my study differed from Coonrod et al.'s study in that I also inquired if participants actually utilized their sources for PCC. The majority of my participants reported they did not actually ask or receive PCC from family or friends.

The finding of several researchers reviewed aligned with my finding that participants did not receive adequate PCC, but they did not distinguish whether PCC was not provided during medical visits or during school sex education classes (Delgado, 2008; Heavey, 2010; Kaiser & Hays, 2005). For example, Delgado discussed PCC received in sex education classes, but did not investigate if PCC information was or was not gleaned from medical professionals. It would be important to further investigate all potential sources of PCC to help identify where the strengths and deficits exist in providing adequate PCC.

Interactions with medical personnel. This theme also included two subthemes: negative interactions with medical personnel were unfavorable, and multiple missed opportunities for building a positive medical professional-patient relationship occurred, and access to care was not a barrier.

Negative interactions with medical professionals. The majority of participants reported that they had only negative interactions with medical professionals during clinic visits, unlike the findings of other PCC studies (Coonrod et al., 2009; Corbett, 2011; Delgado, 2008; Heavey, 2010; Kaiser & Hays, 2005; Quillin et al., 2000; Wang et al., 2006). The other PCC researchers used many different methods. Several used a quantitative research methodology to examine PCC (Coonrod et al., 2009; Corbett, 2011; Delgado, 2008; Kaiser & Hays, 2005; Quillin et al., 2000; Wang et al., 2006) used exploratory research method. One additional study utilized a retrospective research method to investigate PCC (Heavey, 2010). In contrast, using a qualitative phenomenological approach I found a preponderance of negative interactions.

Multiple missed opportunities for building a positive medical professional-patient relationship. All of my participants reported they had access to care and this was not a barrier to receiving PCC. The majority of participants in my study also reported they had multiple clinic visits during the past few years. Multiple researchers also found that the majority of their participants reported that they had access to care (Heavey, 2010; Kaiser & Hays, 2005). Multiple researchers also reported their participants had numerous recent clinic visits with opportunities to receive PCC, but did not (Corbett, 2011; Heavey, 2010). Another important finding in Heavey's study was participants who had previous visits and desired pregnancy were found to have multiple risk factors that would have been addressed if PCC was covered. PCC was not covered in those previous visits.

General lack of knowledge about preparing for pregnancy. There were two subthemes of this finding. The first was participants' inability to identify healthy behaviors during and limited knowledge regarding unhealthy behaviors that could be detrimental to a pregnancy.

Inability to identify healthy behaviors. I found all but one participant in my study was unable to name even one healthy behavior that would prepare them for pregnancy. Participants' responses were abstract and did not address aspects of healthy habits of PCC. The abstract statements elicited including get your life organized, get a job, and finish high school.

Multiple researchers were consistent in finding participants generally did not possess the knowledge of which healthy behaviors would help a woman prepare for pregnancy (Coonrod et al., 2009; Delgado, 2008; Kaiser & Hays, 2005; Heavey, 2010).

Coonrod et al. found that the younger the participant the less knowledge she possessed of healthy behaviors. This may explain why participants in my study, whose average age was 20, were even less knowledgeable than participants in other studies.

A key finding of Delgado (2008) was that the majority of participants believed they knew more about the healthy behaviors a woman should implement prior to a pregnancy than they actually did know. Kaiser and Hays (2005) focused on prenatal care classes with pregnant adolescent participants as the healthy behavior to prepare for pregnancy. They found that the majority (53%) of their pregnant adolescent participants did not attend either a prenatal or parenting class during their pregnancy.

Heavey (2010) focused on taking folic acid/prenatal vitamins and monitoring of disease states as the healthy behaviors that would promote a healthy pregnancy. Heavey found that the majority (95%) of her participants reported that they were not taking folic acid or prenatal vitamins despite a desire to be pregnant. Almost 50% of the adolescents who desired pregnancy were diagnosed with chlamydia, gonorrhea, bacterial vaginosis, diabetes, and urinary tract infections during clinic visits. All of these diagnoses are associated with detrimental maternal and fetal effects (Lowdermilk et al., 2016). It is important to note all of the healthy behaviors should normally be addressed during regular clinic visits that include routine PCC for all women of childbearing age.

Detrimental unhealthy behaviors. I found that the majority of participants could not correctly identify any unhealthy behaviors that could be detrimental to a pregnancy. Two participants were able to correctly identify drugs and alcohol, two unhealthy behaviors to stop to prepare for a pregnancy. Multiple researchers reported similar

findings that participants were generally lacking in knowledge of unhealthy behaviors that could be detrimental to a pregnancy (Coonrod et al., 2009; Delgado, 2008; Kaiser & Hays, 2005; Heavey, 2010). Coonrod et al.'s (2009) and Delgado's findings were consistent with my study's finding that some of the participants were able to identify alcohol and drug use as negative health behaviors to cease prior to and during pregnancy. Delgado attributed sex education classes and media campaigns to the participants' awareness that alcohol and drug use could have detrimental effects on an unborn child.

Desire for PCC. The majority of participants reported they did desire information regarding PCC and/or RLP information. This study found participants wanted information and would participate if a program were offered on PCC. They also were interested in receiving information regarding developing a RLP. Multiple studies also found that participants desired information about PCC (Delgado, 2008; Kaiser & Hays, 2005). Other PCC researchers did not support this findings (Coonrod et al., 2009; Corbett, 2011; Delgado, 2008; Heavey, 2010; Kaiser & Hays, 2005; Quillin et al., 2000; Wang et al., 2006.)

Research Question 2

The second research question was asked to explore the differences and similarities between adolescent females' knowledge, attitudes, and beliefs regarding participating in developing a reproductive life plan. Three major themes emerged, that the participants had: (a) no experiences with RLP, (b) inaccurate knowledge about the relationship between unprotected sex and pregnancy, and (c) miscommunication regarding birth control.

No experiences with RLP. The first major theme of no experiences with RLP included three subthemes. Limited RLP during clinic visits, limited discussions of RLP during sex education, and perceived value in developing a RLP were the three subthemes identified during data analysis.

Limited RLP during clinic visits. I found that participants reported that they did not discuss the components of a RLP during medical visits. A few stated the only aspect discussed at medical visits was birth control. The majority of participants believed RLP was only for women who wanted to have children now. Delgado's (2008) finding was consistent with my study's finding in regard to one component of RLP, spacing of children. She found that the majority (85%) of participants had a low awareness of appropriate recommended spacing of children and did not identify getting the information during clinic visits. None of the other PCC researchers investigated RLP during clinic visits as a concept (Coonrod et al., 2009; Corbett, 2011; Delgado, 2008; Kaiser & Hays, 2005; Quillin et al., 2000; Wang et al., 2006).

Limited discussions of RLP during sex education. The majority of participants in my study identified being told to use birth control during sex education classes but could not remember receiving education regarding different types of birth control methods, how to use birth control, and the like. The findings in my study were consistent with Coonrod et al. (2009) and Delgado (2008) in that despite participating in sex education in a formal classroom setting participants still lacked adequate RLP knowledge.

Perceived value in developing a RLP. This finding was consistent with Delgado's (2008) research indicating that women are interested and open to receiving

information about RLP. Although Coonrod et al.'s (2009) study was consistent in finding a majority (77%) of participants reported they were very interested in receiving information about pregnancy, the study did not discriminate between an interest in PCC or RLP or both.

Inaccurate knowledge about the relationship between unprotected sex and pregnancy. I found that participants were not practicing birth control but they did not understand that they were at risk for pregnancy. Only one other study reported that a small number (5%) of their participants didn't believe that they were able to get pregnant (Coonrod et al., 2009). Because many of the studies in this field included pregnant participants, this question was not relevant (Coonrod et al., 2009; Heavey, 2010; Kaiser & Hays, 2005).

Miscommunication regarding RLP. Two subthemes that emerged were lack of knowledge of common terms associated with PCC and RLP and misinformation regarding RLP.

Lack of knowledge of common terms. I found the majority of participants had multiple common terms associated with PCC and RLP that they did not understand during interviews. An example was the majority of participants reported they did not have unprotected sex but did not use some form of birth control 100% of the time. Another example is that condoms are considered birth control in addition to safe sex. Other PCC studies did not report this findings (Coonrod et al., 2009; Corbett, 2011; Delgado, 2008; Heavey, 2010; Kaiser & Hays, 2005; Quillin et al., 2000; Wang et al.,

2006). In contrast, using a qualitative phenomenological approach I found a preponderance of lack of knowledge of common PCC/RLP terms.

Misinformation regarding RLP. Several participants revealed a misunderstanding about key aspects of RLP. Participants were misinformed regarding daily timing of birth control pills, availability of different pills to address side effects experienced, and how long they needed to be off their birth control pills before attempting a pregnancy.

Other researchers did not identify this subtheme (Coonrod et al., 2009; Corbett, 2011; Delgado, 2008; Fuhrmann, 1986; Heavey, 2010; Kaiser & Hays, 2005; Mathiesen et al., 2007; Steele et al., 1990; Temple et al., 2006). Perhaps since these studies used quantitative, retrospective, prospective, and randomized intervention methods for data collection they were not afforded the opportunity to identify these findings in their participant pools.

Interpretation of Conceptual Framework

In this section, I will provide a brief summary of findings as they relate to the conceptual framework. Three theories contributed to the framework: the health belief model, social cognitive theory, and adolescent affective and cognitive theory. The framework was utilized to analyze the data and formulate the recommendations for future studies.

Health Belief Model (HBM)

The HBM is based on the understanding that a person will participate in behaviors that will prevent a detrimental health outcome if they believe it will successfully work

(Champion & Skinner, 2008). The four key factors of the HBM are: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy. I discuss each of these factors in relation to my findings.

Perceived susceptibility is concerned with whether an individual believes they will get pregnant. Participants' responses indicate there is a general belief that they are at not at risk for getting pregnant despite being sexually active and not using birth control. This finding is consistent with adolescents' general belief that they are infallible. Participants in this study did not perceive their own susceptibility.

Perceived severity is concerned with whether an individual believes pregnancy is a serious condition that that could have serious effects or consequences. Participants' responses indicated a lack of knowledge of detrimental effects and possible consequences that are associated with pregnancy. Findings in this study supported participants did not perceive that pregnancy could have serious consequences.

Perceived benefits is concerned with whether an individual believes that actions could be taken to decrease or prevent risks or lessen serious effects. In this study, this key factor is closely related to perceived severity and perceived susceptibility in that participants did not believe they were susceptible to pregnancy and generally lacked knowledge of possible serious effects or consequences. Findings indicated participants did perceive benefit in participating in PCC and RLP but other factors prevented them from seeking it.

Within this study, perceived barriers are whether an individual believes there are any physical or psychological reasons that would prevent one from engaging in PCC or

RLP. Findings from this study showed that participants had multiple perceived barriers that will prevented them from seeking PCC or RLP. These perceived barriers are: negative interactions with medical professionals, lack of knowledge of common terms, and lack of discussions of PCC and RLP during clinic visits and sex education classes.

Cues to action in this study are participants' ability to verbalize how to participate in PCC. The study found that participants would not cue to action due to the identified barriers including negative interactions with medical professionals and lack of discussions of PCC and RLP during clinic visits and sex education classes.

Self-efficacy in this study is participants' belief that they can successfully participate in PCC and RLP. To utilize self-efficacy one must possess a level of maturity and self-confidence. Findings from this study show that participants were capable of self-efficacy. Without self-efficacy the ability to successfully participate in PCC and RLP is doubtful.

In summary, the HBM provided insight as to what barriers and perceptions would prevent participants from seeking PCC and RLP. Each of HBM's factors are interrelated and also support participants' inability to participate PCC and RLP successfully.

Social Cognitive Theory

SCT is based on the understanding that human behavior is influenced by many factors including environmental, personal, and behavioral experiences (Bandura, 1986). This theory helped explain how negative past interactions with medical personnel has created a barrier for participants seeking additional information regarding PCC and RLP. Negative past experiences influences how participants will interact in the future with

other medical professionals. Negative past experiences also created a barrier to participants implementing new healthy behaviors.

Adolescent Affective and Cognitive Theory

AACT is how adolescent's emotional, behavioral, and cognitive systems mature at different rates and are influenced by many factors including social, biological, and cultural factors (Casey & Jones, 2010; Piaget, 1970; Steinberg, 2005). This theory was utilized to understand how the participants' perceptions of the same event differed from each other. The theory also indicated that adolescents are likely to have immature levels of cognitive and emotional ability and lack self-efficacy as shown in these participants, meaning that interventions with adolescent girls about PCC and RLP need to take their developmental stage into consideration.

In summary the three theories selected did relate to the results. As expected adolescents did not possess self-efficacy behaviors. The adolescents' belief systems were influenced by peers and negative experiences with school and medical personnel. Participants relied on information from uninformed peer sources. Information from parental sources was not adequately utilized by participants. As anticipated the participants were a vulnerable group with few tools to navigate a complex medical arena to derive needed information on PCC and RLP to make good choices. Therefore, these adolescents are exclusively dependent on schools and medical facilities to steer them positively to PCC and RLP, and to develop their ability to become informed patients.

Implications for Social Change

This study contributes to the body of knowledge on PCC in healthy female adolescents. It provides insights into adolescent females' knowledge, beliefs, and attitudes regarding PCC and RLP. Multiple barriers to their knowledge were identified through this study and reported in the findings. Readers of this study, who work with adolescents, will become more aware of the educational needs of adolescents in regards to information about and planning for pregnancy including school administrators, teachers, and school nurses. Findings of this study may encourage school administrators and teachers to examine the sex education programs to evaluate how they could be enhanced to meet the needs of adolescents. Recognition of adolescent's desire for PCC and RLP may encourage others to provide PCC and RLP counseling in other nontraditional arenas such as community centers, church programs, and teen camps. In addition, this study may serve to encourage health care providers to make changes in the delivery of services to adolescents by building positive health care provider-patient relationships with adolescent patients in their practices. Building positive health care provider-patient relationships may increase dialogue about and education on PCC and RLP with adolescent patients to ultimately improve the care of women.

Recommendations for Action

In this study, I explored the lived experiences of PCC and RLP in adolescent females. I discovered that the participants' experiences with PCC have been limited and have not prepared them for a future pregnancy. I also found that participants' did not have opportunities to participate in RLP. In this study multiple participants expressed a

need for more knowledge and/or wanting more PCC/RLP education. More striking is the desire expressed by the participants for PCC and RLP. These findings spurred multiple questions about how knowledge of PCC and RLP could be provided to increase adolescents' knowledge of PCC and RLP. This research also raised the question of what practices could be implemented to encourage a meaningful relationship between medical professionals and adolescent females.

As a nurse practitioner, I can personally meet this need in my workplace by integrating PCC/RLP in every health care visit for women of child bearing age. I can also seek a change in the electronic medical record system that would provide an easily accessible checklist for all physicians and midlevel providers to include PCC and RLP in every health care visit for women of child bearing age.

Initially, I plan to present a poster presentation of my findings to nurse practitioners at the Louisiana State Nurse Practitioner Association (LANP) annual 2015 state convention. I also plan to present a PCC/RLP workshop at the Louisiana State Nurse Practitioner Association (LANP) annual 2016 state convention. As a workshop presenter, I will be able to help others consider how to provide PCC and RLP knowledge in the clinic settings to parents and adolescents. Emphasizing the need for medical providers to instruct parents on PCC and RLP will ultimately prepare them to be a more knowledgeable source for their adolescent children. The workshop will also serve to inform nurse practitioners regarding the mandate to provide PCC and RLP and give an overview of content that should be included. I will also emphasize the need to establish positive working medical provider-client relationships with teens.

Presenting my findings and working with nurse practitioners at a state and national level to provide PCC and RLP to all women of child-bearing age has the potential to expand beyond the attendees of the convention. Presenting my findings at the national level of nurse practitioner faculty conferences may encourage a change in the curriculum to include and emphasize PCC in programs that prepare nurse practitioners who will ultimately serve adolescents. Since practicing nurse practitioners take an active role in educating nurse practitioner students the positive changes in PCC and RLP practice could extend to multiple others and ultimately improve the care of women.

Recommendations for Further Study

Participants involved in this study were from a low socioeconomic group, predominately African-American, and represented only one area of a large metropolitan city in the Southeast United States. Although participants were from only one location, some of the findings of this study were similar to several previous studies (Coonrod et al., 2009; Corbett, 2011; Delgado, 2008; Kaiser & Hays, 2005). Heavey's (2010) participants most closely aligned with my study's demographics, including that they were adolescent aged, were mainly African American, and were from a lower socioeconomic urban setting. Both studies found the majority of participants had multiple risk factors that could have been addressed in one of their multiple previous clinic visits. Despite the similar finding I would recommend replicating the study with participants from varied socio-economic groups, diverse cultures, and varied areas of the US. Further research on

PCC needs to be targeted at the under 18 years of age and include adolescent males and females.

I used a qualitative approach for this study. Based on my participants' lack of knowledge of common terms associated with PCC and RLP terms I would not recommend using a pure quantitative approach. The ability to capture accurate information from adolescents using only surveys could be compromised. Completing more studies using a qualitative approach with adolescents would allow researchers to identify and clarify when participants need help to accurately provide the information the researcher is trying to collect.

Further research examining the relationships among between medical providers, patients, and patient teaching about preconception counseling would strengthen the research in the area of preconception health. Future researchers examining current PCC practices among medical providers and development of culturally appropriate PCC programs could increase implementation and effectiveness of PCC interventions.

Reflections on the Research Experience

Researcher Reflections

This study has given me the opportunity to appreciate the circumstances that affect adolescents' ability to gain information about such important issues in their lives such as preparing for pregnancy and developing a RLP. Before beginning, I was concerned about whether I could complete the numerous rigorous tasks of a phenomenological study. I used journaling as a method of self-encouragement and a way to track my progress through this journey of completing my research study.

Personal Biases

At the beginning of this study I was concerned that my own professional experiences with the phenomenon would bias my collection and interpretation of data. My role as a nurse practitioner was both helpful and a hindrance during the interview and data collection. As a nurse practitioner who works with teens, I was able to easily gain a rapport with each participant and thereby gather the data needed for the study. A disadvantage was limiting my role to a researcher and not as a health care provider. I used journaling to express my frustration of not being able to educate when knowledge deficits existed. Reviewing my journaling prior to interviewing also helped me reinforce and honor my sole role as a researcher and to refrain from entering into the role of health care provider. In addition I used personal reflection and journaling to help identify any potential biases, personal feelings, and professional experiences to help center myself and keep an open, unbiased approach to each interview session.

Changes Due to Findings of the Study

Reflection on the results of this study has spurred me to make a commitment to effect change on a larger scale. I have changed the way I practice in my clinic in that I am spending more time with adolescents providing PCC and RLP during routine visits. I also have made a commitment to make other medical providers more aware of adolescents need for PCC and RLP during routine clinic visits. Even during this study, while discussing my doctoral work, I have engaged multiple medical providers in discussion about what PCC and RLP is and the need for women of child bearing age to learn about it during clinic visits.

Conclusion

In this study, I explored the lived experiences of female adolescents with PCC and RLP. I used a phenomenological approach with two one-on-one interviews with five adolescents to gather information about their experiences with PCC and RLP. I found that my participants had (a) no experiences with PCC, (b) negative interactions with medical personnel, (c) a general lack of knowledge about preparing for pregnancy, and (d) wanted more information about PCC and RLP. The findings of this study are important because they align with and bring additional information about preconception care with adolescent females to the field. A new and important finding was that although adolescents lack PCC knowledge, they desire it.

References

- Aaron, E. Z., & Criniti, S. M. (2007). Preconception health care for HIV-infected women. *Topics in HIV Medicine: A Publication of the International AIDS Society, USA*, 15(4), 137-141.
- Baltimore County Schools (n.d.). *Limitations, delimitations*. Retrieved from http://www.bcps.org/offices/lis/researchcourse/develop_writing_methodology_limitations.html
- Bandura, A. (1978). The self-system in reciprocal determinism. *American Psychologist*, 33, 344-358.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1997). *Self-efficacy in changing societies*. New York, NY: Cambridge University Press.
- Baron, M. A. (n.d.). Guidelines for writing research proposals and dissertations. Retrieved from http://www.regent.edu/acad/schedu/pdfs/residency/su09/dissertation_guidelines.pdf
- Bearinger, L. H., Sieving, R. E., Ferguson, J., & Sharma, V. (2007). Global perspectives on the sexual and reproductive health of adolescents: Patterns, prevention, and potential. *Lancet*, 369, 1120-1231.
- Becker, M. H. (1974). Health Belief Model and personal health behavior. *Health Education Monographs*, 2, 324-473.

- Biermann, J., Dunlop, A. L., Brady, C., Dubin, C., & Brann, A. (2006). Promising practices in preconception care for women at risk for poor health and pregnancy outcomes. *Maternal and Child Health Journal, 10*(5), S21-S28.
- Blum, R., McNeely, C., & Nonnemaker, J. (2002). Vulnerability, risk, and protection. *Journal of Adolescent Health, 31*(S), 28-39.
- Borbasi, S., Jackson, D., & Wilkes, L. (2005). Fieldwork in nursing research: Positionality, practicalities and predicaments. *Journal of Advanced Nursing, 51*, 493-501.
- Brown, S. S., & Eisenberg, L. (1995). *The best intentions: Unintended pregnancy and the well-being of children and families*. National Academies Press.
- Brown, T. (1990). The biological significance of affectivity. In N. Stein, B. Leventhal, & T. Trabasso (Eds.), *Psychological and biological approaches to emotion* (1st ed., pp. 405-434). Hillsdale, NJ: Lawrence Erlbaum Assoc., Publishers.
- Burns, C. E., Dunn, A. M., Brady, M. A., Starr, N. B., & Blosser, C. G. (2013). *Pediatric primary care: A handbook for nurse practitioners* (5th ed.). Philadelphia, PA: Elsevier/Saunders.
- Busher, H., & James, N. (2012). Ethics of research in education. In A.R.J. Briggs, M. Coleman, & M. Morrison (Eds.), *Research methods in educational leadership and management* (3rd ed., pp. 90-104). Thousand Oaks, CA: SAGE Publications, Inc.
- Casey, B. J., & Jones, R. M. (2010). Neurobiology of the adolescent brain and behavior: Implications for substance use disorders. *Journal of the American Academy of Child & Adolescent Psychiatry, 49*, 1189-1201.

- Centers for Disease Control and Prevention. (2006, April 21). *Recommendations to improve preconception health and health care --- United States* Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5506a1.htm>
- Centers for Disease Control and Prevention. (2014, September 3). *Preconception health and health care*. Retrieved from <http://www.cdc.gov/preconception/careformen/promotion.html>
- Centers for Disease Control. (2015, January 22). *Unintended pregnancy prevention*. Retrieved from <http://www.cdc.gov/reproductivehealth/UnintendedPregnancy/index.htm>
- Centers for Disease Control. (2016a, March 14). *About teen pregnancy*. Retrieved from http://www.cdc.gov/Teen_pregnancy/about/index.htm
- Centers for Disease Control. (2016b, January 12). *Infant mortality*. Retrieved from <http://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm>
- Champion, V. L., & Skinner, C. S. (2008). The health belief model. In K. Glanz, K. Rimer, & K. Viswanth (Eds.), *Health behavior and health education: Theory, research, and practice* (pp. 45-65). San Francisco, CA: Jossey-Bass.
- Chang, G., Goetz, M. A., Wilkins-Haug, L., & Berman, S. (2000). A brief intervention for prenatal alcohol use: An in-depth look. *Journal of Substance Abuse Treatment, 18*, 365-369.

- Charron-Prochownik, D., Sereika, S. M., Wang, S., Hannan, M. F., Fischl, A. R., Stewart, S. H., & Dean-McElhinny, T. (2006). Reproductive health and preconception counseling awareness in adolescents with diabetes: What they don't know can hurt them. *Diabetes Educator, 32*(2), 235-242.
- Coonrod, D. V., Bruce, N. C., Malcolm, T. D., Drachman, D., & Frey, K. A. (2009). Knowledge and attitudes regarding preconception care in a predominantly low-income Mexican American population. *American Journal of Obstetrics & Gynecology, 200*(6), 686-686.
- Corbett, E. (2011). *Joint music attention between toddlers and a music teacher* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3468760)
- Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed method approaches* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Daley, A. M., Sadler, L. S., Leventhal, J. M., & Cromwell, P. (2004). Clinicians' views on reproductive needs and services for teens with negative pregnancy tests. *Journal for Specialists in Pediatric Nursing, 9*(2), 41-49.
- Delgado, C. E. (2008). Undergraduate student awareness of issues related to preconception health and pregnancy. *Maternal Child Health Journal, 12*, 774-782. doi:10.1007/s10995-007-0300-6
- Denscombe, M. (2014). *The good research guide for small-scale social research projects* (5th ed.). New York, NY: McGraw-Hill House.

- Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage Handbook of qualitative research* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Drust, J. (2013). *Elementary school teacher's perceptions of the math coach approach to professional development* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3552164)
- Dunlop, A. L., Jack, B., & Frey, K. (2007). National recommendations for preconception care: the essential role of the family physician. *Journal of the American Board of Family Medicine, 20*, 81-84. doi:10.3122/jabfm.2007.01.060143
- Elisinga, J., De Jong-Potjer, L. C., Van Der Pal-De Bruin, K. M., Le Cessie, S., Assendelft, W. J., & Buitendijk, S. E. (2008). The effect of preconception counselling on lifestyle and other behaviour before and during pregnancy. *Women's Health Issues, 18S*, S117-S125. doi:10.1016/j.whi.2008.09.003
- Fogel, C. I., & Woods, N. F. (2008). *Women's health care in advanced practice nursing*. New York, NY: Springer Publishing Company, LLC.
- Ford, K., Weglicki, L., Kershaw, T., Schram, C., Hoyer, O., & Jacobson, M. (2002). Effects of a prenatal care intervention for adolescent mothers on birth weight, repeat pregnancy, and educational outcomes at one year postpartum. *Journal of Perinatal Education, 11*(1), 35-38.
- Fuhrmann, K. (1986). Treatment of pregnant insulin-dependent diabetic women. *Acta Endocrinologica, 277*, 74-76.

- Galindo, A., Burguillo, A. G., Azriel, S., & Fuente, P. D. (2006). Outcome of fetuses in women with pregestational diabetes mellitus. *Journal of Prenatal Medicine, 34*, 323-331.
- Gall, J. P., Gall, M. D., & Borg, W. R. (2014). *Applying educational research: How to read, do, and use research to solve problems* (7th ed.). Bloomington, MN: Pearson e Text.
- Ginsburg, H. P., & Opper, S. (1988). *Piaget's theory of intellectual development* (3rd ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.
- Gueye, E. (2012). *Perceptions of mentoring relationships for adult mentors and student leaders* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (354131)
- Guttmacher Institute (2015). *Facts on unintended pregnancy in the United States*. Retrieved from <https://www.guttmacher.org/pubs/FB-Unintended-Pregnancy-US.html>
- Hamilton, B. E., Martin, J. A., & Ventura, S. J. (2012). *Births: Preliminary data for 2011. National Vital Statistics Reports, 61*(5).
- Hatch, J. A. (2002). *Doing qualitative research in educational settings*. Albany, NY: State University of New York Press.
- Heavey, E. (2010). *Maternal Child Nursing, 35*(4), 213-219.
<http://catalog.waldenu.edu/content.php?catoid=21&navoid=2450&print>

Hillemeier, M. M., Weisman, C. S., Chase, G. A., Dyer, A., & Shaffer, M. L. (2008).

Women's preconceptional health and use of health services: Implications for preconception care. *Health Research and Educational Trust*, 54-75.

doi:10.1111/j.1475-6773.2007.00747.x

Hochbaum, G. M. (1958). Public participation in medical screening programs: A socio-psychological study. Washington D.C.: U. S. Department of Health, Education, and Welfare.

Hoffman, S. D., & Maynard, R. A. (2008). The study, the context, and the findings in brief. In S. Hoffman & R. Maynard (Eds.), *Kids having kids: Economic costs & social consequences of teen pregnancy* (2nd ed., pp. 1-24). Washington, D.C.: The Urban Institute Press.

Howse, E. J. (2008). Marching forward: Action steps to optimize the health of women and babies. *Women's Health Issues*, 18S, S10-S12.

Hoyert, D. L., & Jiaquan, X. (2012). *Deaths: Preliminary data for 2011. National Vital Statistics Reports*, 61(6).

Johnson, K., Atrash, H., & Johnson, A. (2008). Policy and finance for preconception care. *Women's Health Issues*, 18S, S2-S9.

Kaiser, M. M., & Hays, B. J. (2005). Health-risk behaviors in a sample of first-time pregnant adolescents. *Public Health Nursing*, 22(6), 483-493.

Kendall, P. C. (2006). *Cognitive behavior therapy with adolescents* (3rd ed.). New York, NY: Guilford Press.

- Kerr, C. L. (2008). *Male adolescents of divorce: The relationship with their noncustodial father* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3358474)
- Kliegman, R. M., Stanton, B. D., St Geme, F., & Schor, N. F. (2015). *Nelson textbook of pediatrics* (20th ed.). Santa Barbara, CA: Elsevier.
- Lampe, M. A. (2006). Human immunodeficiency virus-1 and preconception care. *Maternal and Child Health Journal, 10*(5), S193-S195.
- Lave, J. (1988). *Cognition in practice: Mind, mathematics, and culture in everyday life*. Cambridge, United Kingdom: Cambridge University Press.
- Lewin, K. (1951). *Psychological theory, contemporary readings*. New York, New York: Macmillan.
- Lowdermilk, D. L., Perry, S. E., Cashion, K., & Alden, K. R. (2016). *Maternity and women's health care* (11th ed.). St. Louis, MO: Mosby Elsevier.
- Lu, M. C. (2007). Recommendations for preconception care. *American Family Physician, 76*, 397-400. *Maternal Child Health Journal, 10*, S73-S77. doi:10.1007/s10995-006-0110-2
- Macdorman, M. F., & Matthews, T. J. (2008). *Recent trends in infant mortality in the United States*. Retrieved from <http://www.cdc.gov/nchs/databriefs/db09.htm>
- Marshall, C., & Rossman, G. B. (2015). *Designing qualitative research* (6th ed.). Los Angeles, CA: SAGE Publications, Inc.

- Martin, J. A., Hamilton, B. E., Sutton, P. D., Ventura, S. J., Menacker, F., Kirmeyer, S., Mathews, T. J. (2009). Births: Final data for 2006. *National Vital Statistics Report, 57(7)*, 1-10.
- Maryland PRAMS: Pregnancy Risk Assessment Monitoring System (2013, April). Focus on preconception care: Among Maryland women giving birth 2009-2011. Retrieved from http://phpa.dhmh.maryland.gov/mch/Documents/prams_preconception_care.pdf
- Mathiesen, E. R., Kinsley, B., Amiel, S. A., Heller, S., McCance, D., Duran, S., Raben, A. (2007). Maternal glycemc control and hypoglycemia in Type 1 diabetic pregnancy: A randomized trial of insulin aspart versus human insulin in 322 pregnant women. *Diabetes Care, 30(4)*, 771-776.
- McAlister, A. L., Perry, C. L., & Parcel, G. S. (2008). How individuals, environments, and health behaviors interact: Social cognitive theory. In K. Glanz, B. Rimer, & K. Viswanath (Eds.), *Health Behavior and Health Education: Theory, research, and practice* (4th ed., pp. 169-188). San Francisco, CA: Jossey-Bass.
- Merriam, S. B. (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco, CA: Jossey-Bass.
- Miller, N., & Dollard, J. (1941). *Social learning and imitation*. New Haven, NJ: Yale University Press.
- Mosher, W. D., Jones, J., & Abma, J. C. (2012, July). *Intended and unintended births in the United States: 1982-2010* (DHHS Publication No. 2012-1250). Retrieved from <http://www.cdc.gov/nchs/data/nhsr/nhsr055.pdf>

- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage Publications, Inc.
- Nightingale, E., & Fischhoff, B. (2002). Adolescent risk and vulnerability: An overview. *Journal of Adolescent Health, 31*(S), 3-9.
- Northern Arizona University (n.d.). *Research design: Limitations and delimitations*. Retrieved from <http://jan.ucc.nau.edu/>
- Piaget, J. (1970). Intellectual evolution from adolescence to adulthood. *Human Development, 51*(1), 40-47. doi:10.1159/000112531.
- Patton, M. Q. (2014). *Qualitative research and evaluation methods* (4th ed.). Thousand Oaks, NJ: SAGE Publications, Inc.
- Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of Counseling Psychology, 52*, 137-145.
- Pope, C., & Mays, N. (2006). *Qualitative research in health care* (3rd ed.). Malden, MA: Blackwell Publishing Ltd.
- Posner, S. F., Johnson, K., Parker, C., Atrash, H., & Bierman, J. (2006). The National Summit on Preconception Care: A summary of concepts and recommendations. *Maternal Child Health Journal, 10*, S197-S205. doi:10.1007/s10995-006-0107-x
- Quillin, J. M., Silberg, J., Board, P., Pratt, L., & Bodurtha, J. (2000). College women's awareness and consumption of folic acid for the prevention of neural tube defects. *Genetics in Medicine, 2*, 209-213.

- Rogers, E. R., & King, S. R. (2013). Intervention based on social cognitive theory: Evaluating adolescents' knowledge of OTC pain medications. *Journal of the American Pharmacists Association, 53*, 30-38.
- Rosenstock, I. M. (1974). The health belief model and preventative health behavior. *Health Education Monographs, 2*(4), 354-386.
- Rosenstock, I. M., Stretcher, V. J., & Becker, M. H. (1988). The social learning theory and the health belief model. *Health Education Quarterly, 15*(2), 175-183.
- Rotter, J. B. (1945). *Social learning and clinical psychology*. Englewood Cliffs, NJ: Prentice Hall.
- Rubin, H. J., & Rubin, I. S. (2005). *Qualitative interviewing: the art of hearing data* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Sanders, L. B. (2009). Reproductive life plans: Initiating the dialogue with women. *MCN, the American Journal of Maternal/Child Nursing, 34*(6), 342-347.
doi:10.1097/01.NMC.0000363681.97443.c4
- Schulz, L. L. (2006). *Experience of alienation for males ages 16-19 from high school in the Pacific Northwest: A phenomenological inquiry*(Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3252481)
- Shaw, S. (2012). *Factors influencing Hispanic parental involvement in education*(Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3525691)
- Skinner, B. F. (1938). *The behavior of organisms*. Englewood Cliffs, NJ: Appleton-Century-Crofts.

- Steel, J. M., Johnstone, F. D., Hepburn, D. A., & Smith, A. F. (1991). Can pre-pregnancy care of diabetic women reduce the risk of abnormal babies? *British Medical Journal*, *301*, 1070-1074.
- Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in Cognitive Sciences*, *9*(2), 69-74.
- Steinberg, L. (2013). *Adolescence* (10th ed.). New York, NY: McGraw-Hill.
- Streubert, H. J., & Carpenter, D. R. (2010). *Qualitative research in nursing: Advancing the humanistic imperative* (5th ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.
- Temple, R. C., Aldridge, V. J., & Murphy, H. R. (2006). Pre-pregnancy care and pregnancy outcomes in women with Type 1 diabetes. *Diabetes Care*, *29*(8), 1744-1749.
- Tolman, E. C. (1932). *Purposive behavior in animals and men*. New York, New York: Appleton-Century-Crofts.
- Tylee, A., Haller, D. M., Graham, T., Churchill, R., & Sanci, L. A. (2007). Youth-friendly primary-care services: How are we doing and what more needs to be done? *Lancet*, *369*, 1565-1573.
- U.S. Department of Health & Human Services (2016, February 25). Trends in teen pregnancy and childbearing. Retrieved from www.hhs.gov/ash/oah/adolescent-health-topics/reproductive-health/teen-pregnancy/trends.html/

- U.S. Department Of Health Resources and Services Administration (2011). *Unintended pregnancy and contraception*. Retrieved from <http://mchb.hrsa.gov/chusa13/perinatal-risk-factors-behaviors/p/unintended-pregnancy-contraception-use.html>
- United States Department of Health & Human Services. (n.d.). *Fact sheet: Health disparities in infant deaths*. Retrieved from <http://www.cdc.gov/minorityhealth/CHDIR/2011/FactSheets/InfantDeath.pdf>
- Vygotsky, L. S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Wadsworth, B. J. (1971). *Piaget's theory of cognitive and affective development: Foundations of constructivism* (5th ed.). White Plains, NY: Longman Publishers, USA.
- Wahabi, H. A., Alzeidan, R. A., Bawazeer, G. A., Alansari, L. A., & Esmail, S. A. (2010). Preconception care for diabetic women for improving maternal and fetal outcomes: A systematic review and meta-analysis. *BMC Pregnancy and Childbirth, 10*(63), 1-14.
- Walden University. (2010, September). *2010-2011 Catalog: Vision, Mission, and Goals*.
- Wang, S-I, Charron-Prochownik, D., Sereika, S. M., Siminerio, L., & Kim, Y. (2006). Comparing three theories in predicting reproductive health behavioral intention in adolescent women with diabetes. *Pediatric Diabetes, 7*, 108-115.
- Watson, J. B. (1925). *Behaviorism*. New York, New York: Norton.

Whyte, W. F. (1984). *Learning from the field: A guide from experience*. Newbury Park, CA: Sage.

Wilensky, S., & Proser, M. (2008). Community approaches to women's health: Delivering preconception care in a community health center model. *Women's Health Issues, 18S*, S52-S60.

Zelazo, P., Chandler, M., & Crone, E. (Eds.). (2010). *Developmental social cognitive neuroscience: The Jean Piaget symposium series* (1st ed.). New York, NY: Psychology Press.

Appendix A: Background Information Form

Please answer the following questions. If multiple options are given pick the one that describes you best.

1. Where do you currently live?

Beechwood & Claiborne Homes

Beechwood Apartments

Other

2. Sex

Female

Male

3. Select which racial/ethnic identity best describes you.

Asian or Pacific Islander

Bi-racial

(Specify_____)

Multi-racial

(Specify_____)

Multi-racial

(Specify_____)

Black/African American

White/European American

Latino/Hispanic

Multi-racial

(Specify _____)

Native American

4. Age _____ years old

5. Indicate your relationship status:

Single

With a partner (boyfriend or girlfriend)

Married

6. Select your current living situation:

I live alone

I live with roommates

I live with my parents/guardian

I live with my partner (husband/boyfriend or girlfriend)

I live with my partner's parents

Other

7. Employment Status:

Unemployed

Employed

8. Your mothers' employment status:

Unemployed

Employed

9. Your father's employment status:

Unemployed

Employed

10. To the best of your knowledge your family's yearly income?

Below \$30,000 per year

\$30,000 to \$50,000

\$50,000 to \$75,000

\$75,000 to \$100,000

Over \$100,000

11. Highest level of school that you have completed:

Did not finish high school (Specify last grade completed_____)

High School Diploma

GED

Some College (Specify last grade completed_____)

College Degree

12. Do you currently have health insurance?

Yes

No

Medicaid

13. How many days each week do you drink alcohol?

None

1 to 2 per week

3 to 4 per week

5 or more per week

14. Do you smoke cigarettes?

Yes

No

15. Have you been diagnosed with a chronic illness in the past (asthma, diabetes, high blood sugar, etc.)?

Yes

No

16. Are you currently sexually active?

Yes

No

17. Are you currently taking birth control (“the Pill”)?

Yes

No

18. How often do you use condoms when having sex?

N/A (I am not sexually active)

I do not use condoms

Not much of the time

Some of the time

Appendix B: Interview Guide

Question 1: Can you describe your medical visits from age 12 until now that you can remember. (AACT Affective Component/AACT Cognitive Component)

For each visit:

What was the reason for the visit?

Who did you see at the visit? (Doctor, nurse, etc.)

Were the visits only when you were sick?

Did you ever have a visit for just a checkup or when you were not sick?

Please tell me (describe) what they talked to you about at the visit. (AACT Cognitive Component)

Did they teach you anything during the visit? (AACT Cognitive Component/SCT Observational Learning)

How old were you at your last medical visit? (AACT Affective Component)

Did the Doctor talk directly to you or to the person who brought you? (AACT Affective Component)

Describe what it is like to talk to the doctor or nurse during the visit. (AACT Affective Component)

Do you feel it is easy to talk to the doctor or nurse? (AACT Affective Component/Perceived Barriers)

Did you understand what the doctor/nurse talked about? (AACT Cognitive Component/HBM Perceived Barriers)

Were you able to ask the doctor or nurse questions during the visit?

(AACT Cognitive Component/HBM Perceived Barriers)

How comfortable are you talking with the doctor/nurse? (AACT Cognitive Component/HBM Perceived Barriers)

Do you feel more comfortable asking questions to the doctor or the nurse?

(AACT Cognitive Component/HBM Perceived Barriers)

Do you feel comfortable asking questions in front of your mom/parent at the doctor's appointment? (AACT Cognitive Component/HBM Perceived Barriers)

What about when you are talking about sex, birth control, alcohol, or drug use in front of your mom/parent? (AACT Cognitive Component/HBM Perceived Barriers)

How did you pay for the visit? (HBM Perceived Barriers)

If Medicaid/Private insurance was used: Are you able to go to a doctor's visit without your mom/parent knowing or having them present? Can you use your Medicaid/Insurance card without your mom/parent/friend/sibling/family member? (AACT Cognitive Component/HBM Perceived Barriers)

If paid cash: Would you be able to pay cash for a visit, by yourself, if you needed to go without your mother? (AACT Cognitive Component/HBM Perceived Barriers)

Question 2: Can you describe how you got your doctor appointments in the past?

(AACT Cognitive Component/HBM Perceived Barriers)

Describe how you would make an appointment if you needed one today. (AACT Cognitive Component/HBM Perceived Barriers)

For a visit if you were sick?

For a visit if you were not sick?

For a visit if you were pregnant or thought you might be pregnant? (AACT Cognitive Component/HBM Perceived Barriers)

If mom/parent usually makes their appointment, then ask would you be able to ask mom/parent/friend/sibling/family member to make an appointment if you were pregnant or thought they were pregnant? (AACT Cognitive Component/HBM Perceived Barriers)

What would your mom/parent/friend/sibling/family member say or do if they told them it was for that? (SCT Reciprocal Determinism)

Have you ever made your own doctor's appointment? Could you make a doctor's appointment if you needed one? (AACT Cognitive Component/HBM Perceived Barriers)

Who could you could ask to help you get an appointment besides your mom/parent? (AACT Affective Component/HBM Perceived Barriers)

Question 3: PCC Knowledge

Are you familiar with what PCC is? (AACT Cognitive Component)

Can you describe what PCC is and what is PCC for? (AACT Cognitive Component)

Have you or anyone you know participated in PCC? (SCT Reciprocal Determinism)

Describe where you could go to get PCC. (HBM Cues to Action)

Describe how to set up an appointment for PCC. (HBM Cues to Action)

Have you talked to anyone about what to do to plan a pregnancy or prevent a pregnancy? (SCT Reciprocal Determinism)

When is the best time for a woman to seek PCC? (HBM Self-efficacy)

Will you participate in PCC prior to a pregnancy? (HBM Self-efficacy)

Do you think you would participate in PCC? (HBM Perceived Benefits)

Are you planning to make an appointment for PCC? (HBM Self-efficacy) When?

Question 4: Before trying to get pregnant what are things someone can do to have a healthy pregnancy and healthy baby? (AACT Cognitive Component)

What things do you plan to do to prepare for a pregnancy? (HBM Perceived Benefits)

Is there anything you plan to do before getting pregnant? (HBM Perceived Benefits)

What kinds of things can someone do to have a healthy pregnancy? (AACT Cognitive Component/HBM Perceived Benefits)

When should they start doing _____ to have a healthy pregnancy/baby?

What does _____ do for the baby? (Ask for each behavior)

Where did you learn to _____ (Fill in each behavior identified by participant) _____ before getting pregnant?

Where did you first hear about it?

Could having a doctor's visit, before getting pregnant, help someone have a healthier pregnancy or healthy baby?

If interviewee does not identify early and continued prenatal care, eating balanced and nutritious meals, and taking prenatal vitamins ask about each of them and the effect on an unborn child.

Question 5: Are there things someone should **not** do or quit doing before getting pregnant to have a healthy baby? (AACT Cognitive Component/HBM Perceived Severity)

Do you know any medical conditions or lifestyle behaviors that could harm (negatively affect) a pregnancy or a baby? (HBM Perceived Severity)

What things do you think might hurt a baby during pregnancy? (AACT Cognitive Component/HBM Perceived Severity)

What does _____ do to an unborn baby? (AACT Cognitive Component/HBM Perceived Severity)

Where did you learn **not** to do _____ before getting pregnant? (AACT Cognitive Component/HBM Perceived Severity)

Who or where did you first hear about it?

If the interviewee does not identify cigarette smoking, drinking alcohol, delayed prenatal care, and poor nutrition then ask them about each of them

and the effect on the unborn baby. (AACT Cognitive Component/HBM Perceived Severity)

Question 6: Are you planning to get pregnant in the next year? Do you think you will be pregnant in the next year, 2 years? (HBM Perceived Susceptibility)

Do you think you “might” or could get pregnant in the next year or two years?

(HBM Perceived Susceptibility)

Have you ever had sex? (HBM Perceived Susceptibility)

Have you ever had unprotected sex? (HBM Perceived Susceptibility)

Have you used contraception every time you have had sex? (HBM Perceived Susceptibility)

What type of contraception have you used? (HBM Perceived Susceptibility)

Have you ever thought you might be pregnant? (HBM Perceived Susceptibility)

Have you ever taken a home pregnancy test? (HBM Perceived Susceptibility)

Do you think you will be pregnant in the next four years? (HBM Perceived Susceptibility)

If you are planning to get pregnant what type of things should one do to prepare or get ready before the pregnancy? (AACT Cognitive Component)

Or Before you get pregnant have you or do you plan to do anything to prepare?

Question 7: In middle-school or high school do you remember learning anything about what to do or **not** to do when someone is thinking about getting pregnant. (AACT Cognitive Component/SCT Observational Learning/SCT Reciprocal Determinism)

Do you remember learning anything about what to do or **not** to do when someone wants not to get pregnant? (AACT Cognitive Component/SCT Observational Learning/SCT Reciprocal Determinism)

If “**yes**”: Source of information?

Name of class, grade level?

Peer, parent, any source identified probe the circumstances

(Who, what, when)

What about what to do or not to do if you are pregnant? (AACT Cognitive Component/SCT Observational Learning/SCT Reciprocal Determinism)

If “**yes**”: Source of information?

Name of class, grade level?

Peer, parent, any source identified probe the circumstances

(Who, what, when)

Question 8: Has anyone ever told you that you should get special medical care and advice before you become pregnant or plan for a pregnancy (preconception care)? (AACT Cognitive Component)

Where have you gotten information from about getting ready for pregnancy or preventing a pregnancy? (SCT Observational Learning)

Doctors/clinic/school/Mother, grandmother, family, friends, books, clinic,
internet, TV? (SCT Observational Learning)

What were you told? (for each one identified by interviewee will be
probed.)

Do you feel you know everything you need to have a healthy baby?

(AACT Affective Component/AACT Cognitive Component)

What do people use birth control for? Prevent pregnancy/plan
pregnancies? (AACT Cognitive Component)

Who would be the best person to receive information PCC from? (SCT
Facilitation)

What is the best age to start receiving PCC? (SCT Facilitation)

Question 9: Do you have any additional thoughts or things you would like to add?

Appendix C: Informed Consent (Aged 18 & Over)

You are invited to take part in a research study about your experiences with preconception care. This study seeks to describe your knowledge, attitudes, and beliefs about preparing before you get pregnant (preconception care). You have been invited to participate in this study because you are an adolescent female. Your participation in this study will help provide important information about what adolescents want and need in a preconception program.

Exclusion Criteria:

Women who are under 18 or are 22 years old or older are not able to participate. Also women who have been pregnant or are now pregnant may not participate in the study. Women who have had a hysterectomy will not be able to participate.

Inclusion Criteria:

You may participate in this study if you are a female between the ages of 18 to 21 years old.

This study is being conducted by a researcher named Lynette Collins, who is a doctoral student at Walden University. The researcher is a family nurse practitioner at Daughters of Charity Health Clinic in New Orleans, Louisiana. She has been a nurse practitioner for 16 years.

Background Information:

The purpose of this study is to understand preconception care from the perspective of adolescent females. Participants' descriptions of preconception care will

help the researcher propose new ways to provide preconception care that will meet the needs of adolescents. It will also help to identify barriers to seeking preconception care.

Procedures:

If you agree to be in this study, you will be asked to:

Sign the consent form

1st meeting: (Should last about 45 minutes)

Complete a demographic questionnaire

Complete interviews about your experiences with preconception care.

2nd Meeting: (Should last about 30 to 45 minutes)

Review a written copy of your interview statements made during the 1st meeting.

Duration of the Study:

The study will begin in TBA.

The researcher may collect data until TBA.

Voluntary Nature of the Study:

Your participation in this study is voluntary. This means you have the right not to participate. No one will treat you differently if you decide not to be in the study. If you decide to be in the study you always have the right to not participate later. If you feel stressed during the study you may stop at any time. You do not have to answer questions that you feel are too personal or do not feel comfortable answering.

Risks and Benefits of Being in the Study:

There are no direct benefits to you for being in the study. There are no foreseeable physical or emotional risks or discomforts involved in this study.

Compensation:

All participants will receive a \$20 gift card from Walmart for participating in the interviews.

Confidentiality:

Your real name or any information that would identify you will not be used to protect you and the information you provide for this study. All information you provide will only be used for this research project. The written report will not include your real name or any information that would reveal your identity.

Contacts and Questions:

The researcher's name is Lynette Collins. The researcher's faculty chair is Dr. Carol Philips. You may ask any question you have now or later by contacting the researcher on the phone ([REDACTED]) or by email (lynette.collins@waldenu.edu). You may also contact the researcher's faculty by phone ([REDACTED]) or by email (carol.philips@waldenu.edu). Also if you would like to talk to someone about your rights as a participant, you can call Dr. Leilani Endicott at 612-312-1210. Walden University approval number for this study is Enter number and will expire on Enter expiration number.

If you wish to participate, please sign this form as a record of your agreement. Signing this consent form indicates that you agree to the terms written. If you do not want to participate then this form will be shredded. You may want to keep a copy of this

consent with contact numbers for your records. Please sign your name and phone number as a record of your participation.

Thank you.

Name: _____ Date: _____

Phone number: _____

Address: _____

Appendix D: Participants' Textural and Structural Descriptions of Participants

Textural Description of Participant A

One-on-one interviews were done to understand this participant's past experiences with PCC and RLP. Beginning with Abby's past medical experiences she stated she had one visit with a medical clinic for a sore throat. She did not engage in conversation with the medical personnel during the visit due to feeling unable to speak on her own behalf. Her mother was the person present who spoke to the medical personnel.

Abby's experiences with PCC were provided by her public school and focused on birth control. The issue of not communicating directly and openly with the medical personnel was a barrier for her not receiving more information about PCC. During discussion of healthy and bad habits for preparing for a pregnancy Abby's answers focused on abstract answers like "get a job" and "get your life together for your child". She was not able to identify one known positive or negative behavior associated with PCC. Abby's sex education classes did not focus on PCC or how to have a healthy pregnancy. She said the class was about "how to take care of babies" and "that we should use pills to keep from getting pregnant."

Abby's experiences with reproductive life planning (RLP) revealed that she has not been taught how to make a plan or considered making a plan. She has thought about how many children she would like but has not considered how to plan her family. Abby does not know the information necessary to make a RLP.

Abby's discussion of whom she turns to for PCC and RLP information were contradictory. She readily identified "my friends mostly" as the people she turned to for

information about PCC and RLP. When asked if she had talked to her friends about PCC and RLP she answered no.

Abby does not believe she can ever have children. Abby does not believe she is at risk for pregnancy because she reports she does not have unprotected sex. Abby is at risk for pregnancy because she does not use any other type of birth control and only uses condoms *sometimes*. She does not identify condoms as a birth control method. Abby also does not seem to understand what unprotected sex means. She knew several girls who were pregnant in middle school and “a whole bunch” in high school. Abby reports that she does not feel prepared if she gets pregnant.

Structural Description of Participant A

Abby’s experiences of acquiring accurate thorough PCC and RLP information have been limited. Due to multiple factors Abby has not gained the knowledge needed to prepare her for a healthy pregnancy. Limited contact with medical personnel in her adolescent years is one factor that has limited her acquisition of knowledge of PCC and RLP. Limited contact has also led to not establishing a rapport with medical personnel who could have provided needed information. Abby lacks confidence in talking openly with medical personnel and that also is a barrier for her obtaining information on PCC and RLP. She depends on her mother to help her make doctor appointments and get her to the clinic.

Abby’s formal school sex education classes did not offer the opportunity for her to gain the necessary knowledge about PCC and RLP. Her sex education class focused on

birth control and how to take care of babies. Abby was not able to identify one correct positive or negative behavior that would affect her having a healthy pregnancy and baby.

Although Abby identified several people she can talk to about PCC and RLP she reports she does not discuss these topics with them. It would be a logical conclusion that Abby's friends who attended the same schools she did also lack knowledge about PCC and RLP. Abby did not readily identify the contradictions in her statements about who she gets information from about PCC and RLP and the statements that contradict that she talks to them about PCC and RLP.

Abby is sexually active but does not realize that she is at risk for getting pregnant. She is under the impression that because she hasn't gotten pregnant yet, then it cannot happen. Abby does acknowledge that she is not prepared to get pregnant. Another barrier for Abby is that she does not know what knowledge she is lacking regarding PCC and RLP. Despite having full Medicaid Abby has limited ability to seek accurate sources to gain this knowledge.

Textural Description of Participant B

The first scheduled interview was to understand the participant's past experiences with PCC and RLP. Bella described multiple medical visits with multiple clinics due to problems with her menses and seeking birth control. Her interactions with the first clinic's medical personnel were described as negative because she felt like they did not talk with her or answer her questions. Bella stated "I really didn't like 'em 'cause they don't never, um, really talk to me about stuff... just told me to um take birth control pills to make my menstrual regular. That is what the Planet (sic) Parenthood lady doctor said, I

didn't really like going, um, I don't get why they would give me birth control pills didn't make sense to give birth control pills for my menstrual if I wanted to get pregnant." Bella further described an equally unhappy relationship with the second clinic's medical staff when she stated "yeah, it was about the same as before, they don't really talk nothing 'bout what's going on with you or what they doing. They just tell you do this."... Initially Bella's mother set up and attended clinic appointments with her. After the first few times Bella made her own appointments and went on her own. Bella reported she has full Medicaid that pays for her visits.

Bella's experience with PCC was limited due to the fact that she was not allowed to complete her sex education class in school. She relayed how while starting school sex education classes "I got put out!"... "That sex education class."... : "Cause some boy was cuttin' up and got me in trouble and got us both put out. So then they stopped the class." nobody got the class." Bella does not recall anyone at the clinic discussing preparing for pregnancy despite multiple opportunities to do PCC counseling. She provided abstract answers like "get a job" and "ask my mama for help" when discussing the healthy habits and bad habits to avoid to get ready to get pregnant. Bella did add that her mother told her not to smoke or drink but she did not know it was something not to do especially if you are planning to get pregnant.

Bella denies learning about RLP. Her initial response to whether she has a RLP she said: "I ain't having kids anytime soon." When asked whether or not a woman can control when she has children her reply was: "No, I don't think so, you have kids when you do, it just happens when it happens." Bella did not understand that a RLP can include

planning to not have children until she wants. She reports “it would be good to make a plan.” and does see value in making a plan.

Bella’s discussion of who she turns to for information about PCC and RLP included friends and her sister. During the discussion she reports she has not discussed PCC or RLP with any of her friends. The only thing she has talked to her sister about is birth control methods.

Bella does not believe she will get pregnant in the next year. She does not use birth control all the time. Bella also does not identify condoms as a type of birth control. She reports she uses condoms sometimes.

Structural Description of Participant B

Opportunities for Bella to gain PCC and RLP information have been available through multiple clinic visits. She has failed to develop a positive relationship with any medical personnel despite multiple visits. Bella feels the medical personnel do not talk with her or answer her questions but just tells her what to do. Although Bella feels comfortable making and attending her medical appointments she does not feel she has open communication with any of the personnel.

Bella’s experience with PCC was incomplete due to being thrown out of the sex education class in school. She was unable to identify any of the positive habits to implement prior to getting pregnant or negative behaviors to stop before attempting a pregnancy to help have a healthy baby.

Bella does not believe she can control when and how many children she has in her life. Bella did not understand that a RLP is a means of planning your children. Once RLP was discussed Bella did believe it would be valuable to make a RLP.

Bella has not found a reliable source for information on PCC and RLP. She does not use birth control but does not believe she will get pregnant in the next year. Bella does not understand condoms are a form of birth control. Therefore, it would be difficult to get accurate survey information about PCC and RLP from this participant.

Textural Description of Participant C

The goal of this interview was to understand the participant's past experiences with PCC and RLP. Cici described multiple medical visits at multiple clinics for different reasons including school shots, a sexually transmitted diseases check, and once when she thought she was pregnant. Interactions with the staff have been mixed. She reports one interaction while checking in as "It was okay, the nurse that checked me in was real nice, but I was worried 'cause I thought, um, I might have a STD." Interactions with the doctors was characterized as "they always seemed like rushed, the doctor hardly talked to me at all he seemed like rushed." Cici has full Medicaid that pays for her medical visits. Setting up medical appointments has always been done for her by her grandmother.

Cici's experience with PCC has not been adequate. She recalls that when she went to the clinic concerned that she might be pregnant, the staff did not discuss PCC only "told me I wasn't pregnant and, um, that I should use condoms." Cici's PCC experience in school was described as "um, Well, we had sex ed in like the 10th grade. Mostly like how to change diapers, hold babies, and stuff." We "just talked about STD's and use

condoms and birth control. Just really kept telling us don't get pregnant before you go to school, get a job stuff like that." She does not remember any discussion about spacing children or what to do to get ready for pregnancy. When asked about what healthy things could you do to prepare to get pregnant her responses were abstract and not correct. "Well, um maybe get an apartment, get a job...no, oh yeah get your GED (General Education Diploma)." She further added "um, No I don't know of any" when asked what are bad things one should stop doing to prepare for pregnancy.

Cici denies learning about RLP or even hearing the phrase anywhere. Her initial response to hearing the phrase RLP was "I ain't trying to be pregnant." When discussing whether or not it would be valuable to formulate a RLP she indicated it would be, but then commented that it was not in your control if you have children. Her statement when referring to whether it is valuable to make a RLP that it is not because pregnancy "it is either meant to be or not."

Cici does not understand the term sexually active. She reported she is not sexually active but then stated "I only have sex maybe 2 times a week or so." She does not intend to have children for a few years. Cici does not have an effective plan to wait a few years to have children. Cici does not believe she has unprotected sex but uses condoms "most of the time" as her only means of birth control.

Structural Description of Participant C

All but one of Cici's past experiences with different medical personnel have been negative. She had one brief positive interaction with a nurse at one clinic. Interactions have been characterized as rushed and the doctor hardly spoke with her. CiCi has not

regularly attended one clinic in her adolescent years and has clearly not established a patient-client relationship with a medical provider. Although Cici has full access to medical care her visits continue to be negative. Cici does not feel comfortable making her own medical appointments.

Despite multiple opportunities to receive PCC through clinic visits Cici has not received the information she needs. Her formal school class on sex education focused on childcare and using birth control and did not provide PCC. Cici does not know what positive or negative factors could affect a pregnancy.

Cici's initially associated RLP only as wanting to get pregnant. Cici does not value RLP because she does not believe a woman can control when she will get pregnant.

Cici does not understand common terms associated with PCC and RLP. Therefore, it would be difficult to get accurate survey information about PCC and RLP from this participant. She also does not believe she has unprotected sex but only uses condoms most of the time. Her lack of knowledge makes her more at risk for pregnancy, STD's, and poor fetal maternal outcomes.

Textural Description of Participant D

The first scheduled interview was to understand the participant's past experiences with PCC and RLP. Deidra could only remember one visit to the doctor for a bladder infection. She reported she has gone for others but cannot remember what for. Initially the clinic visits were set up by her mother and her mother went with her to the clinic. "Like the doctor's offices and stuff I go usually with my mom but for the last couple of visits I've been going by myself. But I usually go with my mama." Interactions with the

medical staff have not been positive as indicated when she described “I hardly saw the doctor any...yeah, um but you hardly ever see the same doctor or nurses, every time you go it’s someone new um different. Then they don’t know you or seen you before.” Deidra has full Medicaid that pays for the visit. When discussing how comfortable she is talking to medical personnel she felt she could and does ask them questions.

The majority of Deidra’s experiences with PCC were provided by her public school in the seventh grade. While discussing whether or not she received any PCC counseling from the clinic her response was “No ,huh, I don’t remember any the, um, doctor’s office or nothing or anything talking about to me about planning or planning parenthood or nothing like that.” When discussing healthy habits to prepare to get pregnant Deidra initially said no, then added “if they do drugs they should stop the drugs completely, quit the drugs completely. They should get their life organized before they plan to have a baby or anything.” During discussion of her knowledge of bad habits to stop during pregnancy she responded “Like I said if the people, if the person is doing drugs they should stop before getting pregnant. I live in a neighborhood where I see that a lot. Like the demographics they don’t care if they get pregnant and they still they are smoking marijuana and drink and stuff. That’s why I get concerned about when they are doing the drugs before and while they are pregnant and even when they have the baby.” While discussing she shared “They just talked about if you have sex use protection, use the pill, stuff like that.... drinking, smoking, the drugs.” Deidra’s formal sex education class was in the seventh grade. She stated the class did not discuss PCC they just talked about “They just talked about if you have sex use protection, use the pill, stuff like

that...just stuff like what to do while you are pregnant, The drinking, smoking, the drugs.”

Deidra denies learning about RLP. Her initial response to whether she has a RLP she said: “No, I don’t have a plan or anything like that....Nobody has never said nothing about making a plan.” Discussing whether there is value in making a plan she commented: “Probably so you got your life in order and were ready for kids. I think it would be a good idea to have a plan if you knew something about how.” Exploring what she would need to make a RLP Deidra stated “You’d need to know lots of stuff...Pretty much about birth control, more about how to not get pregnant.” When asked directly if she knows enough to make a RLP her response was “No not me...I would like to go to a pregnancy plan class if I could.”

When discussing of who she turns to for information about PCC and RLP she readily stated “Parents and doctors would be best.” She then qualified that talking with “Some of the doctors, my mama. But it wasn’t geared for planning a pregnancy it has been more about preventing a pregnancy.” Deidra had contradictory statements about “my mom and I talk all the time” to state they do not talk about PCC except “just about preventing a pregnancy. She said she would take me for birth control if I needed it.”

Deidra reports she is sexually active. She does not believe she has unprotected sex but stated she does not use birth control. Deidra stated she uses condoms most of the time “but I’m thinking about going on the pill.” She apparently does not understand that unprotected sex requires she use birth control 100% of the time if she does not want to become pregnant. Deidra did know girls in middle school that got pregnant. Since she did

not attend high school she was not able to address whether she knew girls in high school who became pregnant.

Deidra reports she does not feel prepared if she gets pregnant. She stated “I know some stuff but you know I’m not the smartest person in the world, you know. But I don’t do drugs, I don’t drink, you just drink plenty of water and you know, you know but, I don’t know everything.”

Structural Description of Participant D

Opportunities for Deidra to gain PCC and RLP information have been available through multiple clinic visits but she has not gained PCC and RLP information she needs. She has failed to develop a positive relationship with any medical personnel despite multiple visits. Deidra feels you never see the same doctors and they don’t know who you are from one visit to the next. Although Deidra feels comfortable making, and getting to her medical appointments she does not feel she has open communication established with any of the medical personnel.

Deidra’s had limited experiences with learning about PCC. PCC was not discussed during any of her clinic visits. She had limited informal school sex education due to dropping out of school in the eighth grade. Her formal school sex education class focused on prevention of pregnancy and positive and negative behaviors to observe when you are already pregnant. Deidra did correctly identify two of the negative behaviors to stop before getting pregnant but was not sure where she learned about it.

Deidra does not have a RLP but would be interested in attending a class to learn how. She does not feel she knows what she needs to make a RLP on her own and has not

received the information needed to make one. Deidra does see the value in making a RLP but does not feel she has the information needed to make one.

Deidra has not discussed PCC or RLP with anyone she identifies as sources of information. She identified that medical personnel would be the best source of PCC and RLP information but this would probably not be a good source unless she was able to develop a doctor-patient relationship with one. Deidra's lack of established positive doctor-patient relationship with a medical provider would be a barrier to successfully getting information on PCC and RLP.

Deidra does not believe she has unprotected sex despite her not using birth control 100% of the time. Deidra does not feel she has the knowledge needed to be prepared for a healthy pregnancy. Deidra does not understand some of the basic terms of PCC and RLP. Therefore, it would be difficult to get accurate survey information about PCC and RLP from this participant.

Textural Description of Participant E

The first scheduled interview was to understand the participant's past experiences with PCC and RLP. Elsa could only recall one medical visit to get birth control and a Pap smear. She described the experience as "Kind of scary that was the first time I had a Pap done. I was scared they might find something bad... I heard how much it was going to hurt and all." She further described how the doctor did not explain how the Pap smear was going to be done he only said "just put your legs here, they didn't talk to me at all whiles they were doing the Pap." Elsa reported "I feel comfortable talking to both nurses and doctors." When talking about her experience she relayed she did not talk with doctor

by stating “They don’t spend that much time in the room with you, they, um, did the Pap and left.” She also stated she made her own medical appointment.

Elsa’s experience with PCC has not adequate. She denied ever having anyone discuss PCC with her from the clinics. When asking if anyone at the clinic talked to her about PCC she responded “Not at all, nobody has ever talked about what to do to get ready to get pregnant. Not that I remember.” Elsa was interested in attending a PCC/RLP class by stating “Yes, I would want to know about how to ready to make a healthy baby. I would participate if they offered it to me, just to find out.” She responded to whether she knows of any healthy behaviors to do when planning to get pregnant by stating “no not really just take vitamins or something to make everything go smooth.” Elsa identified only one healthy behavior to do before getting pregnant. She did identify one bad habit to stop before attempting a pregnancy when she stated “I know to stop drinking for one. Stop doing a lot of heavy duty (physical) working if you have a job like that.” Elsa summed up her PCC education in school as “in school we only talked about preventing it, just about not getting pregnant.”

Elsa denies learning about RLP or having one. When asked about has she thought about a RLP she stated “no haven’t really thought about it, kinda of think I would like a couple of kids.” Elsa said she did not know of anywhere she could go to get PCC or RLP counseling she responded “Nope I don’t know, not anywhere that I know.” She believed the best time to get PCC/RLP counseling is “If you are looking to have a baby”.

Elsa identified multiple sources of who to turn to get information about PCC/RLP including her aunt, mother, internet, and Planned Parenthood. With discussion Elsa

revealed “No I haven’t ever talked to my mom about sex or birth control... she tried to talk about how to prevent pregnancy” Although her aunt is an identified source of information she reported “we talk about birth control, boys, and stuff” but no other aspects of PCC or RLP.

Elsa does not believe she will be pregnant in the next year but does not use birth control 100% of the time. She does not think she has unprotected sex but her only method of birth control is using condoms. When asked about how often she uses condoms she responded “Sometimes we use condoms....No, we don’t use condoms every time but mostly yes.” Elsa would like to have a couple of kids “but not right now.” She knew “a lot of girls got pregnant in high school that were there with me.” Elsa does not feel prepared to get pregnant. She stated “I don’t really know too much about what to do before or when I ‘m pregnant guess I’ll find out then.”

During the interview it became obvious that Elsa had misinformation or lack of communication regarding several issues. First how long she needed to be off birth control pills before attempting a pregnancy Elsa stated “Um, well from my aunt I know she told me, uh, maybe like a year or 2 years to be off that.” Her aunt did not advise her correctly. In addition she reported she stopped taking birth control because “I just didn’t like how the way the pills made me feel, they made my stomach feel bad.” Elsa did not discuss the side effects of her birth control to see if an adjustment could be made to her birth control pills to eliminate the side effects.

Structural Description of Participant E

Elsa had only one medical visit during adolescence. Her experience was negative including feeling scared and not comforted by the medical staff. Elsa reports the doctor did not explain what they are doing or spend enough time with you during the visit. Elsa has access to care through Medicaid and feels capable of making her own appointments. Elsa does not have an established positive doctor-patient relationship with any medical personnel.

Elsa's experiences with PCC have not been adequate to provide all the PCC and RLP information she needs to have a healthy baby. PCC was not provided during her medical visit. Elsa's formal school sex education did not provide PCC instruction. Her sex education class only provided information on preventing pregnancy. Elsa correctly identified one healthy and one negative behavior to implement before attempting a pregnancy. Other behaviors were not associated with preparing for a pregnancy.

Elsa was not taught about RLP and does not have a RLP formed. She does not know of any source that could help her with learning about a RLP or helping develop one.

Although Elsa identified multiple sources of information for PCC and RLP she reports she has not discussed PCC or RLP with anyone. Elsa would like to have children but not in the near future. Elsa does not have an effective means of preventing pregnancy in place.

Although Elsa does not use birth control 100% of the time she does not believe she will be pregnant in the next year. She does not feel prepared to get pregnant.

Elsa does not understand what unprotected sex means. Elsa does not understand terms associated with PCC and RLP. Therefore, it would be difficult to get accurate survey information about PCC and RLP from this participant.

Elsa has been misinformed about how long to be off of birth control pills before attempting a pregnancy. Elsa did not understand she should return to the doctor when she had side effects from birth control pills. She did not understand that the pills could have been changed to eliminate the side effects and be able to continue using this form of birth control.