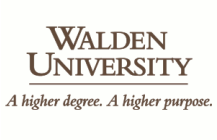

2018

Perceptions of Preconception Health and Prenatal Care by Young Adult Women and Men at Risk for Unintended Pregnancies

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
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Abstract

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by

Broderick Crawford

MA, Walden University, 2013

BS, Park University, 2010

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Among young adults at risk for unintended pregnancies, preconception health and prenatal care programs aimed at positive birth outcomes remain unaddressed. The purpose of this phenomenological study was to explore the lived experiences of young adults in terms of their willingness to use preconception health and prenatal care as a means for increasing both positive birth outcomes and overall health. All study participants met the following criteria: (a) young adult man or woman, (b) age 18 to 25, (c) at risk for unintended pregnancies, (d) sexually active, (e) single or in cohabiting partnerships, and (f) living in the greater Los Angeles, Calif., area. The researcher conducted individual, semi structured interviews with study participants, and analyzed the resulting transcripts using a modified van Kaam analysis. Data analysis yielded 3 major themes to address the study's 3 research questions. First, participants believed that parenthood is largely learned through witnessing the practices of their parents, family members, and friends. Second, participants believed in the necessity of healthy lifestyle choices for healthy preconception and optimal prenatal care. Third, the key obstacle to perinatal care was the lack of awareness of pregnancy and available health care resources. These findings may provide a guideline for improving preconception health and prenatal care programs for young adults who are at risk of unintended pregnancies.

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Chapter 1: Introduction to the Study

Introduction

For many young adults between the ages of 18 and 25, deciding whether and when to conceive a child can be a difficult one, and young men and woman often lack an understanding both of the health issues involved and of the parenting role they are assuming. Therefore, health professionals should make it a priority to provide this population group with as much education as possible regarding the reproductive process, preconception health and prenatal care in order to optimize health outcomes.

Chapter 1 presents an overview of preconception health and prenatal care, and outlines the background of the study, its problem statement, its purpose, the research questions it addresses, its conceptual framework, and the nature of the study. Chapter 1 also defines the key terms, identifies the study's scope, assumptions, limitations, and delimitations, and explains the significance of the study.

Background of the Study

In providing health care before conception, health professionals have the opportunity to intervene before pregnancy to optimize a young adult's overall health, to guide reproductive behavioral practices, and to minimize health risks to both mother and baby in later pregnancies. The "Mommy and Baby Project" in Los Angeles County, Calif., estimated that half of all births among the county's young adult women, ages 18 to 25, were unintended (Los Angeles County Department of Public Health, 2014). Brown and Eisenberg (1995) determined that, whether pregnancies were unintended, mistimed,

or unwanted at the time of conception, they had a significant impact on the social and economic status of the young mothers.

Prior to the 1973 legalization of abortion through the U.S. Supreme Court's Roe v. Wade decision, Brown and Eisenberg (1995) stated that approximately half of all unintended pregnancies in the United States ended in abortion, and that approximately one million abortions were being performed annually, with between 1,000 and 10,000 women dying each year from complications following the procedure. Unintended pregnancies can occur among all population segments, but they occur in larger numbers among unmarried women and among women at the end of their reproductive age (Brown & Eisenberg, 1995).

Providing young adult women and men with ongoing education and resources regarding preconception health, prenatal care, and reproductive health is absolutely essential because it provides a means to improve birth outcomes. Preconception care consists of the health services and health interventions provided to both males and females prior to conception (World Health Organization, 2012). Preconception care is health care provided to women of childbearing age prior to conceiving such as family planning, treatment of cronic conditions or STDs, and basic nutritional education (Delissant, Liakso & McKyer, 2011). Delissant, Lisako & McKyer (2011), in a study of the factors that contribute to preconception health behaviors among women of childbearing age in the United States, found that there was a critical need to teach women about the benefits of practicing preconception care and that the more educated the

woman, the more inclined she was to practice health behaviors that foster healthy birth outcomes.

Prenatal care is the regular, medical and nursing care recommended for women during pregnancy to minimize adverse health problems throughout the pregnancy. Prenatal care enables doctors and health care professionals to continuously promote healthy lifestyle choices and treat health and medical conditions that could harm a mother and her unborn child. Thielen's (2012) study used the theoretical framework of Pender's health promotion model (HPM) and Swanson's theory of caring focused on similarities and differences in gestational age as well as on birth similarities among women in individual and group prenatal care. Thielen concluded that risk factors associated with poor perinatal outcomes could be minimized by reducing alcohol and drug use, and by eating healthy foods, exercising routinely and keeping pregnancy weight gain within healthy limits.

A growing body of literature acknowledge the need for improving understanding of the lived experiences of young adult women and men with respect to reproduction, preconception health and prenatal care, and notes the critical role that health care providers play in promoting healthy families (Los Angeles County Department of Public Health, 2014). Health care professionals believe that prompt prenatal care effectively identifies mothers who are at risk for delivering pre-term infants, and preempts adverse pregnancy conditions by providing young adults with needed information on

reproduction, nutrition, medical screenings, counseling services, and physical exams (Unite for Sight, n.d).

The literature is sparse on the subject of the young adults' views of their decisions regarding whether and when to conceive a child and the subsequent decisions they must make regarding their health behaviors, reproductive health, preconception health and prenatal care (Eugene, Israel, & Atombosoba, 2016; Hernandez, Sappenfield, Goodman, & Pooler, 2012). Potential social change implications of this study include gaining a greater understanding of the preconception needs of young adults within childbearing age and determine what gaps exist in the current provision of preconception care. The study can also provide young men with a better understanding of women's reproductive health and identify the ways that they can best support young women during the critical reproductive window.

Problem Statement

The general problem addressed in the study is the fact more than a third of births are reported by mothers as resulting from unintended pregnancies (Kost & Lindberg, 2015; Mosher, Jones & Abma, 2012). Young adults at risk for unintended pregnancies remain largely unaddressed by preconception health and prenatal care programs aimed at increasing positive birth outcomes (Applegate, Gee, & Martin, 2014; Melnick et al., 2016; Waring, Simas, Rosal, & Pagoto, 2015). Health care professionals continually seek to develop age-appropriate health education programs for teaching young adults about the importance of reproductive care, thus promoting healthy lifestyles prior to conception and

prior to accessing ongoing perinatal care services (Applegate et al., 2014). But health care professionals understand that regardless of their efforts to reach young women, many will still become mothers without having the resources, education, or support they need to avoid poor birth outcomes, fetal deaths, and neurological abnormalities (Hernandez et al., 2012). Very little existing literature addresses the views of young adult women and men on their reproductive decisions or on their health, preconception health, and prenatal care behaviors (Eugene et al., 2016; Hernandez et al., 2012). Additionally, there is a lack of information on access young men and women have to preconception health care, and what additionally services would add to family health, particularly among poor communities.

Purpose of the Study

The purpose of this phenomenological study was to explore the lived experiences of young adults in order to determine their willingness to use preconception health and prenatal care as a way to improve birth outcomes and improve their own overall health. Young adults will benefit from improved understanding of their lived experiences regarding reproduction and reproductive health issues (World Health Organization, 2014). With this study, the researcher examined the use of preconception health and prenatal care programs among young adults who are at risk of unintended pregnancies.

Guiding Questions

This phenomenological aimed to explore the lived experiences of young adults as it relates to their willingness to use preconception health and prenatal care as a means of

increasing positive birth outcomes and improving their overall health. The specific guiding questions are:

GQ1. What are the behavioral practices of young adult women and men at risk for unintended pregnancies as they relate to preparing for early parenthood and for child-raising responsibilities?

GQ2. What are the attitudes and beliefs of young adult women and men at risk for unintended pregnancies as they relate to healthy preconception behaviors and optimal prenatal care?

GQ3. What are the perceived barriers or obstacles that young adult women and men at risk for unintended pregnancies face in accessing perinatal care?

Conceptual Framework

The health promotion model (HPM), developed by Pender (1982; 1996), supported the study's effort to understand the risk posed to mothers and unborn children by the mothers' health and medical status, as well as their interpersonal and physical environments. Pender's (1982; 1996) HPM assesses an individual's readiness and willingness to learn prior to the teaching of a health promotion curriculum, specifically highlighting the specific characteristics of lifestyle, perception about care, psychological health, social and cultural circumstances, and life experiences that affect an individual's willingness to practice the healthy behaviors that are essential to improving overall quality of life. The health promotion model improves the understanding of health professionals regarding the determinants of individual health behaviors and the effective

development of health programs that sustain positive, healthy changes (Pender, Murdaugh, & Parsons, 2010). Pender's HPM guided this study by focusing on three areas of personal health: (a) current health behaviors and lived experiences, (b) perceived self-efficacy specific to preconception or perinatal care, and (c) perceived barriers or obstacles to accessing perinatal care.

This study explored behaviors that promote health in women and men of reproductive age. Pender's model focuses on promoting healthy change, that fosters self-actualization with respect to individual characteristics and experiences, and promotes autonomous steps toward better health (Galloway, 2003). Pender's (1982; 1996) model served as a guide for this study's effort to understanding the willingness of young adults at risk of unintended pregnancies to use preconception health and prenatal care to improve birth outcomes as well as their own overall health

Nature of the Study

I chose a phenomenological design for this study because it explored the phenomenon of young adults lacking preconception health care in a natural environment natural environment (Marshall & Rossman, 2014) – in this case, the preconception health and the prenatal care programs targeted at young adults who are at risk of unintended pregnancies. The phenomenological design, since it is qualitative in nature, yielded the rich data needed for this study's an in-depth analysis of the phenomenon (Briggs, Morrison, & Coleman, 2012; Jacob & Furgerson, 2012; Maxwell, 2013). A phenomenological approach may also further enable this study to uncover in-depth

qualities of the participants lived experiences that would not usually emerge during a typical interview or survey, or that the participant would not usually reveal to people outside their own social circles (Straus & Corbin, 1998).

A phenomenological approach was ideal for this study's examiation of the lived experiences, attitudes and beliefs of young adults in terms of their health behaviors related to reproduction women and men about healthy behavioral practices associated with child reproduction, since a phenomenological design uses participants' own categories of meanings to address a problem (Moustakas, 1994).

I recruited a group of 9 young adult women and 9 young adult men between the ages of 18 and 25 who were at risk for unintended pregnancies, were sexually active, or were cohabiting in the greater Los Angeles, Calif., area. I gathered data through semi-structured interviews with the participants, improving the study's credibility by recognizing my personal expectations and biases regarding the outcome of the study (Chan, Fung, & Chien, 2013; Tufford & Newman, 2012). For data analysis, I followed Moustakas's (1994) seven-step process, a modification of van Kaam's initial method of analyzing phenomenological studies.

Definition of Terms

This paper includes a number of technical terms that are commonly used in maternal and child health research literature. This study uses the terms as defined below.

Anencephaly: Anencephaly is a condition that prevents the normal development of the brain and the bones of the skull.

Gestational period: The gestational period is the time during which a fetus develops, beginning with fertilization and ending at birth.

Hydrocephalus: Hydrocephalus is a condition in which an excessive amount of cerebrospinal fluid builds up in the brain.

Live birth: A live birth is one that produces a living infant with a heartbeat and respiratory system that indicate normal functioning.

Neural tube defect: Neural tube defects generally manifest during the first few weeks of pregnancy before the mother is aware of the pregnancy. The two most common neural tube defects are anencephaly and spina bifida.

Preconception health: Preconception health describes a woman's physical condition during the time before she becomes pregnant.

Prenatal care: Prenatal care is the healthcare that is provided to a woman throughout her pregnancy, with the goal of maintaining her health as well as the health of the developing ababy.

Spina bifida: Spina bifida is a birth defect in which a developing baby's spinal cord fails to develop properly.

Unintended pregnancy: An unintended pregnancy is a pregnancy that, at the time of conception is either mistimed or unwanted.

Assumptions

I based my choice for a theoretical framework on the previous work of researchers who presented analysis regarding the best methods for collecting data for a

variety of studies, assuming that those earlier determinations would apply to this study's scope. I also assumed that study participants were honest about meeting the criteria for participation and responded to the questions truthfully.

Scope and Delimitations

The study explored the lived experiences of young adults at risk of unintended pregnancies, focusing on the phenomenon of their behavior related to the use of preconception health and prenatal care programs. As a result of this limited focus, there may be limited transferability of the study findings. To maximize transferability, I have provided a detailed presentation of the study methodology, thereby enabling future researchers to replicate the methods for another group or population.

Limitations

There are multiple limitations in this study, the first of which stems from the fact that the study focuses exclusively on the population of young adults at risk of unintended pregnancy. Although this specific focus limits the generalizability of the study's findings, future researchers can apply the methodology for the study of other population segments. Lastly, this study was limited in the conclusive data it could produce regarding other potential barriers to reproductive health due to the possibility that the study participants discount the importance of issues such as smoking, alcohol use, drug use.

Significance of the Study

Mothers who seek out early and regular perinatal care significantly increase their chances of healthy pregnancies (National Institutes of Health, 2013). This qualitative

study provides important, empirical findings regarding the lived experiences of young adults regarding reproductive planning, preparation for parenting, preconception health care, and the use of prenatal care, specifically among segment of the young adult population that is at risk for unintended pregnancies. The current study has the potential to advance preconception health care practices by providing guidance for the development of more effective preconception and prenatal health programs for young adults at risk for unintended pregnancies. By improving health care practices, the present study could facilitate social change by improving health outcomes for young adults, particularly in low income communities.

The study adds to the current body of literature by identifying elements of preconception care which are currently lacking, and by providing additional literature on necessary preconception care. The findings may help health professionals better tailor preconceptive and prenatal health programs to encourage access by young adults, thereby improving health outcomes for young mothers and their babies. The findings also offer insight for young men regarding women's health during reproductive years, and provide information regarding ways that they can support their partners during those years.

Summary

In some areas in the United States, the rate of unintended pregnancies is extremely high. For example, a 2014 study from the Los Angeles Department of Public Health determined that 45 percent of births in 2014 were mistimed or unplanned (Los Angeles Department of Public Health, 2014). A lack of preparation for and knowledge

about preconception health and prenatal care can have serious implications for the life of new parents as well as their children. Existing literature sheds little light on the views of young adults and their decisions about whether and when to conceive children, and provides little insight into their health behaviors in the areas of preconception health, prenatal care and reproduction. This study aimed to address the dearth of information regarding young adults' willingness to access preconception health care and prenatal care as a means of successfully increasing positive birth outcomes and improving their own overall health. This study focussed specifically on the population segment of those young adults who are at risk of unintended pregnancies, exploring their lived experiences in terms of their willingness to access preconception health care and prenatal care services. Using Pender's (1982; 1996) framework as the theoretical basis for this phenomenological study, I interpreted findings based on interviews with the members of the study's target population – young adults at risk of unintended pregnancies.

Chapter 2 presents a review of existing literature, a description of the problem identified in the study, and an explanation of the gap in existing literature. Chapter 3 presents the study methodology and Chapter 4 outlines the results of the study. Finally, Chapter 5 includes an analysis of the study results and discusses the implications of the results.

Chapter 2: Literature Review

Introduction

Preconception care consists of the health services and health interventions provided to both males and females prior to conception (World Health Organization, 2012). Although numerous studies have identified the need for a preconception health plan aimed at young adult males as well as young adult females (Blaumeiser, Braspenningx, Haagdorens, Jacquemyn, & Mortier, 2013; Chapman, Mazza, & Michie, 2013; Bhutta, Dean, Imam, & Lassi, 2013; Dolina et al., 2013), little research has been conducted on the beliefs and behaviors of young adults regarding preconception health (Alio, Fiscella, Harris, Lewis, & Scarborough, 2013). Similarly, little research is available regarding the barriers to preconception care encountered by disadvantaged youths and adults (Borrero, Dehlendorf, Rodriguez, & Steinauer, 2010; Dunlop, Dretler, Badal, & Logue, 2013). Thus, this qualitative study aimed to fill the gaps in the literature regarding the knowledge and perceptions of young adults in the areas of preconception health, prenatal care, reproduction, as well as regarding any barriers to that care that they may perceive. By exploring the personal experiences of young adults at risk for unintended pregnancies, this study produced a more in-depth understanding of their knowledge in the areas of reproduction, preconception health, and prenatal care.

This literature review addresses the problem statement and offers a broad examination of the literature in six subsections that: (a) identify the purpose of the present study and the search strategy used to locate relevant literature; (b) explain Pender's HPM

as the underlying conceptual framework used for this study; (c) explore preconception and reproductive health promotion plans; (d) review preconception and reproduction health promotion implementation and effectiveness; (e) assess preconception and reproduction health promotion for both genders; and (f) investigate barriers to preconception and reproduction health care.

Literature Search Strategy

Relevant literature was pulled primarily from three databases: JSTOR, SAGE, and Google Scholar. Boolean searches identified literature related to the following key terms and phrases: *female preconception health* and *United States; male preconception health* and *United States; females at risk for unintended pregnancy* and *United States; males at risk for unintended pregnancy* and *United States; low-income females* and *preconception health; low-income males* and *preconception health; Pender's Health Promotion Model* and *pregnancy;* and *Pender's Health Preconception Model* and *Review*.

Most of the literature chosen for review (85% of it) was dated from 2012 to 2016 in order to focus on the most recent research available. However, a few of the included articles (15% of them) were older, dated between 2000 and 2011. These older articles were selected because they explored issues that the more recent literature failed to address or because they discussed components of the theoretical foundation and male preconception care.

Conceptual Framework

Nola J. Pender's HPM provides the theoretical framework for this phenomenological study because it offers a holistic perspective for better understanding the health behaviors impacting the preconception and prenatal decisions of young adults (Pender, 2011). The underlying philosophical roots of Pender's HPM are based on the Reciprocal Interaction World View, which posits that since human beings shape the environment they interact with, they should be studied from a holistic perspective by viewing individual parts as contributing to the whole body (Pender, 2011). The theoretical foundation for Pender's HPM is grounded in the expectancy value theory and the social cognitive theory, both of which also employ a holistic perspective. The expectancy value theory states that individual behaviors are primarily influenced by perceived obtainable goals, and the social cognitive theory contends that since individual behaviors intersect with thoughts, individuals must change how they think.

Pender first proposed the HPM in 1982, in an effort to help nurses identify background factors that impact overall client health and thereby assist the client more effectively in achieving a healthy lifestyle (Pender, 2011). In 1996, Pender (2011) revised the HPM to reflect new empirical findings and changing theoretical perspectives (2011). The adapted model focuses on eight primary beliefs, labeled: person; environment; nursing; health; illness; individual characteristics and experiences; behavior-specific cognitions and effects; and behavioral outcomes-health promoting behavior. Table 1 below offers descriptions of the eight beliefs as defined by Pender (2011).

Table 1

Pender's Health Promotion Model

Belief	Description
Person	A bio-psychosocial organism that is partially shaped by the environment, but also seeks to create an environment in which inherent and acquired human potential can be fully expressed. Thus, the relationship between person and environment is reciprocal. Individual characteristics as well as life experiences shape behaviors including health behaviors.
Environment	The social, cultural and physical context in which the life course unfolds. The environment can be manipulated by the individual to create a positive context of cues and facilitators for health-enhancing behaviors.
Nursing	Collaboration with individuals, families, and communities to create the most favorable conditions for the expression of optimal health and high-level well-being.
Health	In reference to the individual is defined as the actualization of inherent and acquired human potential through goal-directed behavior, competent self-care, and satisfying relationships with others, while adjustments are made as needed to maintain structural integrity and harmony with relevant environments. Health is an evolving life experience.
Illness	Discrete events throughout the life span of either short (acute) or long (chronic) duration that can hinder or facilitate one's continuing quest for health.
Individual characteristics and experiences	Prior related behavior – frequency of the same or similar health behavior in the past Personal factors (biological, psychological, sociocultural) – general characteristics of the individual that influence health behavior such as age, personality structure, race, ethnicity, and socioeconomic status.
Behavior-specific cognitions and effects	Perceived benefits of action – perceptions of the positive or reinforcing consequences of undertaking a health behavior. Perceived barriers to action – perceptions of the blocks, hurdles, and personal costs of undertaking a health behavior. Perceived self-efficacy – judgment of personal capability to organize and execute a particular health behavior; self-confidence in performing the health behavior successfully

	Activity-related affect – subjective feeling states or emotions occurring prior to, during and following a specific health behavior
	Interpersonal influences (family, peers, providers): norms, social support, role models – perceptions concerning the behaviors, beliefs, or attitudes of relevant others in regard to engaging in a specific health behavior
	Situational influences (options, demand characteristics, aesthetics) – perceptions of the compatibility of life context or the environment with engaging in a specific health behavior
	Commitment to a plan of action -- intention to carry out a particular health behavior including the identification of specific strategies to do so successfully
	Immediate competing demands and preferences – alternative behaviors that intrude into consciousness as possible courses of action just prior to the intended occurrence of a planned health behavior
Behavioral outcomes – Health promoting behavior	Health promoting behavior – the desired behavioral end point or outcome of health decision-making and preparation for action

Adapted from "Health Promotion Model Manual," by N. J. Pender, 2011.

In order to assess the validity of using Pender's HPM for research, Heydari and Khorashadizadeh (2014) reviewed 62 previous studies conducted beween 1990 and 2012. The reviewed studies implemented Pender's HPM with different objectivesthat could be broken down into nine categories: (a) to predict effective barriers and factors in health promotion; (b) to detect the effects of an intervention program designed to improve health-promotion behaviors; (c) to test Pender's HPM; (d) to identify behaviors that promote health and quality of life; (e) to prevent events that interfere with health-promoting behaviors; (f) to predict change; (g) to create another model; (h) to compare Pender's HPM with another model; and (i) to identify health-promotion variables

(Heydari & Khorashadizadeh, 2014). The authors ultimately found that Pender's HPM was an extremely applicable model that could be useful in a variety of research settings.

Bhutta, Dean, Howson, Imam, Lassi and Mason (2013) assert that beginning preconception care in adolescences maximizes health outcomes for both parents and offspring when conceiving in adulthood. With this in mind, a few empirical studies have used Pender's HPM to address various aspects of adolescent health. In Joseph, Krishnan and Maheswari's (2016) experimental study investigating the effect of a structured teaching program on adolescent females' knowledge and attitudes regarding preconception care, Pender's HPM served as the theoretical framework on which the Likert-scaled questionnaire was based. Findings revealed that prior to participating in a structured teaching program, the female adolescent participants had very little knowledge of preconception care and have negative attitudes toward it. However, both knowledge and attitude measurements were raised to 100% after participating in the structured classes. This finding led the researchers to conclude that teaching adolescents about reproductive health would be beneficial.

With the exception of the Joseph, Krishnan and Maheswari (2016) study, there has been little research specifically using Pender's HPM to identify preconception knowledge and behaviors. Another exception is Srof & Velsor-Friedrich's (2006) study assessing whether Pender's HPM provided an acceptable approach to understanding adolescent health-promotion behavior. The authors reviewed three different research studies in which Pender's HPM was used to investigate whether adolescents' attitudes

and beliefs about physical activity could be used to predict their behaviors. Srof and Velsor- Friedrich (2006) ultimately found that Pender's HPM was an appropriate model to use when researching the health-promoting behaviors of adolescents, but also concluded that it failed to adequately address the relationship between health outcomes and health-promotion behaviors. Srof and Velsor- Friedrich (2006) inevitably concluded that more research on health outcomes was needed to confirm the validity of using Pender's HPM when studying adolescent health promotion behavior.

Review of the Relevant Literature

A Need for Preconception Healthcare Planning, Promotion, and Evaluation

The importance of preconception healthcare has been highlighted by many national and international agencies (Mitchell & Verbiest, 2013; World Health Organization, 2012). These organizations have not only presented national and international guidelines for implementing preconception healthcare, they have also identified a need for effective promotion and intervention evaluations. The following sections offer insight into national and international preconception healthcare plans, identify ways in which preconception care promotional needs are being met, and evaluate interventions that have been implemented.

Preconception healthcare plans. There are several U.S. and international groups that have created preconception care guidelines and recommendations aimed at addressing the reproductive health of females and males (Bhutta, Dean, Lassi, & Mallick 2014; Mitchell & Verbiest, 2013; World Health Organization, 2012). This section

explores the various plans that have been proposed, and identifies specific areas that warrant additional preconception healthcare promotion.

The World Health Organization (2012) met to address the behavioral risk factors associated with health problems during the preconception period, producing specific action points and interventions aimed at preventing maternal and childhood morbidity and reducing mortality in low-income and middle-income countries. Members agreed that consensus was needed regarding the definition for the term preconception, and concurred that the development of a standardized analytical framework required the execution of case studies documenting the actions already being taken regarding preconception care throughout the world. Members asserted that the World Health Organization needed to design a set of guidelines for preconception care that would strengthen the documentation, delivery and promotion of preconception care.

Other recommendations for guiding development and implementation of effective U.S. preconception policies came from the World Health Organization's strategic plan for 2010-2015, the National Prevention Council and Strategy, the 2011 International Organization for Migration report on preventative services for women, and the 2010 Affordable Care Act (Berg, Taylor, & Woods, 2013). Accordingly, Berg et al. (2013) recommended the mobilization of health providers to adhere to the action points identified by the World Health Organization and suggested the adoption of ongoing, evidence-based prevention protocols that are sensitive to gender affiliation and sexuality and that emphasize service improvements on social elements of prevention services. Berg

et al. (2013) also recommended a broad, population-based framework relying on community-based research and employing evidence-based provisions for the sexual and reproductive health of men and women in order to prevent unintended pregnancies.

In accordance with the World Health Organization's (2012) action points, Bhutta, Dean, Howson, et al. (2013) sought to provide evidence-based, precoception interventions that would reduce the risk for preterm births by improving women's overall health during pregnancy. Through the course of their research, they identified specific factors that should be addressed in preconception health screenings in order to prevent preterm births for all women, and particularly for women at high risk for premature births. Preconception interventions that would benefit all women included family planning to prevent adolescent pregnancy and unintended pregnancy, and promoting healthy nutrition and optimal pre-pregnancy weight (Bhutta, Dean, Howson, et al. 2013). Meanwhile, Bhutta, Das, Lassi, Mansoor, and Salem (2014) specifically identified folic acid as essential preconception nutrient for preventing neural tube defects in pregnancy later. Although the advantages of folic acid during the preconception period began gaining visibility in the 1980s, very little advancement in preconception health was accomplished during that time period (Waggoner, 2013). The preconception interventions for women at risk for premature births involved educating them about the importance of vaccinating their children and adolescents, and screening them for mental illness, sexually transmitted infections, and chronic diseases. These recommendations were

echoed by the 2015 clinical guidelines for women presented by the Center for Disease Control (CDC) and the U.S. Department of Health and Human Services (HHS).

In 2015, researchers published a paper explaining the development process and rationales behind the CDC and HHS clinical care guidelines for women (Curtis, Gavin, Godfrey, Moskosky, & Tepper, 2015). The guidelines addressed: (a) contraceptive services, (b) pregnancy testing and counseling, (c) pregnancy and basic infertility services, (d) preconception health care, and (e) sexually transmitted disease services. Systematic reviews of empirical evidence and consultations with physicians identified contraceptive services as an essential part of preventing unintended pregnancies (Curtis et al., 2015). Guidelines regarding pregnancy testing and counseling were added based on the guidance of medical associations and industry experts in the absence of pre-existing recommendations (Curtis et al., 2015). There were also no pre-existing recommendations regarding basic fertility services, so information in that area was gathered the American Society for Reproductive Medicine and other industry experts (Curtis et al., 2015). Previous research identified preconception health services as an area of importance, and guidelines in that area were informed by preexisting CDC recommendations (Curtis et al., 2015). Sexually transmitted disease services were added to the guidelines as a result of the plethora of evidence indicating the importance of educating women in that area, and the guidelines for that area were based on pre-existing research and CDC recommendations (Curtis et al., 2015).

Continuing with their research on effective preconception interventions aimed at reducing risk factors associated with poor birth outcomes, Bhutta, Dean, et al. (2014) offered five packages for delivering preconception interventions throughout a woman's reproductive lifespan. The first package addressed preventing adolescent and teenage pregnancy by encouraging academic and life skills education completion and providing comprehensive preconception counseling. The second and third packages incorporated the nutritional and family planning elements of preconception interventions, respectively. The fourth package focused on youth development programs, particularly programs for teaching preconception and sexually transmitted infections prevention within educational settings. The final package promoted screening for mental illness and chronic diseases. Baltag et al. (2014) asserted that while these packages may work rather effectively in some countries, they would need to be adjusted and prioritized according to the realities of local cultures in order to be effectively implemented in many places. To accomplish that, local governments must participate in assessing the needs of the community, creating delivery systems for the interventions, and assessing the strengths and weaknesses of the current preconception healthcare plans already in place (Baltag, 2014).

James and Taylor (2011) asserted that the United States was failing at preventing unintended pregnancies, and would not succeed in meeting the goals set forth by the U.S. Office of Disease Prevention and Health Promotion's Healthy People 2020 initiative. In an attempt to address this issue, 35 national organizations convened a call to action workgroup, drawing from the international action points identified by the World Health

Organization (2012) and from CDC recommendations to create the Preconception Health Consumer Workgroup. Their workgroup's primary goal was to mobilize communities to educate women and men about the importance of preconception health (Mitchell & Verbiest, 2013). The action workgroup officially launched its campaign in 2013 under the name Show Your Love (Mitchell & Verbiest, 2013), primarily targeting women between the ages of 14 and 44 and with a specific focus on disseminating preconception and prenatal health information in a manner that would be accessible to the women who needed it the most.

The Action Plan for the National Initiative on Preconception Health and Health Care (PCHHC) also provided a model for preconception health care in the United States (Boyle et al., 2013). This model echoed many of the points identified by the World Health Organization and the CDC, while highlighting the importance of community involvement during the implementation process. The PCHHC initiative has successfully mobilized communities to implement preconception health care promotion interventions and has contributed to improved interest in preconception care. As evidence for the effectiveness of the PCHHC initiative's success, Boyle et al. (2013) point to the establishment of the Preconception Health Council of California and the inclusion of preconception health care into the Healthy People 2020 initiative.

In attempt to refine the general recommendations for preconception health, a transdisciplinary framework developed by the National Institutes of Health's Community Child Health Network was presented in 2014 (Chinchill et al., 2014). The framework,

developed through community-based participatory research, was called the Preconception Stress and Resiliency Pathways model. This model was rather unique in that it focused on how fathers and the community can impact women's preconception and inter-conception health. This concept of developing preconception health plans through community-based participatory research has also guided the development of programs for low-income and ethnically diverse women in urban settings (Doornbos, Ayoola, Topp, & Zandee, 2015).

Bonte, Pennings, and Sterckx (2014) proposed an even more targeted preconception care plan framework, tailored to the individual behavioral profile of potential parents. They specifically argued for a more flexible preconception care plan that would be designed to properly address the moral responsibilities of potential parents based upon their individual attitudes and beliefs. Accordingly, potential parents were divided into the following five categories: (a) prepubescent youths who do not have the ability, or intent to conceive, (b) individuals who are able to conceive but are not sexually active, (c) sexually active individuals who have no intention of conceiving, (d) sexually active individuals with ambiguous intentions regarding conception, and (e) sexually active individuals who intend to conceive in the foreseeable future (Bonte, Pennings, & Sterckx, 2014). The authors' intent with the framework was to reflect the varying degrees of potential parents' responsibilities regarding three primary areas of concern – specifically the consumption of folic acid, obesity, and genetic testing.

This section has presented a breakdown of the preconception care frameworks that have been proposed, beginning with the World Health Organization framework and

concluding with more precise recommendations. All of these plans incorporated the same basic key elements of preconception care, and emphasized the importance of culturally relative implementation and community-based frameworks. The authors all agreed that proper promotion of these preconception care frameworks was essential in order to adequately reach those who would benefit most from the services. The next section addresses the promotional aspects of preconception care.

Preconception health promotion. Preconception health care needs to be promoted in order for its implementation to be successful. Promoting preconception occurs not just in the form of guidelines and action points, but also occurs within communities. This section explores the steps currently being taken to promote preconception care, and addresses the role that pediatricians play in promoting preconception health care.

There have been many preconception healthcare promotion plans, but little research has been done on their effectiveness (Levis & Westbrook, 2012). In attempt to remedy this issue, Levis and Westbrook (2012) conducted a preconception health content analysis of materials available throughout the United States. Levis and Westbrook's (2012) research revealed that 28% of all preconception health care literature were self assesments. The majority of materials targeted women with a primary message related to preconception healthcare as a benefit for infant health. Levis and Westbrook (2012) concluded that a greater availability of targeted preconception health promotion was needed, as well as more research into marketing strategies.

Researchers engaged in two different studies to gain a better understanding of consumers' perceptions of preconception care in order to develop a preconception social marketing plan (Dolina et al., 2013; Isenberg, Kish-Doto, Levis, Lewis, & Mitchell, 2013). The first study looked specifically at women aged 18 to 44 in Atlanta, Ga. The women were placed into 10 groups according to their pregnancy plans and their socioeconomic status (Dolina et al., 2013). Results from the focus groups revealed that women who intended to become pregnant were more receptive to preconception healthcare as a product than those who had no intention of becoming pregnant. The women in the focus groups were also more receptive to preconception healthcare when it was framed as a way to promote infant health instead of when it was framed as a way to prevent unhealthy birth outcomes. They also remarked that they would be more receptive to preconception health information if it were delivered by a healthcare professional (Dolina, et al., 2013). The second study focused on couples' perceptions about preconception care (Isenberg et al., 2013). The researchers recruited 58 couples and interviewed them over the telephone. Results from these interviews were similar to Dolina et al.'s (2013) study of women alone, in that those couples who were planning for a pregnancy were more receptive to the preconception health care message than those who were not planning for a pregnancy (Isenberg et al., 2013).

The role of pediatricians in preconception healthcare has been identified as essential to thwarting adolescent pregnancies and unintended pregnancies, and decreasing the infant mortality rate (Cheng, Guyer, & Kotelchuck, 2012; Corchia & Mastroiacovo,

2013). The Maternal Child Health Bureau's life course initiatives and the CDC's preconception care guidelines have identified reducing infant mortality rates and protecting the overall health of the child as important elements of interception and preconception healthcare. Accordingly, Cheng et al. (2012), recommended that pediatricians contribute to preconception care by providing children with reproductive awareness education, performing risk assessment screenings and counseling, and offering health care information to the entire family. Similarly, Corchia and Mastroiacovo (2013) argued for a preconception care framework that incorporates preconception care throughout the human reproductive life cycle. Based on Italy's annual rate of 90,000 preterm infants born with birth defects, the authors asserted that pediatricians and neonatologists should promote family planning to parents when they bring previous children in for assessments. They further contended that pediatricians are in a unique position to educate parents and children about the importance of preconception health during the interception period (Corchia & Mastroiacovo, 2013).

Preconception care promotion to women could be effectively done at the pharmacy, specifically as it relates to medication therapy management (Bright & Dipietro, 2014). The researchers identified pharmacists as a point of contact that women tend to encounter more frequently than medical providers, and as such, pharmacists could contribute to women's preconception health by performing targeted medication reviews to make folic acid recommendations, and by making referrals for preconception counseling. Bright and Dipietro (2014) also recommended other preconception promotion

opportunities for pharmacists, including comprehensive medication reviews, disease screening, assessment based on medication management therapy, and smoking cessation services. Bright and Dipietro (2014) argued that given the complexity involved with many of the interventions for women with chronic illnesses such as diabetes, comprehensive medication reviews during the preconception and interception periods would be particularly beneficial to those women.

This section highlighted the efforts being made to promote the dissemination of preconception care information to the public. Through the use of focus groups and surveys, researchers were able to gain a better understanding of how specific demographic groups view preconception care; thus, guiding the development of more effective promotional methods. This section also identified specific points of contacts for promoting preconception care that otherwise may not have been included in preconception care plan frameworks. The next section moves beyond the preconception care plan promotion and to present evaluations of preconception care interventions.

Evaluating preconception health intervention. Since there have been numerous calls to action for educating women and men about the importance of preconception health care, it would be prudent to assess the effectiveness of the recommended interventions. This section identifies the various interventions that are used to promote preconception healthcare, and offers evaluations of their effectiveness.

In order to ascertain the overall effectiveness of preconception interventions, researchers investigated specific interventions related to nutrition, weight, and risk

behaviors (Denktas, Jack, Temel, & Steegers, 2014). Findings from self-reported behavioral changes indicated that interventions for those who were at risk of consuming alcohol and tobacco had a greater likelihood of reducing the consumption of alcohol or tobacco during pregnancy, but no studies determined whether smoking cessation programs were effective during the actual pregnancy. Research focused primarily on the preconception nutrition intervention of folic acid counseling, and findings revealed that there was reduced occurrence in newborn congenital defects associated with inadequate folic acid consumption. This finding was also verified in another systematic review of preconception interventions conducted by Blaumeiser et al. (2013). The researchers concluded that there are few effective interventions, but that healthcare healthcare providers should continue to put a priority on counseling women on preconception healthcare (Denktas et al., 2014).

Harris and Moss (2015), confirmed those conclusions through their study determining the effectiveness of preconception health interventions as they relate to reproduction and birth outcomes. The researchers collected data from the National Longitudinal Study on Adolescent Health (also called Add Health), which included 2001-2002 information from couples, and 2008 follow-up information from the same couples (Harris & Moss, 2015). From the data collected, the researchers analyzed the birth outcomes of these couples as well as their preconception behaviors. Findings revealed that preconception health for both the mother and the father had a direct impact on birth outcomes. They further recommended that preconception counseling should be focused

on preventing diabetes and hypertension, as well as promoting cessation of risk behavior (Harris & Moss, 2015).

In a novel attempt to reach Black women who otherwise might not have the resources to access healthcare clinic services and would therefore not receive preconception counseling, researchers designed an online preconception conversational system named Gabby (Adigun et al., 2015). To test the Gabby's effectiveness, the researchers recruited 100 Black women between the ages of 18 and 34, who were each screened for preconception health risks – specifically smoking, alcohol consumption, drug use, chronic illnesses, and nutritional issues such as a lack of folic acid supplementation. The women were randomly assigned to two different groups – one that would interact with Gabby and a second that would only receive a letter informing them of their preconception health risks and recommending that they follow-up with their physician (Adigun et al., 2015). After about six months, the researchers received data from 85% of the participants, with those who had interacted with Gabby showing greater reductions in risk behaviors than those in the control group. Adigun et al. (2015) concluded Gabby appeared to be quite effective at conveying preconception health information, but that more research would be needed to confirm the system's actual effectiveness with high-risk populations.

In a similar study of low-income women's access to preconception health services, researchers investigated the effects of a Medicaid family planning waiver in California (Adams, Galactionova, & Kenny, 2013). The study compared the self-reported

rate of pregnancies and routine checkups of women between the ages of 18 and 44 who were eligible for the waiver program with the same data from states that did not offer the waiver program. The researchers were inquired as to whether participants had discussed contraceptive choices with their healthcare provider during the previous year. Findings from the probit regression models revealed that the waiver program was an effective method for improving women's reproductive health, demonstrated by an increase in checkups and birth control discussions, as well as a decrease in pregnancies (Adams et al., 2013) when compared to women in states without the waiver program.

This section showed the potential impact of preconception care interventions on the knowledge and behaviors of the adolescents and adults who receive them. These studies outlined in this section also point to improved birth outcomes when preconception care is improved for both men and women. The next section explores the effectiveness of contraceptive counseling.

Preconception contraceptive counseling. Preconception healthcare interventions are not only aimed at improving the health of the men and women involved, but also focus on preventing unintended pregnancies. Thus, preconception counseling usually incorporates an element devoted to contraception use for sexually active individuals. This section reviews the effectiveness of contraceptive counseling.

Curtis, Gavin, Mautone-Smith, et al. (2015) performed a systematic literature review on the effectiveness of contraception counseling for adolescents and adults. Of the 22 articles they reviewed, six investigated contraceptive counseling among adolescents

and 16 explored the impacts of contraceptive counseling on adults. Of the six articles related to the effects of contraceptive counseling on adolescents, only four identified positive impacts, concluding that contraceptive counseling for adolescents was effective in some instances at reducing unintended pregnancies and in increasing the adolescents' overall knowledge. Findings from the 16 studies investigating the effectiveness of adult contraceptive counseling suggested that those who received contraceptive counseling were more likely to use contraceptives correctly as compared with those who did not receive counseling. The researchers concluded that while it was difficult to compare the effectiveness of intervention methods since there were significant differences among approaches, the overall results indicated that there were some promising elements of contraception counseling for both adolescents and adults. Nevertheless, the researchers recommended that in order to gain more insight into the effectiveness of contraception counseling, there needed to be more detailed documentation of counseling procedures and assessments of intervention implementation (Curtis, Gavin, Mautone-Smith, et al., 2015).

A similar study on the effectiveness of family planning interventions was conducted in 2013 by the Jacobs Institute of Women's Health and the Geiger Gibson/RCHN Community Health Foundation Research Collaborative (Rosenbaum, Wood, Cunningham, Beeson, & Shin, 2014). The researchers' primary objective of the nationwide study was to determine the effectiveness of contraception services. Findings revealed that the majority of healthcare centers (87%) provided some form of

contraceptive service, but that a much smaller number (19%) were found to follow through with the contraceptive methods at the site where the contraception process began. Therefore, the researchers recommended that healthcare centers work toward offering women complete contraception services at the locations where intervention beggan (Rosenbaum et al., 2014).

In another study, researchers sought to identify the effectiveness of the Contraceptive CHOICE Project, which was implemented to provide and promote free, long-acting, reversible contraception (LARC) among teenagers in order to reduce the prevalence of teenage pregnancy in the St. Louis, Mo., region (Buckel et al., 2015). The researchers studied 1,404 teenage girls between the ages of 15 and 19 for a period of 2-3 years, paying special attention to pregnancy rates, births, and induced-abortion numbers. Of those who participated in the study, 72% opted for a LARC method of birth control, while 28% chose another birth control method. Findings indicated that those in the study who were educated about contraception options and provided with free contraception had a considerably lower rate of pregnancy, birth, and induced-abortion compared to the national average (Buckel et al., 2015).

Although contraception counseling is effective at reducing pregnancies, there are women who become pregnant even when using contraceptives. In order to better understand this phenomenon, Frost and Darroch (2008) studied a nationally representative sample of women between the ages of 18 and 44, investigating the women’s contraceptive choices and their consistency of use. Findings from the bivariant

and multivariant analyses of the data revealed that socioeconomic factors played a role in the choice of contraceptive method as well as in the consistency of use. More specifically, participants without a college education were less likely to use oral contraceptives as prescribed, and subsequently those women chose long-acting contraceptives (Frost & Darroch, 2008). Women who were satisfied with their contraceptive choice were more likely to consistently use it, while women who were dissatisfied with their chosen method were more likely to be inconsistent with its use. Ultimately, Frost and Darroch (2008) concluded that women and their partners needed to have access to a wide range of contraceptive methods, and that healthcare providers needed to be diligent in identifying when their clients are dissatisfied with their current method.

The studies represented in this section highlighted the importance of including contraceptive counseling in preconception care plans for adolescents and adults by showing the empirical evidence of such counseling's effectiveness. These studies reviewed in this section concluded that improving the knowledge of adolescents and adults through contraceptive counseling has a significant potential for decreasing unintended pregnancy rates and improving the consistency of contraceptive use. The next section continues the discussion on preconception care by offering case studies of females' knowledge and attitudes regarding preconception and reproductive healthcare.

Male and Female Reproductive and Preconception Healthcare

The previous sections in this chapter outlined guidelines and recommendations for preconception care plans, as well as approaches to promoting the plans and evaluating their implementation. Another aspect of preconception care that remains sparsely researched is the question of young adult knowledge and perception regarding reproductive and preconception health (Bowman & Neale, 2013; Collins, 2016). The following sections offer studies specifically focused on male and female knowledge and behavior in the areas of reproductive and preconception healthcare. An additional section discusses some of the external influences on the preconception behaviors of females.

Female reproductive and preconception healthcare. As mentioned earlier, preconception healthcare promotion generally targets women during the stages of their reproductive life. However, little research has focused on women's knowledge and behaviors regarding preconception health, and the research focusing on adolescent women is particularly thin (Collins, 2016). This section examines the research in that area.

To address this gap in the literature, Collins (2016) conducted a phenomenological study investigating the knowledge and beliefs of low-income female adolescents regarding reproductive life planning and preconception healthcare. The study focused on just five participants, which limits the ability to generalize findings to other similar populations. Nevertheless, Collins (2016) noted that the participants lacked basic knowledge about preconception health care, had negative past interactions with medical

staff, and were interested in acquiring more information about preconception care and reproductive life planning (Collins, 2016).

In a study on the preconception health of women in the Mississippi River Delta, Bish, Farr, Johnson and McNally (2012) sought to better understand how Black and White women's preconception health in that area compared to the preconception health of women in other regions. The researchers reviewed data from the CDC's Behavioral Risk Factor Surveillance System on 171,612 women between the ages of 18 and 44 for the years 2005, 2007 and 2009. Findings from their analysis indicated that women who lived in the Mississippi Delta region had poorer preconception health than those in other regions, specifically as it pertained to nutrition and physical activity. Bish et al. (2012) attributed this to the confounding variables of household income and race, which led them to conclude that Mississippi Delta healthcare providers should consider income and racial disparities when implementing preconception healthcare.

A 2013 qualitative study in the United Kingdom investigated ethnically diverse and socially disadvantaged women, with the goal of discovering appropriate interventions for enhancing preconception care (Bhoday, Cross-Bardell, Kai, Qureshi, & Tuomainen, 2013). A total of 41 women between the ages of 18 and 45 participated in the study, with Pakistani, Indian, Caribbean, African, European American, and mixed ethnicities represented in the group. Results from the interviews indicated that participants were moderately to poorly informed about preconception health. Some of the women remarked that they were secretive when planning a pregnancy, while others indicated that their

pregnancies had been unplanned. Since there was also an underlying challenge regarding engaging the women in preconception care, the researchers concluded that primary care providers should promote preconception care to their clients more frequently (Bhoday, et at., 2013).

In order to gain a better understanding of women's hesitancy toward preconception counseling, researchers conducted a qualitative study on the perceptions of preconception counseling of women who were planning a pregnancy (Beaufort, Denktas, Steegers, & Zee, 2012). Researchers used semi-structured, face-to-face meetings to gather information from 16 women between the ages of 22 and 39. Results revealed that the women generally accepted the idea of preconception care, but were unlikely to seek it for themselves. The researchers concluded that the current implementation of preconception care may be at odds with some women's perceptions of what becoming pregnant should be like.

Barrett et al. (2014) conducted a study aimed at understanding how and to what degree women prepared for pregnancy. The researchers used a cross-sectional survey of 1,288 pregnant women from three different maternal service providers in London, as well as phone interviews with a broad range of healthcare providers. Research results indicated that 73% of participants had planned their pregnancy, while 24% were ambivalent, and 3% had unintended pregnancies. As far as preconception preparation was concerned, 51% of the entire group of women reported taking folic acid prior to pregnancy, while 63% of those with planned pregnancies reported taking folic acid as

part of a preconception regiment. Not surprisingly, the women who had received preconception counseling reported healthier behaviors. Of the 21% of participants who reported smoking prior to pregnancy, nearly half of them (48%) reduced or eliminated their smoking ahead of pregnancy. Of the 61% who reported drinking prior to becoming pregnant, 41% either cut back their drinking or stopped altogether before becoming pregnant. Barrett et al. (2014) concluded that although there was a high rate of pregnancy planning, knowledge regarding preconception health care was lacking among the women and among the healthcare providers as well. They recommended that since there was a link between preconception care counseling and positive behaviors, awareness of preconception healthcare should be improved.

In a corresponding study the following year, Barrett et al. (2015) looked into the reasons that women invest in pre-pregnancy healthcare. The researchers conducted 20 qualitative interviews with the pregnant and recently pregnant women who were using the services of an antenatal healthcare provider. The women were divided into categories based on preconception healthcare themes. In the first category were those women who were prepared for pregnancy and had engaged in recommended preconception nutrition advice. The second category of women had planned for the pregnancy but had little knowledge regarding preconception healthcare. The third category was made up of those women with extremely low levels of pregnancy planning and who had expressed disagreement with micronutrient supplementation during the preconception period. Barrett et al. (2015) concluded that preconception healthcare plans should be tailored to

women's needs, especially when considering the varying perspectives of the women from their research.

Dunlop, Thorne, Logue, and Badal (2013) investigated women's general knowledge of preconception health risks at publicly funded clinics and explored the question of whether counseling might improve their knowledge. In order to determine the women's knowledge levels, the researchers administered multiple tests to a group of nonpregnant Black and Hispanic –women who were not pregnant at the first encounter and then a second test 36 months later. The women were divided into two cohorts of 300 each, with one cohort group given brief preconception counseling, and the other cohort given no preconception counseling. Results revealed that the women who received counseling answered more questions correctly than those who did not receive the intervention. Women who had received the intervention showed an increase in preconception care knowledge, particularly regarding the importance of folic acid supplementation prior to pregnancy and the impact that a chronic health condition could have on pregnancy (Dunlop, Thome et al., 2013).

Aarts et al. (2015) conducted a study to determine whether pregnancy planning behavior was associated with particular background characteristics. The researchers used a cross-sectional method to analyze results from the Swedish Pregnancy Planning Study, applying multinomial logistic regression, chi-squared tests and Kruskal-Wallis H tests to analyze the responses of 3,390 pregnant women who attended antenatal clinics. Results indicated that 12% of the pregnancies were unintended. Of the women reporting

unintended pregnancies, 32% of them had considered having an abortion. The women who had planned their pregnancies were more likely to have higher incomes and higher education levels. And there was a correlation between the extent to which women had planned for their pregnancies and their broader planning behavior – women who had planned their pregnancy showed a higher propensity to engage in information-seeking behaviors in general. Aarts et al. (2015) recommended that preconception care plan be established and promoted in Sweden in order to better prepare women for pregnancy.

In a study of 250 low-income, English-speaking female patients of a family clinic, researchers sought to identify whether women had a reproductive life plan (Awaida, Nelson, Shabaik, & Xandre, 2015). Interview results indicated that 53% of the women were certain about the number of children they would like to have, while only 46.3% knew when they wanted to have their next pregnancy. When asked about oral contraception, 60% of the women said they believed it presented the same health risks as pregnancy did. Based on their findings, the researchers recommended that preconception care be better promoted and that it be individualized for women's specific situations and needs.

Rather than exploring women's perceptions, Stevens (2015) sought to explore physicians' perspectives on preconception health by interviewing 24 healthcare providers regarding their interpretation of planned parenthood. The interviews revealed a sense of stratification in the way that the physicians viewed the planning process, with most identifying planned parenthood as a luxury of the middle and upper classes, and

remarking that financial stability is an important element for pregnancy planning. The physicians also noted that planning a pregnancy was an individual choice from which those who do not fit into normative definitions of success are excluded – namely single, poor, and young women. Ultimately, Stevens (2015) concluded that the term planned parenthood may, at times, obfuscate broader tensions regarding family planning.

The studies presented in this section addressed female and physician perspectives regarding reproductive and preconception health. The articles concur that reproductive and preconception healthcare are essential to ensuring healthy birth outcomes, but each highlighted difficulties involved with family planning. The next section identifies the ways that male perspectives may impact preconception healthcare for females, and also addresses other external factors that impact female reproductive and preconception health.

External influences on female preconception health. There are a variety of community and relationship factors that can influence a woman's preconception health, and of these varied factors, male influence on a partner's reproductive and preconception health merits special interest. The next few articles specifically highlight the impact that males can have on a female reproductive and preconception health, and identify some community related predictors of female health.

Dudgeon and Inhorn (2004) reviewed medical anthropologic and ethnographic studies that pinpoint the ways that men influence women's reproductive health. The first half of their analysis focuses on the role men play in reproduction, with emphasis on how

they can be better incorporated into the reproduction healthcare process, and the second half identifies specific areas where men may influence women's reproductive and preconception health. Based on existing literature, Dudgeon and Inhorn (2004) identified seven reproductive areas where men have a direct impact on women: (a) reproductive health, (b) contraception, (c) sexually transmitted infections, (d) abortion, (e) pregnancy and childbirth, (f) infertility, and (g) fetal harm.

In a study specifically focused on how men influence women's preconception choices, Kerns, Morroni, Murphy and Westhoff (2003) explored men's influence on early discontinuation of oral contraceptives in a predominantly Hispanic population. The researchers reviewed follow-up data from 213 Hispanic women who had initiated the use of oral contraception at an urban family planning clinic. Results from the logistic regression analysis revealed that women who had not informed their partner that they were taking oral contraceptives had a greater propensity to discontinue their use than those who had communicated their intentions to their significant other. The researchers concluded that there were many factors associated with whether a female informed her partner about using oral contraceptives, but that the male's involvement in the decision could be an indicator of the strength of the relationship. Kerns et al. (2003) also concluded that healthcare providers should take women's individual circumstances into consideration before advising them to tell their partner about their intentions to take oral contraceptives.

Based on conclusions in existing literature that physical activity is an important contributing behavioral factor to improving the health of women during the preconception period, Bleck et al. (2015) sough to identify the community predictors for physical activity among women prior to pregnancy. The researchers sample included 7,596 women between 18 and 28 years of age who had filled out surveys from the National Longitudinal Study of Adolescent to Adult Health. The community variables identified as predictors included socio-demographic composition, landscape diversity, urbanization, access to resources, crime, and vehicle availability. The researchers analyzed the data using multiple logistic regression modeling in order to estimate the odds of the women engaging in moderate-to-vigorous physical activity. Results suggested that women who lived in communities with higher population densities were more likely to engage in moderate-to-vigorous physical activity during the preconception period than whose who lived in areas with lower population densities. The researchers recommended that communities work harder to promote physical activity to women during the preconception period.

As evidenced by the articles presented in this section, there are a number of confounding variables that may impact the overall preconception and reproductive health of females. Factors range from the potential impact of males on the consistent use of birth control to impact of population density on physical activity. The following section moves away from female preconception care and addresses male reproductive and preconception healthcare.

Male preconception and reproductive healthcare. Male preconception health has taken a back seat in existing research to the more frequently examined area of female preconception health (Bowman & Neale, 2013; Kost & Lindberg, 2014;). Garfield (2014) argues for the necessity of making fundamental changes in the way that preconception interventions are designed for and delivered to men, particularly for disadvantaged populations. Beaufort, Steegers, Wert, and Zee (2013) further urged the necessity of promoting preconception health to men in order to improve the health of future children. The following articles address the importance of promoting male reproductive and preconception health.

Frey, Kotelchuck, Lu, and Navarro (2008) outlined the key components of an approach to preconception care for men in order to improve family planning, arguing that male preconception healthcare ensures that pregnancies are wanted, improves pregnancy outcomes, improves female reproductive health, and improves men's fathering capacity. The authors then outline specific risk assessments that should be included in preconception healthcare for men, including a reproductive life plan, past medical history, medication history, and family history and genetic risks. Frey et al. (2008) go on to identify other elements of a preconception healthcare plan for men, highlighting a need for practitioners to inquire about men's social history, risk behaviors, and mental health. They encourage health promotion for men in the preconception phase of reproduction. While stressing the importance of preconception healthcare for men, Frey et al. (2008)

admit the difficulty of implementing all of the elements given current organizational, financing, and training limitations.

Lindberg and Kost (2015) used nationally representative data from the 2006-2010 National Survey of Family Growth to assess gender differences related to birth intentions and happiness, with the goal of better understanding men's childbearing intentions. The multivariate logistic regression revealed that 40% of births were unintended as far as the men involved were concerned, and that unwed births were more likely to be intended by men of Hispanic origins. They also found that there was no significant difference between men and women regarding intentions to become pregnant, but found that men were generally happier about pregnancies than women were. Lindberg and Kost (2015) concluded by asserting the importance of men being involved in preventing unintended births.

In a similar study using data from the 2006-2010 National Survey of Family Growth, researchers sought to gauge the need for family planning services for men (Astone, Dubay, Popkin, & Sandstrom, 2015). They found that 60% of men would benefit from some form of family planning services, and that even though these men had access to healthcare services, they did not receive preconception counseling or any other reproductive information. The authors argued that while national health guidelines acknowledge men's reproductive and preconception healthcare as an important part of preventing unintended pregnancy, it was still largely being ignored by healthcare providers.

In another study examining fertility intentions of men, Augustine, Nelson and Edin (2009) explored the factors that contribute to disadvantaged men becoming fathers. The researchers conducted a qualitative study of 171 low-income, non-custodial men between the ages of 16 and 60 with Black, Puerto Rican, and European American backgrounds. The average age of the participants was 34, and they had an average of two children. Results from analysis of the narratives provided by the participants revealed three primary categories of explanation for accidental pregnancies: (a) they thought they were sterile, (b) the contraceptive method failed, or (c) their partner lied about contraceptive use. Many also responded to questions about why they had children by saying they just weren't thinking, or by saying that the pregnancies were unplanned but not unexpected. While the findings from this study cannot be generalized, Augustine et al. (2009) contend that the findings offer valuable insight into the attitudes and values that contribute to disadvantaged men having children.

In an attempt to offer solutions to the myriad problems encountered by disadvantaged men and boys of color, Astone et al. (2015) presented four strategies for institutional change. First, they called for an improvement in the accessibility of social and economic resources within the communities populated by people who need such resources most. Secondly, they urged communities to address and eliminate the stressors encountered by young men and boys. Thirdly, they called for the identification and treatment of the problems that chronic stress causes in young boys and men. And fourth, they emphasized the importance of finding solutions for the many issues and stressors by

communicating effectively with the boys and their parents. Astone et al. (2015) further contended that comprehensive preconception health care for males should be addressed throughout their entire reproductive lifespan, and that family and individual interventions should begin when the males are children and continue into adulthood.

Men's preconception health is gaining attention beyond the borders of the United States. Researchers in Hungary presented data from the Coordinating Center of the Hungarian Preconception Service spanning the years from 1984 through 2010, focusing on the 20,603 males who visited the clinics with their significant other (Czeizel, Czeizel, & Vereczkey, 2013). The men had their sperm analyzed and underwent a psychosexual assessment. Findings revealed that age played a role in sperm mobility and that 3% of the couples who were advised to visit a sexologist accepted the recommendation. The researchers concluded their report by asserting the importance for men to be involved in preconception healthcare.

From a slightly different perspective than the previous studies conducted in the United States, and more in line with the Hungarian study, Almeling and Waggoner (2013) compared preconception healthcare and sperm banks in an effort to identify how gendered knowledge effects the different stages of reproduction. By analyzing data from other studies they had conducted at sperm banks, the authors came to two main conclusions: first, that men played a significant role in the conception period of the reproductive process; and second, that while men's decisions to drink, smoke, and do illicit drugs can have adverse effects on the fetus, men generally played an insignificant

role during the actual pregnancy stage of the reproductive process. Ultimately, the researchers recommended that additional studies be done with the goal of better understanding the variables associated with men's involvement in the reproductive process.

Alio et al. (2013) specifically addressed the role of the father during pregnancy from a community perspective. The researchers sought to define the male's role during pregnancy and identify the interventions that the community believed would improve men's involvement. This qualitative study involved focus groups consisting primarily of Black mothers and fathers recruited from the National Healthy Start Association. Research results revealed that the majority of participants identified an ideal father as one that is readily available and accessible, willing to participate during all phases of the pregnancy, open to new information, and emotionally and financially supportive. Alio et al. (2013) reported community-based recommendations including: developing prenatal programs focused on males; improving interventions for women; and ensuring that healthcare providers understood the importance of men being involved during pregnancy. The authors concluded with the acknowledgement that although the father's involvement during pregnancy has been identified as being important, there are numerous factors that diminish the father's role during pregnancy.

The researchers of the studies presented in this section have identified the importance of including men in the reproductive and preconception conversation, and pointed out that paying special attention to their role in the reproductive process could

reduce unintended pregnancies. The authors have highlighted the need for more research into the overall role that men play in the reproductive process. The following section focuses on unintended pregnancies and family planning.

Unintended Pregnancy

Preconception healthcare must include the effort to prevent the unintended pregnancies that are still prevalent in the United States (Lindberg & Zolna, 2012). The articles discussed in this section focus on the statistics of unintended pregnancy and on the factors that contribute to them.

In one breakdown of the statistics related to unintended pregnancies, Lindberg and Zolna (2012) extrapolated National Center for Health Statistics data from 2001 through 2008 to calculate the incidence and outcomes of unintended pregnancies among unmarried, U.S. women between the ages of 20 and 29. The researchers found that unintended pregnancies had increased from 92 for every 1,000 pregnancies in 2001, to 95 for every 1,000 pregnancies in 2008. They also found that, in 2008, the incidence of unintended pregnancies among low-income women was more than three times higher than of women in highest income bracket, and the incidence of unintended pregnancies among women classified as poor was four times higher than that of women in the highest income bracket. Women classified as low-income and poor showed an increase in unintended pregnancies from 2001 to 2008, while women with high incomes experienced a decrease in unintended pregnancies during the same time frame. Results indicated that more than half of the women with unintended pregnancies in 2008 ended the pregnancies

with abortions, a figure that was 60% lower than the same figure in 2001. Lindberg and Zolna (2012) concluded by stressing the importance for women to be educated about family planning and contraceptive use.

In another statistical analysis of intended and unintended births in the United States, Mosher, Jones and Amba (2012) focused on data reported from the National Survey of Family Growth for the years from 1982 through 2010. Results indicated that approximately 37% of births were unintended, a number that held steady throughout the years studied. The researchers also found the number of unintended pregnancyes for non-Hispanic women declined between 1982 2010. Single women, Black women and less-educated women were more likely to have unintended pregnancies compared with married, White, high-income, and college-educated women.

Unintended pregnancies place emotional burdens on the new parents, but can also an unexpected financial burden on the expectant parents and on society at large (Finer & Sonfield, 2013). The researchers referenced Trussel's (2007) $4.6 billion estimate of the financial cost of unintended pregnancies in the United States at, with $2.5 billion of that total attributed to inconsistent contraceptive use. Finer and Sonfield (2013) note that the Affordable Care Act of 2010 has made healthcare easier to access for some individuals, but has not made a dent in the problem of unintended pregnancies. They suggested that if women and men had all available information regarding contraception, they would be more capable of preventing unintended pregnancies and would thus reducing the societal financial burden.

In an effort to estimate the associated costs of unintended pregnancies resulting from a denial of sterilization requests due to Medicaid policy barriers, Borrero, Potter, Smith, Trussell, and Zite (2013) designed a hypothetical policy model that reduced the barriers to sterilization that women encountered with the typical Medicaid policy. They then compared the costs associated with Medicaid sterilization with the costs of Medicaid-covered births. Findings indicated that the implementation of the hypothetical Medicaid model would increase sterilization by 45%, and in turn lead to an annual savings of $215 million by potentially preventing more than 29,000 unintended births. The authors asserted that the implementation of the hypothetical Medicaid model would empower women by giving them more control over their reproductive decisions.

Royer, Saltzman, Sanders and Turok (2016) evaluated emergency contraceptive choices and decision making regarding unintended pregnancy. The researchers studied the pregnancy rates among women who were given the option of using the emergency contraceptive oral levonorgestrel (LNG) or the emergency contraceptive copper T380 intrauterine device (Cu IUD) free of charge. Of the 548 women who participated in the study, 40% opted for the Cu IUD, and 60% decided to use the oral LNG. Results for the women who were available for follow-up revealed that one-third of them had not been using any form of contraceptive when they sought emergency contraceptive. There were 56 pregnancies reported, 54 of which were unintended. Of those pregnancies, 6% were in women who had chosen the IUD, while 12% were in women who had chosen the oral

LNG. Royer et al. (2016) concluded that a woman's intention to become pregnant does not necessarily impact her choice of emergency contraceptive method.

In another study, Akers et al. (2015) conducted a qualitative explorative exploration of the pregnancy perspectives and associated behavior of low-income women. The researchers conducted semi-structured interviews with 66 low-income, Black and White women between the ages of 18 and 45, recruited from reproductive health clinics in Pittsburg, Pa. Research results revealed that, in many instances, women did not feel as though they had complete control over their reproductive behavior and could not adequately formulate reproductive goals. Akers et al. (2015) also discovered that even when women are adamant that they do not want to become pregnant, they continue to make inconsistent use of contraceptives, and make pregnancy decisions in the moment. The researchers concluded that in order to prevent unintended pregnancies, the current views and approaches to pregnancy planning should be adjusted to fit the needs of low-income women.

In a study exploring the factors influencing high-risk male and female youths, Kowaleski-Jones and Mott (1998) analyzed data collected from female respondents to the 1979-1992 National Longitudinal Survey of Youths. The researchers connected that data to data from the 1994 files on their children to gain further information on the 959 children born to those young mothers. Research results revealed that youths who ran away from home were more likely than their peers to engage in sexual activity, and low self-esteem and depression were found to be associated with young women engaging in

sexual intercourse without using contraception. Interestingly, Kowaleski-Jones and Mott (1998) also found that young parents tended to be more responsible than their peers who were not parents, with young women having less tendency to consume alcohol and young men having a higher tendency to engage in productive work.

The relationship between depression and unintended pregnancy is further explored in a systematic review and meta-analysis of the association between unintended pregnancy and perinatal depression (Abajobir, Alati, Maravilla, and Najman2015). The researchers discovered that 21 percent of women with unintended pregnancies also presented with symptoms of clinical depression. The researchers concluded by recommending that healthcare providers screen women for depression at all stages of pregnancy.

The studies presented in this section provided statistics for unintended pregnancy, and showed a positive correlation between preconception health care and reducing unintended pregnancies. These studies also identified a need for more directed preconception care in order to prevent unintended pregnancies in disadvantaged women. The next section explores the barriers to preconception healthcare for disadvantaged groups in more detail.

Barriers to Preconception and Reproductive Health Services

Many women encounter barriers to receiving the preconception healthcare services, and therefore do not receive the associated advantages. The studies discussed in

this section explore the barriers to preconception healthcare from the perspective of clients and physicians.

One such study explored the impact of social disadvantage on preconception health, illness, and well-being (Crews et al., 2013). The researchers conducted their study in Philadelphia, Pa., with 19 Black women participating in a randomized clinical trial for interceptional care. Research results revealed that the women's experience with racism and the fact that they were financially disadvantaged significantly impacted their health and wellness behaviors. The life experiences of these women, specifically related to race and gender, also negatively impacted the effectiveness of preconception and wellness interventions.

Similarly, a study of disadvantaged Black women sought to identify the association between their preconception health and preterm births (Orr, Reiter, James & Orr, 2012). The n 18. The researchers looked at data regarding the women's maternal health, their behaviors, and birth outcomes. Results from the logistic regression revealed that alcohol use, drug use, and chronic disease had a significant association with preterm births. The authors concluded that access to preconception care may improve the overall pregnancy outcomes of disadvantaged, low-income Black women.

In an attempt to address the preconception health barriers encountered by minority communities, this next study looked at developing a culturally appropriate preconception promotion strategy for newly immigrated Latina women in South Carolina (Torres et al., 2013). The researchers asserted U.S. Latinas have faced numerous barriers

to receiving preconception health care, as evidenced by their higher rates of unintended pregnancies than women of other ethnicities. They pointed to PASOs, a South Carolina noprofit providing education, advocacy and leadership development in South Carolina's Latino communities, contending that the group's maternal, child, and reproductive health education program occupies an ideal position for promoting preconception care to newly immigrated Latina women. PASOs incorporated a preconception care plan into its menu of services in 2011, organizing an interactive workshop for 10 Latino women. Torres et al. (2013) noted that the group now takes the preconception care plan to other South Carolina locations where Latinas regularly congregate.

In their study of the reproductive risks of low-income women on the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program, Dunlop, Dretler et al. (2013) analyzed the impact that brief preconception health risk assessments and counseling had on the women. The sample size included 150 Black women aged 18 to 44, recruited from WIC nutrition classes in Clayton County, Ga. Participants were issued an initial, risk-assessment questionnaire and then sent to a brief preconception counseling session. They were interviewed immediately after their counseling session. Questionnaire results indicated that 27% of the women had unintended pregnancies, 49% of the women had a history of sexually transmitted infections, 66% of the women less-than-adequate levels of folic acid supplementation, 47% of the women had experienced violence from a partner, 21% of the woman used tobacco, 10% of the women admitted to binge drinking, and 5% of the women had used

illicit drugs. Ultimately, all of the women said they viewed the preconception counseling as important.

In a study of family planning disparities, researchers identified the specific disparities associated with ethnicity and socioeconomic factors (Borrero et al., 2010). The first disparity the researchers identified related to a lack of knowledge regarding contraceptive and pregnancy, with many Black women reporting beliefs regarding contraceptive use that were shaped by cultural concepts based in conspiracy theories. The second disparity they identified related to healthcare system factors – specifically the limited access to healthcare for those who are most vulnerable and in the greatest need. The third disparity researchers identified addressed provider-related factors, noting evidence that Black and Hispanic women with low education levels rated their family planning visits less positively than others did. Borrero et al. (2010) recommended four means of addressing these disparities: universal health care coverage, publicly funded abortion clinics, more access to information in poor communities, and family planning by providers tailored to individual needs.

In an effort to identify how women's pregnancy beliefs intersect with preconception care barriers, Canady Tiedie, and Lauber (2008) recruited 168 Black women from health department sites and asked them two open-ended questions designed to elicit information regarding their definitions of planned pregnancy and whether or not their most recent pregnancies were planned. Findings revealed that the women found preconception care to be an unfamiliar concept, and that planning for pregnancy had

different meanings to different women. When it came to their impressions about the psychology of pregnancy, the women's responses could be summarized with three words: attitudes, beliefs, and behaviors. Ultimately, Canady et al. (2008) recommended that the nurses charged with caring for women during their childbearing years should incorporate each woman's individual beliefs and attitudes into preconception counseling, while keeping in mind the race and socioeconomic status of the woman.

Chuang et al. (2012) examined physicians' perceptions of the barriers to preventive reproductive health care in rural communities, through semi-structured interviews with 19 physicians in a rural community in central Pennsylvania. Findings from the interviews revealed that while contraceptives were available within the communities, the range of available contraceptive services varied tremendously. The physicians admitted that they had more responsibility for providing their clients with contraceptive care and preconception care than urban physicians typically have, but admitted that they rarely initiated conversations on those topics. The physicians reported that their patients' primary barriers to discussing contraception and preconception issues stemmed from the perceived norms within their communities regarding unintended pregnancies, and from a lack of time and resources. The authors suggested that while preconception care and contraceptive care may not be a priority for rural women, healthcare providers should make more effort to motivate them to seek out information.

In another study of physicians' perceptions of barriers to preconception health care, Chapman et al. (2013) sought insight into the perspectives of general practitioners

regarding the implementation of preconception care guidelines. The researchers conducted a qualitative study of 22 general practitioners recruited from three regional general practice support organizations. Results from the research indicated that the practitioners' perceived time constraints and the cost of accessing preconception care were potential barriers. The physicians also reported a lack of resources – such as pamphlets, posters, and checklists – for the effective delivery of preconception care. The authors suggested that future researchers gather more data on the barriers to preconception healthcare delivery in order to develop new methods for implementation.

Acknowledging that physicians encounter barriers to implementing the recommended preconception and contraceptive health care services, Adkins, Bello, Rao and Stulberg (2013) investigated the impact of a self-assessment tool for reproductive health (RH-SAT) on reproductive health counseling. After training staff at an urban community health center on preconception and contraceptive guidelines, the researchers conducted semi-structured interviews with 22 health center clients to assess their perceptions of the RH-SAT. Using a grounded theory approach, the researchers analyzed the respondents' interviews and determined that both the clients and the providers felt that the RH-SAT offered an interactive and thought-provoking method of delivering preconception health information, and effectively facilitated the counseling process.

This section presented research studies focusing on the perceived barriers to receiving preconception healthcare from the perspectives of disadvantaged individuals and healthcare providers. The studies identified barriers to preconception care including

ethnic disparities, low income, and a lack of resources. The studies cumulatively point to the need for healthcare providers to improve the knowledge and attitudes toward preconception care on the part of disadvantaged women, primarily by identifying the cultural and financial needs of the women when offering reproductive healthcare services.

Summary

This literature review provided a systematic breakdown of the various areas of reproductive and preconception healthcare care addressed in existing literature. The chapter began by identifying preconception plans and promotion needs, and went on to outline methods for promotion, preconception intervention evaluations, and counseling effectiveness. The chapter also examined the available studies on male and female reproductive preconception health, unintended pregnancy, and the barriers to reproductive and preconception health services.

Existing literature revealed wide consensus on what should be included in a preconception care plan (Berg et al., 2013; World Health Organization, 2012), but revealed that implementation poses significant difficulty. Promoting preconception healthcare to men and women low socioeconomic status and diverse ethnicities has proven especially difficult (Borrero et al., 2010; Torres et al., 2013). The studies also showed that researchers are in agreement that contraceptive is an integral part of preventing unintended pregnancies (Lindberg & Zolna, 2012; Curtis, Gavin, Mautone-Smith, et al., 2015).

In regard to young adults' attitudes, beliefs, and behavioral practices related to unintended pregnancies, the literature review presented studies that point to a lack of knowledge regarding preconception health that has created ambiguity regarding family planning among at-risk young adults (Collins, 2016; Bish et al., 2012; Augustine, et al., 2009). In order to identify the perceived barriers for young adults in relation to unintended pregnancies, the literature review cited studies suggesting that race and socioeconomic status are the primary perceived barriers to receiving preconception care. (Crews et al., 2013; Chapman et al., 2013; Chuang et al. 2012). The studies offered no suggestions for the clients themselves to address the barriers to care, but the researchers consistently recommended that providers offer more tailored services to meet clients' specific needs.

The literature review revealed some rather significant gaps in the literature – specifically those that explore the preconception knowledge, beliefs, and attitudes of young adults. While there were metadata studies that drew from previous longitudinal studies, and therefore could be generalized to other populations, they left unanswered many questions regarding women's and men's beliefs, attitudes, and behaviors. Although a few qualitative studies have investigated these questions, they used sample sizes that were too small to generalize more broadly. The present study adds to the literature in these areas by answering some of the questions that other qualitative studies have not fully explored.

The methodology used in this study is discussed in detail in Chapter 3.

Chapter 3: Research Method

Introduction

The researcher chose a phenomenological for this study, which explored the willingness of young adults at risk of unintended pregnancies to use preconception health and prenatal care in order to increase positive birth outcomes and also to improve their overall health.

Chapter 3 addresses the following topics: (a) the research design and rationale, (b) the role of the researcher, (c) the participant selection process, (d) research instrumentation, (e) recruitment, participation, and data collection procedures, (f) data analysis approach, (g) trustworthiness or results, and (h) ethical procedures.

Research Design and Rationale

This study explored the phenomena of preconception and prenatal healthcare program access by young adults at risk of unintended pregnancies. Existing literature is relative quiet regarding the views of young adult women and men deciding whether and when to conceive a child and making the related decisions regarding reproduction, health behaviors, preconception health, and prenatal care (Eugene et al., 2016; Hernandez et al., 2012). To address this gap in the literature, the current study examined the willingness of young adults to access preconception healthcare and prenatal care as a means of improving birth outcomes as well as improving their overall health (Eugene et al., 2016; Hernandez et al., 2012). The central guiding question was: What are the lived experiences of young adults in terms of their willingness to use preconception healthcare and prenatal

care as a means of improving birth outcomes as well as improving their overall health? The three specific guiding questions were:

GQ1. What are the behavioral practices of young adult women and men at risk for unintended pregnancies as they relate to preparing for early parenthood and for child-raising responsibilities?

GQ2. What are the attitudes and beliefs of young adult women and men at risk for unintended pregnancies as they relate to healthy preconception behaviors and optimal prenatal care?

GQ3. What are the perceived barriers or obstacles that young adult women and men at risk for unintended pregnancies face in accessing perinatal care?

In addressing the guiding questions and fulfilling the purpose of the study, I employed a qualitative research methodology – more specifically, a phenomenological research design. A qualitative methodology was appropriate for this study since qualitative research has the goal of exploring a phenomenon within its natural environment and based on the perceptions, experiences, beliefs, and behavior of individuals (Marshall & Rossman, 2014). In this case, the study focuses on the lived experiences of young adults at risk for unintended pregnancy. Moreover, the study aligns with the three characteristics of qualitative research outlined by Moustakas (1994):, (a) it focuses on the wholeness of human experience, including personal behavior and knowledge; (b) it aims to understand the meanings and value of experience and perceptions; and (c) it uses human behavior and opinion as important sources of data.

This study used a particular category of qualitative research – phenomenological study – as its design framework. According to Moustakas (1994), a phenomenological research design has the advantage of using participants' own categories of meanings based on their lived experiences to promote illuminate the phenomenon being studied. Phenomenology focuses on in-depth exploration of the lived experiences of participants using semi-structured interviews (Moustakas, 1994) – an ideal format for this study's exploration of the lived experiences of the young adults at-risk for unintended pregnancy, as those experiences relate to the young adults' use of reproductive, preconception and prenatal healthcare.

Other research traditions considered for this study included the three theories or methodologies listed below.

- Case study methodology: This methodology was discarded because the current study focuses on the lived experiences of the target population rather than on exploring their perceptions (Yin, 2014).
- Grounded theory: This was determined to be inappropriate since the purpose and guidig questions of this study do not imply the need for developing a theory or model based on systematically collected and analyzed data (Gentles, Jack, Nicholas, & McKibbon, 2014).
- Narrative inquiry: It was considered and discarded because the current study does not require the collection and analysis of qualitative data for presentation

in a storied and chronological manner in order to explore a phenomenon (Andrews, Squire, & Tamboukou, 2013).

Role of the Researcher

As the researcher, I collected data through interviews and analyzed the resulting data using Moustakas' (1994) method for analyzing data collected in a phenomenological study. I conducted interviews with the participants in order to obtain any and all information relevant to the study's guiding questions. I prepared the interview protocol containing the interview questions, and subjected the process for expert review. I followed recommendations from Strauss and Corbin (2014) and from Harper and Cole (2012) to ask questions in a direct and professional manner and used appropriate methods of data interpretation (Moustakas, 1994). I organized and loaded the collected data into the NVivo software for analysis, and interpreted the data to identify relevant, emerging themes.

In order to eliminate natural, personal biases and expectations, and in order to minimize any bias of familiarity with the subject, I conducted the study without the participation of anyone from my immediate social network (e.g., immediate family members, relatives, personal friends, colleagues, or fellow community members). I also attempted to eliminate personal expections and beliefs regarding the research topic by bracketing data to protect its credibility and authenticity and to protect outcomes of the study (Tufford & Newman, 2012; Wray, Bachelor, Jones, & Newton, 2015). Bracketing refers to the process of keeping a researcher focused on the topic and phenomenon by

being aware of instances when personal opinions and expectations are already influencing any part of the research methodology, especially during the recruitment of participants, collection of data, and analysis of data (Tufford & Newman, 2012). In employing the technique of bracketing, I acknowledged my previous experiences, opinions, and preconceived notions in relation to the phenomenon and problem being explored in the study, identifying any areas or aspects that should be set aside while collecting and analyzing data (Tufford & Newman, 2012; Wray et al., 2015).

In addition to bracketing, I upheld the concept of intellectual honesty at all times during data collection and data analysis, avoiding any instances where personal beliefs and biases would influence or interfere with data collection and analysis (Friga & Chapas, 2008). I avoided making any deletions or changes to data collected from study participants, and gave participants the opportunity to review and evaluate the interview transcripts and initial interpretations of the data (Shaw, 2013; Harper & Cole, 2012).

Methodology

Participant Selection Logic

This study focused on a target population of young adults at risk of unintended pregnancies. From the target population a sample will be selected. The sample consisted of 9 young adult women and 9 young adult men, who are at risk of unintended pregnancies. In a qualitative study, the sample size is based on data saturation point – the point in the data collection when adding new participants no longer yields additional relevant and significant data to the data set (Walker, 2012). Multiple researchers claimed

that to reach data saturation, most qualitative studies need between 10 and 20 participants (Marshall, Cardon, Poddar, & Fontenot, 2013). For the purpose of this study, I gathered and analyzed data from nine men and nine women, all of whom were at risk of unintended pregnancies.

I used purposive sampling for recruiting participants, a sampling technique commonly used in qualitative studies because of its effectiveness and efficiency (Barratt, Ferris, & Lenton, 2015). Barratt et al. (2015) claimed that purposive sampling makes data collection easy and effective because of the participants' willingness to participate and provide relevant data to the study. The inclusion criteria for study participants were: (a) young adult man or woman, (b) period of life during which unintended pregnancies are most common, (c) at risk for unintended pregnancies, (d) sexually active, (e) single or in cohabiting partnerships, and (f) living in the greater Los Angeles, Calif., area.

I contacted centers and organizations offering preconception health care and prenatal care programs to expectant and child-bearing individuals, requesting permission to conduct a small talk at the end of the centers' sessions with individuals who were within the study's target population. I introduced myself to the group, presented my research topic, making sure to highlight the possibility of positive social change as an outcome of the study Those who expressed a willingness to participate completed a screening checklist for eligibility. Once determined to be eligible, participants read and signed an informed consent form, and set appointments for their interviews.

Instrumentation

I conducted semi-structured, face-to-face interviews with participating young adults in an effort to gather the rich, in-depth data needed for the qualitative study. (Doody & Noonan, 2013; Jacob & Furgerson, 2012). The face-to-face, semi-structured interviews were conducted using open-ended questions guided by the interview protocol presented in Appendix C. While I followed a set structure for the flow of the interview, I also asked follow-up questions to gather more relevant data.

Based on existing literature, the concepts of child rearing and parenthood are areas where men and women at risk of unintended pregnancies require additional information and understanding (Stevens, 2015). With that in mind, I asked questions about child rearing and parenthood within the context of unintended pregnancies. In formulating interview questions, I also took into consideration the evidence that individuals at risk for unplanned pregnancies tend to lack knowledge related to healthy preconception behaviors and optimal prenatal care, and the fact that receiving preconception counseling tends to be uncommon for women with unintended pregnancies (Williams, Zapata, D'Angelo, Harrison, & Morrow, 2012). With those realities in mind, I formulated research questions designed to explore the understanding levels of young adults at risk for unintended pregnancies regarding preconception counseling and prenatal care. I also included interview questions regarding the perinatal period during pregnancy and birth, in order to address the reality that women with unintended pregnancies tend to

experience perinatal depression and require perinatal care that takes their depression into account (Abajobir, Maravilla, Alati, & Najman, 2016).

I submitted the interview protocol for review by an expert panel – my dissertation committee – in order to verify the credibility and validity of the instrument (Benítez & Padilla, 2013). The panel evaluated the structure, content, and wording of the items to confirm their appropriateness to the study, and to verify their overall correctness as a method of gathering relevant data, providing feedback that I used to modifify the interview protocol.

Procedures for Recruitment, Participation, and Data Collection

I will use semi-structured interviews of participants, asking questions that focused on the study's guiding questions.

I set up an interview area in a public library – a location with easy, public access, and an environment providing a quiet, comfortable, neutral tone for both researcher and the participants. I set up a recorder for the interviews, placed the interview protocol on a table and provided a copy of the informed consent for review. Nine young adult women and nine young adult men at risk of unintended pregnancies participate in the semi-structured interviews, each of with was 45-90 minutes in length, depending on the length of the answers and the speech rates of participants.

I opened each interview with an introduction phase during which I explained the flow of the interview and reviewed the content of the informed consent form each one had signed. During the second phase of the interview, I asked questions per the interview

protocol, asking follow-up questions when appropriate, and concluding the interview once all protocol questions were used and when I determined that there was no additional relevant data or clarification to solicit. I gave participants the opportunity to ask questions, request clarification or express any concerns they might have, and concluded by thanking them for taking time to be part of the study. I recorded all of the interviews, in order to transcribe them verbatim in order to maximize credibility and confirmability of the data. After transcribing the interviews, I conducted member checks to assure content validity (Harper & Cole, 2012), giving each participant the opportunity to review the interview transcript and initial interpretations of the data, and making changes when necessary to correct misinterpretations or transcription errors. After collecting and analyzing data, I sent a summary of the findings to each participant via email. Those who are interested and request copies of the dissertation will have that emailed to them as well.

Data Analysis Plan

For qualitative studies, data analysis begins with data collection (Moustakas, 1994). Since this study focuses on the subjective recollection of the lived experiences of young adults, I made every effort to handle the data with due diligence. After performing the member checks, I load the data transcripts into the NVivo software for processing and analysis.

To analyze the data for each of the research questions, I will used Moustakas' (1994) seven-step process of analyzing phenomenology based on the van Kaam method. The steps I followed are listed below.

1. **Textual data listing and preliminary grouping:** In this step, I listed all expressions related to the topic being studied, and performed horizontalization by developing a list of non-repetitive and non-overlapping significant statements.
2. **Invariant theme reduction and elimination:** I evaluated the expressions, excluding or revising all information that did not meet the stipulated requirements, as well as any repetitive, vague, and overlapping words. The term invariant theme refers to any applicable expression, comment, or component found in the participant interview responses. I evaluated expressions according to the following criteria: (a) whether the expression related to the experience that is a necessary constituent for understanding the experience, and (b) whether the expression can be abstracted and labeled to make it belong to the horizon of the experience.
3. **Invariant theme clustering**: During this step, I grouped related invariant themes to address the phenomenon of the study.
4. **Validation and final identification of invariant themes**: To accomplish this, I identified the common factors of the study. To finalize the themes, I evaluated them based on the following criteria: (a) expressed explicitly and (b) compatibility with one another. The themes that do not satisfy the criteria were excluded from the succeeding steps.

5. **Development of an individual experience textural description:** During this step, I construct one description for the experience using the applicable validated invariant themes.
6. **Development of an individual experience structural description:** To achieve this, I used the individual textural description to develop a single structural description of the experience.
7. **Development of a textural-structural description:** In this step, I discussed the meanings and essences of the experiences based on the validated invariant themes.

Issues of Trustworthiness

Qualitative research seeks to achieve a deeper understanding of phenomenon, which is critical in evaluating the quality and substance of the discoveries made. Researchers conducting qualitative studies must ensure trustworthiness through credibility, transferability, dependability, and confirmability (Houghton, Casey, Shaw & Murphy, 2013). Credibility requires that the study employ a well-established research method, and dependability refers to the research's attribute of being duplicable. A study's transferability indicates the generalizability of its findings to other studies and populations, and confirmability implies the acknowledgement of some measure of subjectivity.

For maximum credibility, I performed member checking to verify accuracy of interview transcripts and to ensure objectivity and validity throughout the research

process (Miles, Huberman, & Saldana, 2014). To improve dependability of the findings, I used an audit trail – a tangible article that can prove the accuracy and dependability of the data replicated with similar analysis (Cope, 2014). An audit trail improves study transparency by providing a detailed description of all the research steps taken in the study, the study developments, and a record of any resulting analysis and findings (Cope, 2014). For improved transferability, I provide a complete and detailed description of the processes included in implementing the methodology, and presented the detailed findings of the study so that future researchers can determine the usefulness of the findings for other studies (Miles et al., 2014). To improve confirmability, I used iterative questioning (by including probes within the data collection process), which encouraged participants to provide detailed data (Miles et al., 2014).

Ethical Procedures

Because human participants were included in the study, I took care to address comprehensively address ethical issues, with the goal of ensuring that participants were exposed to as little risk as possible. I also obtained Walden University IRB approval (approval number 05-31-17-0316969). To ensure that participants were aware of the rights and responsibilities attached to their participation in this study, I provided informed consent forms for their signature. Upon confirming their willingness to participate in the study, they were given 10- 15 minutes to read and understand the contents of the informed consent form prior to scheduling the interview for the study.

In order to maintain the confidentiality and to protect the identity of participants, I used pseudonyms when referring to each participant. I did not disclose the identification of participants to anyone at any point during the data collection, data analysis, and reporting processes. For added security, all physical data – notes, audio recordings, data sheets, and other forms – was stored in a locked and fire-safe cabinet inside the researcher's personal and private office. All electronic data files were password-protected in the researcher's personal computer, and the data and information will be kept for five years beyond the presentation of the final report for this research, after which it will be destroyed through burning, shredding, or permanent deletion.

All participants were informed that their participation was voluntary, and were informed that there would be no negative implications if or when any participant declined to take part in the study. No one was forced to participate, and no incentives were offered for participation. There were no consequences for withdrawal from participation at any time during, although any information gathered before the withdrawal was used, if needed, for data analysis of the study.

Summary

This phenomenological study explored the lived experiences of young adults in terms of their willingness to use preconception healthcare and prenatal care as a means of improving birth outcomes as well as improving overall health. Participants were selected from the population of young adults at risk of unintended pregnancies. They were recruited through purposive sampling, subject to the following criteria: (a) young adult

man or woman, (b) 18 to 25 years of age (the window during which unintended pregnancies are most common), (c) at risk for unintended pregnancies, (d) sexually active, (e) single or in cohabiting partnerships, and (f) living in the greater Los Angeles, Calif., area. Data was gathered through semi-structured interviews, using an interview protocol that was subjected to expert review prior to use. Interviews were transcribed and member checked, and data was analyzed using Moustakas' (1994) seven-step process for analyzing phenomenological studies.

Chapter 4: Results

Introduction

Chapter 4 outlines the findings of this phenomenological study, the purpose of which was to explore the lived experiences of young adults in terms of their willingness to use preconception healthcare and prenatal care to improve birth outcomes as well as overall health. The study applied Moustakas' (1994) modified van Kaam method to analyze the data, and NVivo11 by QSR provided the tool for systematic coding and for tabulating codes into themes. Three research questions were examined, as listed below.

GQ1. What are the behavioral practices of young adult women and men at risk for unintended pregnancies as they relate to preparing for early parenthood and for child-raising responsibilities?

GQ2. What are the attitudes and beliefs of young adult women and men at risk for unintended pregnancies as they relate to healthy preconception behaviors and optimal prenatal care?

GQ3. What are the perceived barriers or obstacles that young adult women and men at risk for unintended pregnancies face in accessing perinatal care?

Setting

Face-to-face interviews with young adults from the greater Los Angeles, Calif., area were conducted in a library that was easy for participants to access, using a small, private room that provided a quiet, comfortable, neutral environment

Demographics

Interview participants were 9 females and 9 males between the ages of 18 and 25 from the Los Angeles, Calif., metropolitan area. The majority (11 of 18) were Hispanic/ Latino/ Mexican; four were European Americans, two were South Africans, and one was Asian American. All participants were. Eight of the 18 attended "some college," six were college graduates, and four had no higher education. Of the 18 participants, five were married, another 12 were in a relationship, and one participant did not provide her marital status. Half of the participants (9 of 18) already have children. Table 2 contains the participants' demographic information.

Table 2

Breakdown of Participants Demographics

	Gender	Age	Ethnicity	High school Status	College status	Maritalstatus	With children (+) Without children (–)
P1	Female	23	Hispanic	Graduate	Some college	Married	(+)
P2	Female	22	Hispanic	Graduate	Some college	In a relationship	(–)
P3	Female	18	Latino	Graduate	Some college	In a relationship	(–)
P4	Female	25	South-African	Graduate	College graduate	In a relationship	(–)
P5	Female	25	Mexican	Graduate	No college	In a relationship	(+)
P6	Male	25	Mexican	Graduate	College graduate	Married	(+)
P7	Female	20	Mexican	Graduate	No college	In a relationship	(-)
P8	Female	25	Asian-American	Graduate	College graduate	Married	(+)
P9	Female	24	Latino	Graduate	College graduate	In a relationship	(+)
P10	Male	19	White	Graduate	No college	In a	(-)

						relationship	
P11	Male	24	Hispanic	Graduate	No college	In a relationship	(-)
P12	Female	25	Hispanic	Graduate	Some college	N/A	N/A
P13	Male	20	Hispanic	Graduate	Some college	In a relationship	(+)
P14	Male	25	White	Graduate	Some college	Married	(+)
P15	Male	25	Black	Graduate	College graduate	Married	(+)
P16	Male	20	Latino	Graduate	Some college	In a relationship	(-)
P17	Male	25	Caucasian	Graduate	Some college	In a relationship	(-)
PA18	Male	24	White	Graduate	College graduate	In a relationship	(-)

Data Collection

Interviews were conducted with 18 participants who were all young adult men and women at risk of unintended pregnancies. All participants were provided an informed consent before the formal interviews. An interview protocol was strictly followed, and a semi-structured interview approach was used. In addition, I used a recorder to document the interviews with the 18 participants. I asked all the questions prepared, in addition, follow-up inquiries were provided as needed. I was also open to answering and addressing any concerns and issues that the participants may have upon the completion of the data gathering session. Participants also had the opportunity to access the recorded and transcribed interviews for clarifications and other concerns. Interviews lasted for 45 to 90 minutes, depending on the responses and answers shared by the participants. Once all participants have approved of the data collected or the final interviews, data analysis commenced.

Data Analysis

First Step: Listing and Preliminary Grouping

To complete the first step of the modified van Kaam method, I listed and created preliminary groupings of key ideas gathered from the interviews. In this stage, the shared experiences from the interviews of the 18 young adults at risk for unintended pregnancies were noted and assigned with initial codes. I horizontalized the data, taking note of the most noteworthy patterns (Moustakas, 1994, p. 120). During the horizontalization process, I scrutinized each segment of the participants' perceptions and experiences, and also attempted to remove all probable sources of bias or prejudice.

Second Step: Reduction and Elimination

For this step, I employed Moustakas' (1994) suggestions for determining the invariant constituents or the other substantial perceptions and experiences of participants. Following Moustakas' (1994) recommendations, I filtered all expressions through two questions: (a) Does it contain a moment of the experience that is a necessary and sufficient constituent for understanding? (b) Is it possible to abstract and label it? If so, it is a horizon of the experience. Expressions not meeting the above requirements were eliminated. Overlapping, repetitive, and vague expressions were also eliminated or presented in more descriptive terms. "The horizons that remain are the invariant constituents of the experience" (Moustakas, 1994, p. 121).

The 18 transcripts were thoroughly inspected and reread again, permitting me to identify the parts of the data that could be incorporated in the next stages of the phenomenological study.

Third Step: Clustering and Thematizing of the Invariant Constituents

The third step was completed by gathering and clustering the invariant constituents from the second step of the van Kaam method. According to Moustakas, (1994) the "clustered and labelled constituents" are considered the "core themes" of the analysis (Moustakas, 1994, p. 121), because these findings consist of the most fundamental experiences shared by the participants in relation to the phenomenon being examined. The computer software –NVivo11 by QSR –was used to methodically code the initial notes of the study and to determine the order of significance of the finalized themes.

Fourth Step: Final Identification of the Invariant Constituents and Themes

During the fourth step, the three major themes and 19 other invariant constituents were confirmed and authenticated. This practice validated the findings by reviewing the themes and matching them with the verbatim responses of the participants' respective interview transcripts. Moustakas (1994) suggested three other steps to take:

- Are they expressed explicitly in the complete transcription?
- Are they compatible if not explicitly expressed?
- If they are not explicit or compatible, they are not relevant to the participant's experience and should be deleted. (p. 121).

Fifth Step: Individual Textural Descriptions

In the fifth step of the analysis, individual textural descriptions of the participants' experiences were noted. This step required another round of review and validation of the major themes and invariant constituents generated from the analysis. As in the previous step, the verbatim responses of the 18 participants were again employed.

Sixth Step: Individual Structural Description

The sixth step followed the individual structural descriptions of the participants, applying the experiences of the participants from the previous step. This involved examining the quality of the experiences shared by the participants to better determine each participant's beliefs and experiences on the subject being explored.

Seventh Step: Synthesis of Composite Textural-Structural Descriptions

The last stage of analysis incorporated the invariant constituents and major themes established during previous steps. Here, individual perceptions and the universal experiences discovered in the initial stages of the study were synthesized, bringing together the meanings and essences of the experiences shared in the study.

Evidence of Trustworthiness

Four measures or standards as suggested by Lincoln and Guba (1985) were employed to ensure the trustworthiness of data, assessing the credibility, transferability, dependability, and confirmability of the study. Credibility was attained by collecting and analyzing the experiences of the participants. Each of the 18 young adults were asked to share their firsthand perceptions and knowledge on the subject of their willingness to use

preconception healthcare and prenatal care as a means of improving birth outcomes and improving overall health. Furthermore, all participants were provided with interview transcripts to review for accuracy, giving them the opportunity to examine, and modify their shared responses and lived experiences. Regarding the transferability of data, Moustakas' (1994) seven steps of the modified van Kaam method were used to analyze data and all analysis was reported in full. Dependability was also guaranteed by ensuring that all 18 participants were comfortable and focused during the interviews, and by affirming that the participants were not experiencing any problems or dealing with any issues that would influenced their shared responses. Finally, confirmability was addressed by performing a data audit of the entire research process, and by completing all three of the other standards as well.

Presentation of Findings

This section contains the findings from the phenomenological analysis of the interviews. In this section, the major themes, invariant constituents, and verbatim responses of the participants are presented in detail. However, it must be noted that only the themes that received 20% and above of the references or occurrences should be discussed in detail in order to ensure that only the most common and significant patterns or experiences are included in the presentation of findings (Hayes, 2009). Meanwhile, the themes that received less than 20% of references or ocurrences can be found in their respective tables and may need further research for validation.

GQ1. What are the behavioral practices of young adult women and men at risk for unintended pregnancies as they relate to preparing for early parenthood and for child-raising responsibilities?

The first research question explored the behavioral practices of young adult women and men who are at risk for unintended pregnancies as they relate to preparations for child raising and early parenthood. From the phenomenological analysis of the interviews with the 18 participants, one major theme and eight other invariant constituents emerged. The majority of participants reported that they have learned parenting practices and methods through observation or personal experiences. Meanwhile, eight other invariant constituents were produced that also addressed the first research question, but received fewer occurrences. Table 3 contains the breakdown of the results of GQ1.

Table 3

Breakdown of the Results Addressing RQ1

Themes and invariant constituent	Number of occurrences	Percentage of occurrences
Learning from observation or firsthand experiences --Witnessing parents, family members, and friends --Personal experiences as young parents	13	72%
Feeling concerned about the cost of raising a child at an early age --Needing to establish stability first	7	39%
Providing a loving and nurturing home to the children	6	33%
Learning parenting practices from formal courses or classes	4	22%

Working hard to raise their children, despite the obstacles	3	17%
Expecting lowered social life interactions	2	11%
Paying respect to the lessons instilled by parents and grandparents	2	11%
Parenting is a trial and error	1	6%
Ensuring the health and safety of the children	1	6%

Major Theme 1: Learning from observation or firsthand experiences. The first major theme of the study was the finding that 13 of the 18 participants learned and prepared for parenthood through secondhand observation or through their own firsthand experiences. Nine of the 18 participants stated that their parenting knowledge and skills came from witnessing the parenting of their parents, family members, and friends. Four of the participants indicated that their own personal experiences as young parents helped them gain the knowledge they needed to raise their own children properly.

Subtheme 1: Witnessing parents, family members, and friends. The first subtheme that emerged was the learning experience of witnessing parenthood from parents, family members, and friends. Participant 2 stated that she learned child rearing and parenthood from observing both her parents and grandparents. For this participant, her parents and grandparents were the greatest influences on how she plans to raise her children in the future. In addition, she reported that taking care of her nephews and nieces also added to her parenting knowledge and experiences. She said:

> Most of what I learned about child rearing and parenthood was by watching my parents and grandparents. I come from a very large family and I always had my brothers and sisters and tons of cousins around me all of the time. Watching how

> my parents and grandparents interacted with my brothers and sisters all the time, kind of gave me insight as to how I would eventually raise my own children one day. I kind of see my parenting skills, when I take care of my nieces and nephews.

Participant 4 explained that she had friends and family members who already have children. By observing them and listening to their stories, Participant 4 developed her own ideas and information on what parenting should be like, explaining: "I learned about child-rearing and parenthood directly through my own personal experiences with friends and family members who had children while we were in college." Meanwhile, Participant 7 believed that watching her parents was the most effective learning experience: "Basically, from watching my mom and dad, and from my career counselor while I was getting my GED. I also took a child development class in high school." Participant 10 added that his grandfather and father will be his role models when he becomes a parent someday. He also shared the other valuable lessons that his father instilled in him as a man and a future head of the family:

> I learned parenthood through my grandfather and father -they were great role models for me growing up. I learned from them that as a father, it important to always provide for and support his family and to always be there for his children no matter what.

Participant 11 simply stated that he closely observes other parents and family members with children, saying, "Mostly what I learned about raising kids and being a parent was from being observant of other people with their children." Participant 14

shared a personal experience about helping his ex-girlfriend raise her child. By helping her, he learned valuable lessons about the difficulties of raising a child as a single parent. In addition, he pointed to his father as also another good model for support children despite obstacles and difficulties. He said:

> Because I was helping my girlfriend raise her first kid from the previous marriage, I got a good sense of what it was like to be a father well before Melissa and I had a kid together. Although my dad wasn't around much in my life, he still provided for us and supported us in everything me and little brother did. So, in a sense, I learned from my old man about the importance of parenthood and child rearing.

Participant 16 explained that his mother is his greatest role model and parenting example in life, saying, "Much of what I learned about parenthood was from my mom and everything she did for me as a child." Participant 17 added that he learned parenthood through the experiences shared by his family and friends, explaining, "I would have to say that much of what I learned about parenthood and raising children was through personal experience and from my friends and family who already have kids of their own." Participant 18 also reported that his parents taught him lessons about child rearing and parenthood, and pointed to church teachings and the Bible teachings as significant sources of parenting information: "Much of what I learned about child rearing and parenthood was learned from my parents, at church, and was centered on the teachings from the Bible."

Subtheme 2: Personal experiences as young parents. The second subtheme that emerged was using their own personal experiences as young parents to acquire parenting skills and knowledge. Participant 5 stated that she already has her own children, and has learned a great deal from raising them over the years. She said:

> Most of my knowledge about child-rearing and parenthood is because I have so many kids… so I would say personal experience..., I had my first kid while I was junior in high school -I had no social support from my boyfriend or my family. So much of what I learned about raising kids was from raising my own kids.

Invariant Constituent 1: Feeling concerned about the cost of raising a child at an early age. The first invariant constituent that emerged was concern regarding the cost of raising a child as a young adult. The experience received seven occurrences from the analyzed responses of the 18 participants. Participant 3 explained that she has seen many of her friends struggle in raising their children at a young age. She said she believes it is important to be prepared and stable before deciding to start a family, saying:

> Personally, for me, I think that it would be rather difficult to raise a child at my age, plus I'm still in college and not working. I have a friend who was pregnant in high school and another friend who just had a baby a few weeks ago and both of them are single mothers. I see what they go through and both of them always say, they wish they would have waited. How much does it even cost to raise a kid today?

Participant 6 similarly stated the difficulty of raising a young child, saying it is particularly difficult having little to no support from her partner. In addition, given that she became pregnant at a very young age, she also had to limit her communication with her family, saying: “I personally remember it being hard trying to raise a child with no financial support, having no partner, and very little communication or even a relationship with my parents while I was pregnant.” Participant 11 stated that upon observing his friends and family members who have their own families, he realizes that it is costly to start and raise a family, especially at a young age. He shared, “I think that here in the United States, it takes lots of money to raise children. If I were to have kids now, I would have to work like six jobs just to be able to take care of them.”

Subtheme 1: Needing to establish stability first. Participants were quick to explain that based on their experience, they believe there is a need to establish a stable life before deciding to start a family. Participant 4 contended that young adults should establish a stable career and relationship before committing to raising children. From this participant’s perspective, starting a family at the age of 25 years old should ensure the health of both the mother and the child; as well as the constancy of the family. She said:

> I personally feel that it that it is important to first establish a career and secondly to be in a serious relationship or even married before committing to having children. I also feel that having a college education and being slightly older, at least over 25 or 26 years old better ensures the likeness that the newborn will be better off -much healthier and fully developed at term.

Participant 10 admitted that he is still not ready to become a father. The participant has been strictly following the advice of his parents to complete his education before committing to have his own family, explaining, “My parents have always told me that it was important to get my college degree first before becoming a father, so I’ve always believed that. Plus, I’m not ready to become a father right now.” Participant 17 again shared the lessons he has learned from witnessing the experience of his ex-girlfriendThis participant stated his belief in the advisability of starting a family upon completing any academic studies and obtaining a stable profession, saying:

> For me, I feel that it’s way too expensive to raise kids right now, plus I’m not really interested in having kids just yet -I’m still young and I’m in school full time, so I wouldn’t even have time. I would rather finish school and start a second career before I settle down with a wife and kid. As far as child rearing, I think it’s important that both parents be involved in raising their kids. I saw how much of an impact it had on my ex-girlfriend’s daughter –it was as though she always had to choose between her mom and dad every other weekend.

Invariant Constituent 2: Providing a loving and nurturing home to the children. The second invariant constituent that emerged from the data analysis was the idea that it is important to provide a loving and nurturing home for children. Six of the 18 participants stated the importance of providing a nourishing and nurturing home for children. Participant 2 said that through her parents, she learned the importance of building a home that would support the needs and growth of the children, saying: “I

learned through watching my parents that it was important to provide a home that was nurturing and that allowed each one of my brothers and sisters the ability to grow and learn from one another." Participant 8 stated a similar belief, explaining, "I feel that it is important to provide support for your children and to make sure that they are raised in a nurturing environment." Participant 12 stated that through her personal experience as a mother, she came to understand the importance of being supportive to the children, addig that she believed in the positive encouragement of parents to their children:

> For me personally, I found out the hard way that it was extremely hard in the beginning to support my family. For one, I had very little education and I was just getting my businesses started -but as the years went on and my business slowly started to grow, not until then was I in a better position to support my family. I feel that it's important as parents to be nurturing and to help them in making good life choices primarily through my personal experiences of having children.

Participant 13 shared his personal parenting tips and practices as a father to a young child:

> We also make sure we show him right from wrong and explain to him why certain things are wrong rather than just yelling at him. I personally try not to take my frustrations out on him, for one he's just a kid and it's not his fault that I may have had a bad day at work or if me and his mom had a disagreement about something. We try never to fight in front of him either.

Participant 15 added that strong support from home is one of the most crucial elements of parenting, saying:

> For me personally, I feel that it's important that I provide them with support, a stable home structure and a nurturing environment. I would have to say that knowing how to raise your kids is common sense, and at the end of the day, most of us are our parents anyways right'.

Finally, Participant 18 emphasized that a home built on the teachings of God was the key experience and lesson instilled by his parents. He said:

> I was always surrounded by people who believed that God and family came first and despite always being at church all the time, my childhood experience was still a lot fun. I think the two correlates because it helped my parents with establishing a foundation for raising their kids which was developed through the structure of love, teaching and boding that held are family closely together.

Invariant Constituent 3: Learning parenting practices from formal courses or classes. The third invariant constituent was the experience of learning parenting practices by attending formal courses or classes. Four of the 18 participants shared such experiences. Participant 7 said that high school classes played a role for her, explaining, "Basically, from watching my mom and dad, and from my career counselor while I was getting my GED. I also took a child development class in high school." Participant 8 added, "I became aware of child rearing and parenthood both directly and indirectly

through personal experiences of having kids and through a number of child-developmental courses in psychology."

GQ2. What are the attitudes and beliefs of young adult women and men at risk for unintended pregnancies as they relate to healthy preconception behaviors and optimal prenatal care?

The second guiding question addressed the discovered attitudes and beliefs of young adults at risk for unintended pregnancies, when it comes to healthy preconception behaviors and optimal prenatal care. While analysis the interviews using Moustakas' (1994) modified van Kaam method, one major theme and four invariant constituents emerged. A majority of the young adults reported their belief in the need to make healthy life choices. The second guiding question also generated four other invariant constituents. Table 4 contains the complete results of the themes that emerged from the second research question

Table 4

Breakdown of the Results Addressing RQ2

Themes and invariant constituents	Number of occurrences	Percentage of occurrences
Making healthy life choices --Working out or exercising regularly --Eating healthy and having a proper diet --Avoiding drugs and alcohol --Visiting the doctor regularly --Maintaining a monogamous relationship --Using protection and contraceptives	18	100%
Gaining knowledge from formal classes and courses --Following the doctors' orders	10	56%

Gaining knowledge from personal experiences	3	17%
Having the right pregnancy knowledge or preplanning and education	3	17%
Gaining knowledge from the media	1	6%

Major Theme 2: Making healthy life choices. The second major theme of the study was the belief in the need to always choose and make healthy life choices. All 18 of the interviewed participants stated their belief in the need to always think before they act in order to attain the healthier choices in life. Participant 8 stated that optimal prenatal care starts with the parents' decision to live a healthy lifestyle, saying, "Healthy preconception behaviors and optimal prenatal care begins with healthy lifestyle choices well before deciding to have children." Participant 9 added that once the mother has confirmed her pregnancy, both parents must work to achieve a healthier lifestyle for the baby, explaining, "I feel that prenatal care should start when you first know that you are pregnant, but making healthy choices should start well before that."For Participant 12, preconception behaviors must start months before the couple decide to conceive or have children, she said:

> Now that I better understand what takes place during a woman's pregnancy, I would have to say that preconception behaviors and good life style choices should begin months before deciding to have children, rather than once you and your partner find out that she is pregnant.

Participant 13 expressed the importance of living a healthy lifestyle at all times. For this participant, choosing a healthy lifestyle even if there are no plans for having a child yet benefits mothers and their babies in the long run:

> I think it's important for woman and the men to consciously make healthy lifestyle choices regardless if they plan on having children, already had kids or never plan on having kids. If they haven't had kids yet, I think that choosing to make healthy life style choices, long term, will ensure a positive healthy pregnancy –not only that, it minimizes health problems for the individual. My philosophy is that if you make healthy lifestyle choices, you have a better chance of fighting health complications.

Participant 14 explained that healthy lifestyles determine the health of both the mother and the child, saying, "It's all about the life choices we make which ultimately determine our overall health as well as the health of our children."

Subtheme 1: Working out or exercising regularly. Seven of the 18 participants shared the perception that the first decision or change that parents must make is to work out or exercise regularly. Participant 1 shared the lifestyle choices and changes he believes parents must make to achieve the ideal prenatal care:

> I think it's very important for women to make healthy lifestyle choices like exercising, eating healthy, going to their doctor's visits regularly, having one sexual partner and using protection. I think in order to have a healthy baby -I feel that it's the women's' healthy lifestyle choices that ensure healthy pregnancies.

Participant 3 explained that daily exercise is one of the factors that women should consider even if they are not planning to get pregnant in the near future. This participant suggested that the mother's good health can greatly determine the baby's condition in the long run:

> For me personally, I think that it is very important to eat healthy, exercise daily, and to always make healthy life style choices. I'm not really concerned with becoming pregnant, because I'm really focused on my education, having fun, and experiencing new adventures in college –don't get me wrong though, I know how important my life style choices are to my health as well as my babies' health when I decide the time is right for me to get pregnant.

Participant 16 added that women should take care of their bodies correctly and regularly, saying, "I would say that if a woman wants to have a healthy pregnancy, she has to make sure she is taking care of her body, eating healthy, and not abusing her body with drug or alcohol."

Subtheme 2: Eating healthy and having a proper diet. The second subtheme that emerged was the need to have a proper diet, with seven of the 18 participants commenting on this idea. Participant 4 said that she simply believed in "Eating healthy, routine exercise." Participant 10 shared several suggestions for achieving a healthy lifestyle:

> I know that it is important for women to attend their doctors' visits when they first become pregnant -and that it's important for the female to eat healthy, exercise,

> and immediately stop drinking alcohol once she becomes pregnant in order to minimize pregnancy complications.

Participant 16 added that women should take care of their bodies, and not abuse them, saying, "I would say that if a woman wants to have a healthy pregnancy, she has to make sure she is taking care of her body, eating healthy, and not abusing her body with drugs or alcohol."

Subtheme 3: Avoiding drugs and alcohol. The sixth subtheme or healthy lifestyle recommendation was to avoid drugs and alcohol during pregnancy. Participant 2 suggested that alcohol use be minimized even before pregnancy, and once pregnancy has been confirmed, the mother must eliminate it altogether, adding, "Some life style choices that I feel will ensure a healthy pregnancy, are using some type of contraceptive to prevent [sexually transmitted diseases], minimizing alcohol use, not having multiple sex partners." Participant 3 stated the belief that there are many possible risks in a woman's pregnancy, and that complications may occur if the mother continued using drugs or alcohol when pregnant:

> Based on what you are saying about what implications are, I think that abortions or low birth weight of the newborn may happen, especially if the woman didn't know she was pregnant to begin with so she may not be eating properly or worse - using drugs or consuming alcohol during her pregnancy.

Participant 7 made a similar point, saying, "Alcohol and drugs can seriously complicate a pregnancy –so by not drinking or smoking I think that it can positively

increase the mother's chance of having a health pregnancy." And Participant 10 added mothers must be responsible in their lifestyle choices in order to minimize pregnancy issues or complications:

> I know that it is important for women to attend their doctors' visits when they first become pregnant -and that it's important for the female to eat healthy, exercise, and immediately stop drinking alcohol once she becomes pregnant in order to minimize pregnancy complications.

Subtheme 4: Visiting the doctor regularly. The fourth subtheme was the need to visit the doctor regularly. Participant 1 stated that once the couple discovers that they are expecting a child, they must constantly visit their doctor to ensure a safe and healthy pregnancy. Participant 5 added that going to medical checkups is one way to protect the baby, and to minimize the risks of pregnancy by making the parents aware of the do's and dont's during this crucial stage:

> Although I don't plan on having more children, I think it's important for women to take preconception planning courses, go to their medical checkups so that they know that they are having a healthy pregnancy. I think that some of the classes should also be offered in Spanish in order to reach the Hispanic population in my community.

Participant 17 agreed that medical check-ups can secure the development of the child, and the safety of the mother through the suggested prenatal program:

> I know that it is important for women who become pregnant to see a doctor immediately, so that the doctor can put them on a prenatal program –also, this gives the nurse or doctor a chance to check on the baby to make sure that it is developing properly.

Subtheme 5: Maintaining a monogamous relationship. The fifth subtheme that emerged was the belief that every individual should strive to achieve and maintain a monogamous relationship. For Participant 1, healthy lifestyle choices also "Having one sexual partner." Meanwhile, Participant 2 stated the belief that parents should protect themselves from sexually transmitted diseases by maintaining just one sexual partner: "Some life style choices that I feel will ensure a healthy pregnancy, are using some type of contraceptive in order to prevent [sexually transmitted diseases], minimizing alcohol use, not having multiple sex partners."

Subtheme 6: Using protection and contraceptives. The sixth subtheme that followed was the need to use protection and contraceptives. Participant 11 insisted that young adults not planning for and prepared to start a family should consider using contraceptives:

> I think it's important for both male and females to make healthy life style choices regardless if they're going to have kids. It's also important for the man to provide support when their partner becomes pregnant. But if you're not planning to have children, you should use some sort of protection.

Invariant Constituent 1: Gaining knowledge from formal classes and courses.

The first invariant constituent that emerged was the experience of gaining knowledge from formal classes and courses. For 10 of the 18 participants, they noted an ability to apply the information acquired from their former classes and programs to their current knowledge on prenatal care. Participant 2 stated that her healthy preconception practices were developed through her adolescence development psychology course and a personal training program. Through these experiences, she explained, she learned the proper fitness plan and diets for a healthy pregnancy:

> Most of what I learned about healthy preconception behaviors and optimal prenatal care was through my adolescence development psychology course. I also learned a few things from my personal training certification class two years ago -I've had the opportunity to work with a few women who were pregnant. Being in charge of their fitness plan as well as their diets, I had to make sure we were moving in the right direction in order to ensure a healthy pregnancy.

Participant 5 admitted to being a health enthusiast, sharing that she has previously attended nutrition classes and other planning courses that she found to be vital to her current knowledge in achieving optimal prenatal care:

> Personally, for me, it's important to stay on top of my health. I attend nutrition and diabetes classes. Although I don't plan on having more children, I think it's important for women to take preconception planning courses, go to their medical checkups so that they know that they are having a healthy pregnancy. I think that

> some of the classes should also be offered in Spanish in order to reach the Hispanic population in my community.

Participant 7 said, “I became aware of healthy preconception behaviors through my child-development class.” And Participant 8 added that her firsthand experiences and pregnancy health class in high school have been very helpful, noting, “I would have to say that much of what I learned about this topic was gained directly through own personal experiences and my child-development psychology class.” Participant 10 also similar experiences, stating, “I remember reading about health care before pregnancy from my health class in high school.” Participant 15 explained that he uses his knowledge from psychology courses and his experience working at a training center in attaining ideal prenatal care for his wife:

> Much of what I learned about preconception health was though the psychology courses I took as well as from the resource center that I worked at for a little while. That’s how I met my wife, she also worked at the center. She was the one who would schedule the preconception courses for the women who came in for help.

Subtheme 1: Following the doctors’ orders. One subtheme that emerged from the data was the importance of following the doctors’ orders through the personal check-ups or short courses attended. Participant 4 shared that her doctor was generous in sharing the needed information and practices to achieve an ideal pregnancy care:

> I became aware of healthy preconception behaviors and optimal prenatal care directly through doctor, who on every visit talks to me about healthy life-style choices and way of ensuring a healthy pregnancy when I decided to have children. My doctor also discussed the benefits of preplanning my pregnancy.

Participant 6 shared that her doctors were able to provide the general information needed for ensuring a safe pregnancy and the proper care for the child, saying, "Primarily through my own experiences. I also remember receiving general information at my WIC appointments, doctors' visits with the children, and a little from my gynecologist."

GQ3. What are the perceived barriers or obstacles that young adult women and men at risk for unintended pregnancies face in accessing perinatal care?

The third guiding question focused on the perceived barriers or obstacles faced by young adults at risk for unintended pregnancies in regards to their efforts to access and use perinatal care. One major theme and seven other invariant constituents were developed from the data. A majority of the participants pointed to a lack of awareness regarding pregnancy and proper care as the key obstacles faced, and noted language barriers as well. The data revealed seven other invariant constituents or important barriers as well. Table 5 contains the breakdown of the results addressing the final research question.

Table 5

Breakdown of the Results Addressing RQ3

Themes and invariant constituent	Number of occurrences	Percentage of occurrences

Lacking awareness on pregnancy and proper care	9	50%
--Language barrier for the Latinos		
Having transportation issues	5	28%
Having issues on immigration status	5	28%
Experiencing medical issues or complications	5	28%
Lacking a support system	3	17%
Lacking medical health insurance	2	11%
Having financial issues in supporting the needs of the child	2	11%
Unhealthy lifestyle before pregnancy	2	11%

Major Theme 3: Lacking awareness on pregnancy and proper care. The third major theme was the barrier of inadequate awareness regarding pregnancy and the proper care that it entails, with 9 of the 18 participants commenting on this theme. Participant 3 stated the importance of providing pregnancy awareness at a young age, indicating that the education should start at home and come from parents:

> In order to best address these challenges, I think it's' important that the topic be discuss much earlier than the exposure I received in college. I think that it would also be better for parents to discuss this with their children maybe before their kids get out of junior high.

Participant 9 added that disseminating the information to young adults is challenging. Even when information is available, there are concerns regarding the timely and successful distribution of pregnancy information, he noted:

> I think one of the main challenges is that the information is not reaching young adults in a timely manner –and most women who become pregnant, the likelihood is that they are finding out late and most likely haven't prepared to have kids.

Participant 13 admitted that he was careless when he was younger, choosing to party and have a good time instead of making the safe and correct decisions in life. He suggested that key information providers must work to ensure proper communication of the information to the target audience of the young adults:

> I think that we would have taken our choices much more serious. Understandably we were young and having an enjoyable time partying and drinking, and the last thing on our mind was her getting pregnant –we were simply just having a good time and enjoying life as it unfolded. Moving forward, I think that it's just of matter of making sure young adults get the information from their doctors, teachers and more importantly their parents. Above all else, it's all about making good life choices.

Participant 15 added that there are young adults who have no access to education at all, and thus the lack of pregnancy knowledge and awareness, saying, "I remember at the resource center, many of the women who came to see us for help, did not have access to transportation, they had no health insurance and most of them had little to no high

school education." Participant 16 shared that pregnancy planning is lacking for young adults like him and suggested that more studies be conducted with the goal of raising awareness on pregnancy education:

> For real though, I never thought much about the risks of having a baby without planning for it first. I think the best way to address these issues would be for you to invite more people my age to sit down with you to discuss these topics in more detail. It seems like you care enough about this topic and I think young guys would listen to you.

Subtheme 1: Language barrier for Latinos. The first subtheme under the lack of awareness was the issue of the language barrier for Latinos. Three of the participants said that most of the information available is too difficult for Hispanics and Latinos to comprehend. Participant 5 stated her belief that the information aims at the wrong target audience and does not suit Hispanics and Latinos, saying, "I feel that the current information on preconception health and prenatal care is not tailored towards Hispanics/Latinos living in my community." Participant 11 added that Spanish is the primary language of most of the people in that community and that most residents understanding English, which is the primary language used for most available information available on pregnancy care:

> I also think that the information about medical benefits and pregnancies should be interpreted in Spanish also, because many of the people in my area, for them English isn't their primary language, and it isn't that strong. Maybe they can also

> make health care and health resource here in California more accessible to undocumented immigrants living in the community.

Invariant Constituent 1: Having transportation issues. The first invariant constituent that emerged was the issue of transportation, which received five interview occurrences. Participant 2 noted that transportation is a big issue when there is a need to visit the doctor or meet other important obligations:

> I would imagine that not everyone who becomes pregnant has a car or will always have transportation to their doctors' visits. I remember when my mom was pregnant with my younger sister a few times she didn't have a ride to the doctor's office because we only had one car. I remember riding the bus to the doctor's office and then stopping to get ice cream on the way back home.

Participant 5 added that: "In my area where I live, many of the residents are Hispanic, make very little money, may or may not have transportation or are here in the United States illegally." Meanwhile, Participant 8 said, "Other challenges I feel are important to consider are transportation, financial issues and complications of preterm births." And Participant 12 expressed the thought that most of the time, young adults have limited resources and are not able to fulfill their duties and obligations:

> I would have to say family support, limited resources due to immigration status, not enough information on preconception health and prenatal care for young people who only speak Spanish, and transportation are the main challenges that I personally feel need to be addressed in this community.

Invariant Constituent 2: Having issues on immigration status. The second invariant constituent was the issue of the young adults' immigration status, with five of the 18 participants sharing this barrier or obstacle. Participant 2 stated that along with the basic concerns of all young mothers, many cases also include concerns about immigration status. She said, "Some of problems that may be encountered might be transportation issues, not having adequate medical health insurance, or possibly immigration status." Participant 5 stated the belief that many young adults do not have access to the resources they need because of their immigration status: "In my area where I live, many of the residents are Hispanic, make very little money, may or may not have transportation or are here in the United States illegally." Participant 11 explained the concerns of young adults who are not U.S. citizens, saying:

> I think that of the main challenge is with the type of medical care and the limited resources that are available to non-us citizens. I have friends and family members who choose not to go to the clinic because they are scared they will get turned in by and deported back to Mexico.

Invariant Constituent 3: Experiencing medical issues or complications. The third invariant constituent was the barrier of medical issues and complications, addressed by five of the 18 participants. Participant 4 said that the challenges depend on the medical and economic conditions of the mother:

> I think that some of the challenges that may take place in perinatal care will be different for each pregnant woman. I think that the pregnancy experience will be

> based on her medical history, current health, and life style behaviors, education level, financial situation, and her relationship status.

Participant 6 added that complications may emerge from the medical conditions of the mother that may affect the baby later on:

> The challenges that I personally feel that can complicate the perinatal process are high or low blood pressure of the mother especially during the time she is giving birth. Anemia and depression can also complicate the child birth experience. Long term, especially after the child has been born, the mother or the child might have psychological issues.

Summary

Chapter 4 contains the findings from the phenomenological analysis of the 18 interviews with young adult women and men at risk for unintended pregnancies. This phenomenological study explored the lived experiences of young adults in terms of their willingness to use preconception healthcare and prenatal care as a means or improving birth outcomes as well as improving overall health. The researcher gathered data during face to face interviews with participants, and the interviews followed a semi-structured format. To analyze data, the researcher first grouped related responses and comments. Then, the researcher eliminated ideas which did not add to an understanding of the topic or were irrelevant to the study purpose. Next, the researcher identified and labeled comments which suggested the emergence of impotant themes. Finally, the researcher

identified major themes among the data by reviewing comments which were repeated by multiple particpants and presented insights which were relatable across participants.

Three major themes emerged from the analysis, addressing the three guiding questions of the study. Participants pointed to their own firsthand experiences as parents and their secondhand observations of parenting practices of parents, family members and friends as a primary source of information and knowledge. Furthermore, participants pointed out the the need to make healthy lifestyle choices in order to have optimal preconception health and prenatal care, with emphasis on: regular exercise; a healthy diet; abstention from consumption of alcohol, tobacco and drugs; regular doctor's visits; maintaining monogamous relationships; and using contraceptives. Participants also identified lack of awareness as the key obstacle or barrier for accessing perinatal care.

Chapter 5 provides a more detailed discussion of the findings in relation to existing literature, makes recommendations for future study, outlines the study implications, and presents conclusions.

Chapter 5: Discussions, Conclusions, and Recommendations

Introduction

The purpose of this phenomenological study was to explore the lived experiences of young adults on their willingness to use preconception health and prenatal care to improve birth outcomes and their overall health. The findings were expected to offer insights into the underuse of preconception health and prenatal care among young adults living in the United States. According to Unite for Sight (n.d), preconception health care increases the wellbeing of both parents and children, thus contributing to a healthier society overall. The main guiding question posed for this study was: What are the lived experiences of young adults in terms of their willingness to use preconception healthcare and prenatal care as a means of improving birth outcomes as well as improving their overall health? The study also addressed three subquestions that helped to illuminate the central guiding question:

GQ1. What are the behavioral practices of young adult women and men at risk for unintended pregnancies as they relate to preparing for early parenthood and for child-raising responsibilities?

GQ2. What are the attitudes and beliefs of young adult women and men at risk for unintended pregnancies as they relate to healthy preconception behaviors and optimal prenatal care?

GQ3. What are the perceived barriers or obstacles that young adult women and men at risk for unintended pregnancies face in accessing perinatal care?

I used the health promotion model as the lens for understanding the willingness of young adults were to use preconception healthcare and prenatal care to improve birth outcomes as well to improve their overall health, I interviewed 18 young adult women and men at risk for unintended pregnancies – nine females and nine males – between the ages of 18 and 25 years. Of the 18 participants 11 were Hispanic, four were White, two were South African, and one was Asian American. All were high school graduates, and six of the 18 had earned college degrees. Among the 18 participants, five were married, 12 were in a relationship, and one participant did not disclose her marital status. Half of the 18 participants already had children. Given the varied mix of relationship status and educational attainment among the participants, findings represent a diverse population.

Summary of Findings

Data analysis revealed themes and subthemes for each guiding question, and each set of findings has its own implications. The first guiding question revealed one major theme and two subthemes. The main theme was that most participants (72% of them) learned parenting practices and methods through through their first-hand experiences as parents or through their secondhand observations of other parents. One of the two subthemes was participants' reports that they learned about parenthood and parenting from secondhand observation of the parenting done by their own parents, as well as family members and friends. Some claimed that their parents and grandparents had a great influence on what they know about parenting as well. Participants without children noted that witnessing how their parents raised them or their siblings, and observing how

their grandparents raised their parents was enough to help them in the future endeavor of raising their own children. Participants pointed out that their parents and grandparents instilled valuable lessons in them regarding parenting, and served as their main role models for parenthood. Some participants reported that helping with the care of nieces and nephews improved their parenting knowledge and provided valuable experience. This was especially true for those with large families.

Participants also referenced the influence of their friends and other relatives. Listening to their friends' parenting stories made them aware of possible child-rearing methods, and some learned about parenting from former relationships with partners who already had children.

The second subtheme related only to those participants who already had children. Those participants revealed that their own personal experiences as young parents prepared them for their next children.

In relation to the first research question, participants also specifically shared what they learned from their own experiences or their parents, friends, and relatives. Responses included that discovery of parenthood's costs, the importance of a loving and nurturing home, the benefits of attending formal courses or classes, and the importance of establishing stability before taking on the challenges of parenting.

The second research question explored the attitudes and beliefs of young adults at risk for unintended pregnancies regarding healthy preconception behaviors and optimal prenatal care. Using Moustakas' (1994) modified van Kaam method to analyze the

interviews, one major theme and six subthemes emerged. The major theme was participants' expressed belief in the necessity of making healthy life choices. All of the 18 participantsasserted the need to think before acting in order to make healthy decisions. In particular, they stated that optimal prenatal care begins with the decision to pursue a healthy lifestyle.

Participants acknowledged that healthy preconception behaviors and optimal prenatal care are not likely to happen unless healthy lifestyle choices have been made in advance of deciding to have children. Participants added that after becoming pregnant, making healthier choices becomes even more important. Participants agreed that healthy choices should begin before pregnancy and that prenatal care should begin immediately after becoming pregnant. Participants expressed the importance of living a healthy lifestyle at all times, not just when they know that they will have a child soon, since a healthy lifestyle determines not only the health of the parent, but also of the child.

The six subthemes revealed the changes or decisions that should be made in order to achieve a healthier lifestyle. Participants revealed that to achieve a healthier lifestyle, they should exercise or work out regularly, have a proper diet, avoid drugs and alcohol, visit doctors regularly, practice monogamy, and use contraception. Those with definite plans for becoming pregnant stated a belief that living a healthy lifestyle is one way to prepare their bodies for having a baby.

A minority of participants stated a belief that enrolling in formal classes and courses and listening to doctors' orders can increase knowledge about healthy pregnancy

and parenting. Participants who expressed this idea claimed that they gained significant information regarding healthy preconception behaviors and optimal prenatal care through courses such as adolescence development psychology courses, personal training certification classes, and preconception planning courses. Some participants said that most optimal healthy preconception behaviors and optimal prenatal care knowledge came directly from their doctors.

The third guiding question explored the perceived barriers or obstacles that young adults face in their efforts to access and use perinatal care. The analysis revealed one major theme and one subtheme. Regarding this question, minority responses revealed significant insights. The major theme was that accessing perinatal care is obstructed by a lack of awareness regarding pregnancy and the kind of care that pregnancy entails. Participants explained that it is important for pregnancy awareness to begin at a young age, but noted that most young adults do not have that advantage. They also indicated that education should begin at home and come from parents, a situation that is often not the case either. Interview answers revealed that a lack of information could be avoiced if the appropriate topics were presented in their high school and college courses. Participants also noted that although information is available, there are often concerns about its timely and successful distribution to those who need it.

Participants noted that having the correct information at the right time poses one of the greatest challenges to effectively using perinatal care. Women may discover the information too late, or once they already have children. As a result, many are careless,

ignorant, and misinformed about perinatal care and even parenthood. Participants admitted that young adults often prioritize partying and having a good time, pushing safe and healthy preparation for pregnancy and parenthood to the back burner until the unexpected happens. The young adults suggested that getting necessary information from their parents, teachers and doctors improves their chances of making good life choices. But the evidence showed that young adults often do not have access to the necessary education regarding perinatal care and pregnancy.

One subtheme also emerged from the data – the reality of language barriers for the Latino young adults. Interview responses indicated that even when information is available, it is generally available in English and is therefore difficult for Latinos and Hispanics to adequately understand. Participants also noted a lack of information accurately tailored to the young adults for whom Spanish is their primary language One participant suggested that medical information regarding pregnancy interpreted into Spanish would make a difference by providing a significant portion of the at-risk population with better knowledge about perinatal care.

Several minority responses are worth noting for their insights into the third research question and the information about additional barriers to reproductive, preconception and perinatal healthcare. Transportation issues were mentioned by a small number of participants, as were immigration issues and medical complications. While these barriers were identified by a small portion of the participants group, addressing them could make a difference in perinatal care access for a significant number of the

young adults at risk for unintended pregnancies. All of these barriers can prevent the young adults from using perinatal care.

As noted by several participiants, pregnant individuals do not necessarily have the means of transportation to the doctor's office to access necessary care. Many live in far-flung communities without immediate access to perinatal healthcare, and have little money to finance their transportation. A significant number of young adults simply have very limited resources, making it difficult for them to adequately care for their pregnancy.

Immigration status also poses a barrier to perinatal care. The participants who noted this barrier claimed that they must carry concerns about their immigration status in addition to the basic concerns of all young mothers. The immigration status also affects their access to healthcare and insurance. And since many Hispanics young adults have limited incomes, they may also face transportation hurdles. Those who are in the United States illegally cannot easily obtain healthcare coverage. And some refuse to access perinatal care for fear that their immigrant status will be used to deport them.

Another barrier pointed out by a minority of respondents is that of existing medical issues or medical complications. Some young mothers experience medical problems that make it difficult for them make doctor's visits or that complicate the perinatal process. Conditions such as anxiety and depression can also complicate the child birth experience impede access to perinatal care.

Interpretations of Findings

This phenomenological research revealed significant problems faced by the young adult women and men who are at risk for unintended pregnancies. The findings revealed that knowledge about parenthood for the majority of these young adults comes from their first-hand experiences as parents, or from secondhand observation of the parenting practices of their parents, family members, and friends. Such findings contribute to the existing literature, which did not examine how young adults at risk of unwanted pregnancies obtained their knowledge about early parenthood, parenting, prenatal care, preconception care, and pregnancy. Past studies portrayed young adults at-risk of unwanted pregnancies as having no parenting knowledge, but these findings tell a different story. While there is often a lack of accurate information about parenting or prenatal care, this study showed that most young adults at risk of unwanted pregnancies or who have experienced early pregnancy do have some knowledge about caring for a baby. However, the findings also highlight the need for giving attention to this particular group in order to equip them with the increase their willingness to access the prenatal care that they need.

Another important finding is that participants acknowledge the need to make healthy lifestyle choices in order to have a healthy preconception and optimal prenatal care. Specifically, the participants emphasized that lifestyle changes should focus on: exercising regularly; eating a healthy diet; avoiding drugs and alcohol; visiting the doctor regularly; maintaining monogamous relationships; and using contraceptives. These

findings demonstrate that while participants may not adhere to those principles, they do understand the need to strive for health even if they are not yet pregnant. Studies have shown that evidenced-based preconception interventions that would reduce the risk for preterm births by improving women's overall health during pregnancy, which include living a healthy lifestyle. Family planning to prevent adolescent pregnancy and unintended pregnancy, as well as promoting healthy nutrition and optimal weight prior to pregnancy are necessary (Bhutta, Dean, Howson, et al., 2013).

Finally, the study findings indicate that for the majority of the young adult participants, the main obstacle or barrier to perinatal care was the lack of awareness regarding pregnancy and proper care. These findings have support in existing literature. For example, past researchers addressing the specific barriers to preconception care found that these are usually associated with ethnicity and socioeconomic factors (Borrero et al., 2010). Oftentimes, perinatal care is most limited for vulnerable populations with the greatest need (Borrero et al, 2010). Past researchers have also identified ways to address these disparities, pointing to universal health care coverage, publicly funded abortion clinics, increased information access in poor communities, and family planning tailored to clients' needs (Borrero et al., 2010; Torres et al., 2013). Past researchers have asserted that across the United States, minorities usually face multiple barriers to preconception health care, as evidenced by their higher rates of unintended pregnancies (Borrero et al, 2010; Collins, 2016).. Barriers remain despite the fact that community-based, maternal, child, and reproductive health education programs are well-positioned to promote

preconception care to immigrants and despite the fact that many immigrants are interested in the subject. For low-income young adults, knowledge regarding preconception health care and reproductive life planning are simply lacking (Collins, 2016). However, past studies have revealed many adults of childbearing age were interested in acquiring more information about preconception care and reproductive life planning (Borrero et al., 2010; Collins, 2016). The findings of the current study confirmed this. The current study also confirms conclusions of past studies that healthcare providers should consider income and racial disparities when implementing preconception healthcare (Borrero et al., 2010; Collins, 2016).

This study's findings coincide with previous research findings indicating that most young adults are moderately to poorly informed about preconception health and, as a result, engaging them in preconception care is difficult (Bhoday et al., 2013). A lack of knowledge about preconception care puts the implementation of existing preconception care at odds with some women's perceptions of what becoming pregnant should be like (Barrett et al., 2014; Beaufort et al., 2013). This current study, like those studies, reveals the necessity for women to receive preconception counseling that leads to healthier behaviors. This study, like those, establishes the link between preconception care counseling for women and the subsequent adoption by those women of more positive behaviors (Barrett et al., 2014; Beaufort et al., 2013)

This study included male participants, even though it seems that most of the responses reflected more of the females' experiences. Past studies have shown the

importance of fathers' prenatal and preconception care perspectives, and have established that there are no significant differences between the perceptions of males and females regarding preconception healthcare and prenatal care (Beaufort et al, 2013; Kost & Lieberg, 2014). Both young males and females usually have wrong and inaccurate information (Kost & Lieberg, 2014). There was no significant difference between men and women regarding pregnancy intentions either, which makes male and female understanding and use of prenatal services equally important.

The current findings that young adults would benefit from more educational intervention regarding prenatal care are well established in the literature. Astone et al. (2015) found that both men and women would benefit from some form of family planning, and that even though these men had access to healthcare services, they did not receive preconception counselling or any other reproductive information.

Limitations of the Study

As a qualitative study, the study findings are not universally true to all individuals or all societies (Houghton, Casey, Shaw & Murphy, 2013). The subjects all resided within a defined geographical location, so the study result may not pertain to individuals living in difference societies with varying cultures. Furthermore, the small sample size of the qualitative study makes it impossible to gather data from a truly representative sample. Therefore, while the present study presents important finds which can be useful to healthcare practitioners, it does not determine causation of all issues related to healthcare in all populations. However, for improved credibility, I asked participants to

check the transcripts for accuracy and to make sure that results were objective and valid throughout the research process (Miles et al., 2014). To improve dependability and transferability of the findings, I used an audit trail and provided a complete and detailed description of the processes included in implementing the methodology and producing the detailed findings of the study, a measure that will allow future researchers to apply the findings to other studies (Miles et al., 2014). I -I has listed the seven steps of data analysis as clearly as possible.

Recommendations

The current study and its findings add to the current body of literature on the value of preconception healthcare and prenatal care, as well as the reasons for their underuse. The study also filled knowledge gaps regarding reproduction and revealed effective ways of addressing those gaps. The current findings provide insights into how young men can gain a better understanding of women's health during their reproductive years and how they can best provide support to their partners during the critical reproductive window. Despite these findings, the topic merits continued exploration by future researchers.

In particular, the current study has certain limitations that future researchers should try to avoid or overcome. For instance, the study was limited by its focus on a small population of young adults who are at risk for unintended pregnancy. Future researchers can apply the methodology of this study, but expand it to different populations. The study was also limited by its phenomenological research design, which

gathered subjective data that provides limited opportunities for generalization. It was also difficult to avoid all personal bias, though I employed all possible measures to do so. The study was also limited in sample size to 18 participants – an acceptable sample size, but still on the small side. The small sample size makes it difficult to label the participant's experiences as typical for their population segment. Future studies could make use of different qualitative research methods or opt for a quantitative approach. For instance, a quantitative study exploring the relationship between income status and prenatal care could add useful data, as could studies of other factors that relate to prenatal care, such as educational level, partner support, parental support, gender, age, and others. Such relationships could be better with a quantitative method. Understanding such relationships could also solidify the findings of the current study, particularly the finding that a lack of resources and knowledge affects the understanding and use of prenatal care. The current findings did not significantly differentiate between young adults who had children and those who did not, and studies that address those differences could lead to a better understanding of the underuse of prenatal care by certain groups of young adults.

Implications

Researchers have highlighted that parents– and particularly mothers who seek out early and regular perinatal care during their pregnancy – significantly increase their chances of healthy pregnancies (National Institutes of Health, 2013). However, the current study has shown, through the investigation of young adults' lived experiences, that many young adults are not seeking out early and regular perinatal care, and that

many don't know about it at all. This should be changed. The findings support the need to provide more effective means of creating, promoting and distributing preconception healthcare and prenatal care programs that will be more helpful to young adults, especially those who are at risk of unintended pregnancies. There is also room to address the several significant barriers to prenatal care faced by the young adults like those highlighted in the current study.

Policymakers must devise strategies that can provide at-risk populations with appropriate and correct information at the right time. As revealed by the current study, a majority of young adults learn about the available prenatal care information too late. If policymakers would intervene with the correct programs, many women would cease being careless, ignorant, and misinformed about perinatal care and parenthood. Schools and households should also understand the need for educating children about early pregnancy, its implications, and the necessary healthcare. This population group often prioritize having fun and partying, relegating pregnancy preparation ad parenthood preparation to low priority. If schools and families work to make sure that young adults get information about pregnancy and related healthcare from experts and doctors, the young adults would better prevent unintended pregnancies.

Current information about perinatal care should be translated into Spanish and other languages in order to reach as many at-risk young adults as possible. Most of the currently available information is in English, making it difficult for a large segment of the U.S. population to benefit from it.

Other barriers such as transportation, low income levels, and immigration status can be addressed if information about young pregnancy, prenatal care, and young parenthood is disseminated locally by clinics and hospitals, and also in high school and college classes. School healthcare staff should also be trained to provide accurate information to students So that young adults with limited means and resources would have access to necessary information. School healthcare personnel need not inquire about student immigrant status – they can help every student in the school with this issue. Community-based program and healthcare professionals should also address the barrier of medical issues and complications.

In 2011, more than one-third of all U.S. births resulted from unintended pregnancies, with young adults making up a large proportion of this figure (Finer & Zolna, 2016). The lack of preparation and knowledge about preconception health and prenatal care can lead to serious implications in the lives of child and parents. Policymakers should make this issue a priority.

Conclusion

This phenomenological study explored the lived experiences of young adults in terms of their willingness to access preconception healthcare and prenatal care as a method of improving birth outcomes as well as improving overall health. The findings revealed that the majority of young adults at-risk for early and unwanted pregnancies primarily acquire their pregnancy and parenting through second hand observations of other parents around them, or from their own firsthand experiences as new parents.

Findings also revealed that they understand the importance of optimal health before and during pregnancy. And findings revealed that the underuse of prenatal services is attributable mainly to a lack of awareness about them. The findings lead to recommendations that policymakers, government agencies, schools, communities, health providers and families come together to address the problem of unwanted pregnancy not with judgment, but with support, right information, and better access to care. Future researchers are called to address the limitations of the current study and conduct additional research regarding prenatal care for the young adult population at risk of unwanted pregnancies.

References

Aarts, C., Berglund, A., Ekstrand, M., Hegaard, H., Joelsson, L., Kristiannsson, P., Tyden, T. (2015). Is pregnancy planning associated with background characteristics and pregnancy-planning behavior? *Acta Obstretricia Gynecologica Scandinavica, 95*, 182-189. doi: 10.1111/aogs.12816

Abajobir, A. A., Maravilla, J. C., Alati, R., & Najman, J. M. (2016). A systematic review and meta-analysis of the association between unintended pregnancy and perinatal depression. *Journal of affective disorders*, 192, 56-63. Doi:/10.1016/j.jad.2015.12.008

Adams, E., Galactionova, K., & Kenney, G. (2013). Preventive and reproductive health services for women: The role of California's family planning waiver. *American Journal of Health Promotion, 27*(3), 1-10. doi: 10.4278/ajhp.120113-QUAN-28

Adigun, F., Bickmore, T., Damus, K., Gardiner, P., Hempstead, M., Jack, B. & Yinusa-Nyahkoon, L. (2015). Reducing preconception risks among African American women with conversational agent technology. *The Journal of the American Board of Family Medicine, 28*(4), 441-451. doi: 10.3122/jabfm.2015.04.140327

Adkins, K., Bello, J., Rao, G., & Stulberg, D. (2013). Perceptions of a reproductive health self-assessment tool (RH-SAT) in an urban community health center. *Patient Education and Counseling, 93*, 655-663. Doi:

Akers, A., Borrero, S., Freedman, L. Ibrahim, A., Nikolajaki, C., Schwarz, E., & Steinberg, J. (2015). "It just happens:" A qualitative study exploring low-income

women's perspectives on pregnancy intention and planning. *Contraception, 91*(2), 150-156. doi:10.1016/j.contraception.2014.09.014

Alio, A., Fiscella, K., Harris, K., Lewis, C., & Scarborough, K. (2013). A community perspective on the role of fathers during pregnancy: A qualitative study. *Biomedical Central Pregnancy & Childbirth, 13*(60), 1-11.

Almeling, R., & Waggoner, M. (2013). More and less than equal: How men factor in the reproductive equation. *Gender & Society, 27*(6), 1-16. doi:10.1177/0891243213484510

Andrews, M., Squire, C., & Tamboukou, M. (Eds.). (2013). *Doing narrative research*. Thousand Oaks, CA: Sage Publications.

Applegate, M., Gee, R. E., & Martin Jr, J. N. (2014). Improving maternal and infant health outcomes in Medicaid and the children's health insurance program. *Obstetrics & Gynecology, 124*(1), 143-149.

Astone, N., Dubay, L., Popkin, S., & Sandstrom, H., (2015). *Promoting healthy families and communities for boys and young men of color*. Retrieved from http://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000094-Promoting-Healthy-Families-and-Communities-for-Boys-and-Young-Men-of-Color.pdf

Augustine, J. M., Nelson, T., & Edin, K. (2009). Why do poor men have children? Fertility intentions among low-income unmarried U.S. fathers. *Annals of the*

American Academy of Political and Social Science, 624, 99-117. doi:10.1177/0002716209334694.

Awaida, J., Nelson, A., Shabaik, S., & Xandre, P. (2016). Reproductive life planning and preconception care 2015: Attitudes of English-speaking family planning patients. *Journal of Women's Health,* (8), 832-9. doi:10.1089/jwh.2015.532

Baltag, V., Bhutta, Z., Chandra-Mouli, V., Christiansen, C., Lassi, Z., & Mason, E. (2014). Preconception care: Advancing from 'important to do and can be done' to 'is being done and is making a difference'. *Reproductive Health, 3*(58), 1-9. Retrieved from http://www.reproductive-health-journal.com/content/11/S3/S8.

Barratt, M., Ferris, J. A., & Lenton, S. (2015). Hidden populations, online purposive sampling, and external validity: Taking off the blindfold. Field Methods, 27(1), 3-21. https://doi.org/10.1177/1525822X14526838

Barrett, G., Copas, A., Howden, B., Ojukwu, O., Pandya, P., Patal, D. & Stephenson, J. (2014). How do women prepare for pregnancy? Preconception experiences of women attending antenatal services and views of health professionals. *PLOS One, 9*(7), 1-10.

Barrett, G., Howden, B., Ojukwu, O., Pandya, P., Patel, D., Shawe, J., & Stephenson, J. (2015). Why do women invest in pre-pregnancy health and care? A qualitative investigation with women attending maternity services. *Biomedical Central Pregnancy and Childbirth, 15*(236), 1-15. doi:10.1186/s12884-015-0672-3.

Beaufort, I., Denktas, S., Steegers, E., & Zee, B. (2012). Perceptions of preconception counseling among women planning a pregnancy: a qualitative study. *Family Practice, 30,* 341-346. doi:10.1093/fampra/cms074

Beaufort, I., Steegers, E., Wert, G., & Zee, B. (2013). Ethical aspects of paternal preconception lifestyle modification [Clinical opinion]. *American Journal of Obstetrics & Gynecology,* 11-16. doi: 10.1016/j.ajog.2013.01.009

Benítez, I., & Padilla, J. L. (2013). Analysis of nonequivalent assessments across different linguistic groups using a mixed methods approach understanding the causes of differential item functioning by cognitive interviewing. *Journal of Mixed Methods Research, 8*(1), 52-68.

Berg, J., Taylor, D., & Woods, N. (2013). Where we are today: Prioritizing women's health services and health policy. A report by the Women's Health Expert Panel of the American Academy of Nursing. *Nursing Outlook, 61,* 5-15. http://dx.doi.org/10.1016/j.outlook.2012.06.004.

Bhoday, M., Cross-Bardell, L., Qureshi, N., & Tuomainen, H. (2013). Opportunities and challenges for enhancing preconception health in primary care: Qualitative study with women from ethnically diverse communities. *The BMJ, 3,* 1-10. doi:10.1136/bmjopen-2013-002977.

Bhutta, Z., Das, J., Lassi, Z., Mansoor, T., & Salam, R. (2014). Essential pre-pregnancy and pregnancy interventions for improved maternal, newborn and child health.

Reproductive Health, 11(1), 1-19. Retrieved from http://www.reproductive-health-journal.com/content/11/S1/S2.

Bhutta, Z., Dean, S., Howson, C., Imam, A., Lassi, Z., & Mason, E. (2013). Born Too Soon: Care before and between pregnancy to prevent preterm births: From evidence to action. *Reproductive Health, 10*(1), 1-16. Retrieved from http://www.reproductive-health-journal.com/content/10/S1/S3.

Bhutta, Z., Dean, S., Imam, A., & Lassi, Z. (2013). Maternal and Child Nutrition: The first 1,000 Days. *Nestlé Nutrition Institute Workshop, 74*, 63-73. doi:10.1159/000348402.

Bhutta, Z., Dean, S., Lassi, Z., & Mallick, D. (2014). Preconception care: Delivery strategies and packages for care. *Reproductive Health, 11*(3), 1-17. Retrieved from http://www.reproductive-health-journal.com/content/11/S3/S7.

Bish, C., Farr, S., Johnson, D., & McAnally, R. (2012). Preconception health of reproductive aged women of the Mississippi River Delta. *Maternal Child Health Journal, 16*(2), 250- 257. doi:10.1007/s10995-012-1166-9.

Blaumeiser, B., Braspenningx, S., Haagdorens, M., Jacquemyn, Y., & Mortier, G. (2013). Preconception care: a systematic review of the current situation and recommendations for the future. *Facts, Views, & Visions in Obstetrics, Gynecolory and Reproductive Health, 5*(1), 13-25.

Bleck, J., Daley, E., DeBate, R., Flory, S., Merrell, L., Sun, H. … & Vamos, C. (2015). Community level predictors of physical activity among women in the

preconception period. *Maternal and Child Health Journal, 19*(7), 1584-1592. doi:10.1007/s10995-015-1668-3.

Bonte, P., Pennings, G., & Sterckx, S. (2014). Is there a moral obligation to conceive children under the best possible conditions? A preliminary framework for identifying the preconception responsibilities of potential parents. *BMC Medical Ethics, 15*(5), 1-10. Retrieved from http://www.biomedcentral.com/1472-6939/15/5.

Borrero, S., Dehlendorf, C., Levy, K., Rodriguez, M., & Steinauer, J. (2010). Disparities in family planning. *American Journal of Obstetrics and Gynecology, 202*(3), 214-220. doi:10.1016/j.ajog.2009.08.022.

Borrero, S., Potter, J., Smith, K., Trussell, J., & Zite, N. (2013). Potential unintended pregnancies averted and cost savings associated with a revised Medicaid sterilization policy. *Contraception, 88*(6), 691-696. doi: 10.1016/j.contraception.2013.08.004.

Bowman, M., & Neale, A. (2013). Successful behavioral interventions, international comparisons, and a wonderful variety of topics for clinic practice. *Journal of the American Board of Family Medicine, 26,* 105-107. doi:10.3122/jabfm.2013.02.130010.

Boyle, C., Floyd, R., Johnson, K., Moore, C., Owens, J., & Verbiest, S. (2013). A national action plan for promoting preconception health and health care in the

United States (2012-2014). *Journal of Women's Health, 22*(10), 797-802. doi:10.1089/jwh.2013.4505.

Briggs, A. R. J., Coleman, M., & Morrison, M. (2012). Research Methods in Educational Leadership and Management, 3rd edition. Thousand Oaks, CA: Sage Publications.

Bright, D., & Dipietro, N. (2014). Medication therapy management and preconception care: Opportunities for pharmacist intervention. *Innovations in Pharmacy, 5*(1), 1-10. Retrieved from http://pubs.lib.umn.edu/innovations/vol5/iss1/3

Brown, S. and Eisenberg, L. (1995). *The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families*. Washington, DC: The National Academies Press. https://doi.org/10.17226/4903.

Buckel, C., Madden, T., McNicholas, C., Mullersman, J., Peipert, J., Secura, G., & Zhao, Q. (2015). Provision of no-cost, long-acting contraception and teenage pregnancy. *The New England Journal of Medicine, 371*(14). 1316-1323. doi:10.1056/NEJMoa1400506

Canady, R., Tiedie, L., & Lauber, C. (2008). Preconception care and pregnancy planning: Voices of African American women. *The American Journal of Maternal/Child Nursing*, *33*(2), 90-97.

Chan, Z. C., Fung, Y. L., & Chien, W. T. (2013). Bracketing in phenomenology: only undertaken in the data collection and analysis process?. *The Qualitative Report*, *18*(30), 1.

Chapman, A., Mazza, D., & Michie, S. (2013). Barriers to the implementation of preconception care guidelines as perceived by general practitioners: A qualitative study. *Health Service Research, 13*(36), 1-8.

Cheng, T., Guyer, B., & Kotelchuck, M. (2015). Preconception women's health and pediatrics: An opportunity to address infant mortality and family health. *Academic Pediatrics, 12*(5), 357-359. doi:10.1016/j.acap.2012.04.006

Chinchill, V., Declerque, J., Hobel, C., Lanzi, R., Raju, T., Ramey, S., & Schafer, P. (2014). The preconception stress and resiliency pathways model: A multi-level framework on maternal, paternal, and child health disparities derived by community-based participatory research []. *Maternal and Child Health Journal, 19*(4), 707-719. doi:10.1007/s10995-014-1581-1

Chuang, C. H., Hwang, S. W., McCall-Hosenfeld, J. S., Rosenwasser, L., Hillemeier, M. M., & Weisman, C.S. (2012). Primary care physicians' perceptions of barriers to preventive reproductive health care in rural communities. *Perspectives on Sex and Reproductive Health, 44*(2), 78-83. doi:10.1363/4407812

Cope, D. G. (2014, January). Methods and meanings: credibility and trustworthiness of qualitative research. *Oncology nursing forum, 41*(1), 1-10.

Corchia, C., & Mastroiacovo, P. (2013). Health promotion for children, mothers and families: here's why we should "think about it before conception". *Italian Journal of Pediatrics, 39*(68), 1-4. Retrieved from http://www.ijponline.net/content/39/1/68

Collins, L. (2016). *Knowledge, attitudes, and beliefs about preconception care among American adolescent females*. Retrieved from http://scholarworks.waldenu.edu/dissertations/2349/

Crews, K, Culhane, J., Hogan, V., Mullings, L., Mwaria, C., & Levenstein, L., Rowley, D. (2013). The impact of social disadvantage on preconception health, illness, and well-being: An intersectional analysis. *American Journal of Health Promotion, 27*(3), 32-42.

Curtis, K., Gavin, L., Godfrey, E., Moskosky, S., & Tepper, N. (2015). Developing federal clinical care recommendations for women. *American Journal of Preventative Medicine, 49*(1), 6-13. http://dx.doi.org/10.1016/j.amepre.2015.02.023

Curtis, K., Gavin, L., Mautone-Smith, N., Pazol, K., Tiller, M., Tregear, S., & Zapata, L. (2015). Impact of contraceptive counseling in clinical settings: A systematic review. *American Journal of Preventative Medicine, 49*(1), 31-45. doi:10.1016/j.amepre.2015.03.023

Czeizel, A., Czeizel, B., & Vereczkey, A. (2013). The participation of prospective fathers in preconception period. *Clinical Medicine Insights: Reproductive Health, 7*, 1-9. doi:10.4137/CMRH.S10930

Delissant, D., Lisako, E., & McKyer, J. (2011). A systematic review of factors utilized in preconception health behavior research. *Health Education & Behavior 38(*6), 603-616.

Denktas, S., Jack, B., Steegers, E., Temel, S., & Voorst, S. (2014). Evidence-based preconception lifestyle interventions. *Epidemiological Reviews, 36*, 19-30. doi:10.1093/epirev/mxt003

Dolina, S., Kish-Doto, J., Lynch, M., Margolis, M., Mitchell, E., Scales, M., & Squiers, L. (2013). Consumers' preconceptions of preconception health. *American Journal of Health Promotion, 27*(3), 10-19.

Doody, O., & Noonan, M. (2013). Preparing and conducting interviews to collect data. *Nurse Researcher*, *20*(5), 28-32.

Doornbos, M. M., Avoola, A., Topp, R., & Zandee, G. L. (2015). Conducting research with community groups. *Western Journal of Nursing Research, 37*(10), 1323-1339. doi:10.1177/0193945915573633

Dudgeon, M., & Inhorn, M. (2004). Men's influences on women's reproductive health: Medical anthropology perspectives. *Social Science & Medicine, 59*, 1379-1395.

Dunlop, A., Dretler, A., Badal, H., & Logue, K. (2013). Acceptability and potential impact of brief preconception health risk assessment and counseling in the WIC setting. *American Journal of Health Promotion, 27*(3), 58-65. doi:10.4278/ajhp.120109-QUAL-7.

Dunlop, A., Thorne, C., Logue, K., & Badal, H. (2013). Change in women's knowledge of general and personal preconception health risks following targeted brief counseling in publicly funded primary care settings. *American Journal of Health Promotion, 27*(3), 50-57.

Eugene, I., Israel, J., & Atombosoba, E. (2016). An appraisal of awareness and practice of modern contraception among prenatal clinic attendees in southern Nigeria. *British Journal of Medicine and Medical Research*, *15*(5), 1-13.

Finer, L., & Sonfield, A. (2013). The evidence mounts on the benefits of preventing unintended pregnancy. *Contraception, 87*(2), 126-127. doi:10.1016/j.contraception.2012.12.005

Finer, L & Zolna, M. (2016). Declines in unintended pregnancy in the United States, 2008-2011. *New England Journal of Medicine, 347*(9), 843-852. Retrieved from http://www.nejm.org

Frey K A., Navarro, S. M., Kotelchuck, M., & Lu, M.C. (2008). The clinical content of preconception care: Preconception care for men. *American Journal of Obstetrics & Gynecology*, *199*(2), 389-395. doi:10.1016/j.ajog.2008.10.024

Friga, P. N., & Chapas, R. B. (2008). Make better business decisions. *Research-Technology Management*, *51*(4), 8-16.

Frost, J., & Darroch, E. (2008). Factors associated with contraceptive choice and inconsistent method use, United States, 2004. *Perspectives on Sexual and Reproductive Health, 40*(2), 94-104. doi:10.1363/4009408

Galloway, R. D. (2003). Health promotion: Causes, beliefs and measurement. *Clinical Medicine & Research 1(3),* 249-258.

Garfield, C. (2015). Supporting fatherhood before and after it happens. *Pediatrics, 135*(2), 528-530. doi:10.1542/peds.2014-3747

Gentles, S. J., Jack, S. M., Nicholas, D. B., & McKibbon, K. (2014). Critical Approach to Reflexivity in Grounded Theory. *The Qualitative Report*, *19*(44), 1-14.

Harper, M., & Cole, P. (2012). Member checking: Can benefits be gained similar to group therapy?. *The Qualitative Report*, *17*(2), 510-517.

Harris, K., & Moss, J. (2016). Impact of maternal and paternal preconception health on birth outcomes using prospective couples' data in Add Health. *Archives of Gynecology and Obstetrics*, *291*(2), 287-298. doi:10.1007/s00404-014-3521-0

Hayes, N. (2009). *Doing qualitative analysis in psychology*. New York, NY: Taylor and Francis Group.

Heydari, A., & Khorashadizadeh F. (2014). Pender's health promotion model in medical research. *The Journal of the Pakistan Medical Association*, *64*(9), 1067-1074.

Hernandez, L. E., Sappenfield, W. M., Goodman, D., & Pooler, J. (2012). Is effective contraceptive use conceived prenatally in Florida? The association between prenatal contraceptive counseling and postpartum contraceptive use. *Maternal and Child Health Journal*, *16*(2), 423-429.

Houghton, C., Casey D., Shaw, D. & Murphy, K. (2013). Rigour in qualitative case-study research. Nurse Research, 20(4), 12-7.

Isenberg, K., Kish-Doto, J., Levis, D., Lewis, M., & Mitchell, E. (2013). Couples' notions about preconception health: Implications for framing social marketing plans. *American Journal of Health Promotion, 27*(3). 20-27. doi:10.4278/ajhp.120127-QUAL-65

Jacob, S. A., & Furgerson, S. P. (2012). Writing interview protocols and conducting interviews: Tips for students new to the field of qualitative research. *The Qualitative Report, 17*(42), 1-10.

James, E., & Taylor, D. (2011). An evidence-based guideline for unintended pregnancy prevention. *Journal of Obstetrics, Gynecology, and Neonatal Nursing, 40*(6), 782-793. doi:10.1111/j.1552-6909.2011.01296.x

Joseph, J., Krishnan, G., & Mahaswari, B. (2016). Effect of structured teaching program on knowledge and attitude regarding preconception care among adolescent girls. *International Journal of Applied Research, 2*(4). 435-439.

Kerns, J., Morroni, C., Murphy, P. & Westhoff, C. (2003). Partner influence on early discontinuation of the pill in a predominantly Hispanic population. *Perspectives on Sexual Reproductive Health, 3*(5), 256-260.

Kost, K., & Lindburg, L. (2014). Exploring U.S. men's birth intentions. *Maternal Child Health, 18*(3), 625-633. doi:10.1007/s10995-013-1286-x.

Kowaleski-Jones, L., & Mott, F. (1998). Sex, contraception and childbearing amount high-risk youth: Do different factors influence males and females? *Family Planning, 30*(4), 163-169.

Levis, D., & Westbrook, K. (2013). A content analysis of preconception health education materials: Characteristics, strategies, and clinical-behavioral components. *American Journal of Health Promotion, 27*(3), 36-42. doi:10.4278/ajhp.120113-qual-19

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage Publications.

Lindberg, L. D., & Kost, K. (2013). Exploring U.S. men's birth intentions. *Maternal and Child Health Journal*, 18, 625–633.

Lindberg, L., & Zolna, M. (2012). *Unintended pregnancy: Incidence and outcomes among young adult unmarried women in the United States, 2001 and 2008*. Retrieved from http://www.guttmacher.org/pubs/unintended-pregnancy-US-2001-2008.pdf

Los Angeles County Department of Public Health, Maternal, Child, & Adolescent Health through the Los Angeles County Department of Public Health and through First LA. (2014). http://webcache.googleusercontent.com/search?q=cache:GX11wmTKRBAJ:publichealth.lacounty.gov/mch/LAMB/LAMBAdvisorySummit/posters/2_unintended%2520pregnancy_2014_final.pdf+&cd=2&hl=en&ct=clnk&gl=usMarshall, B., Cardon, P., Poddar, A. & Fontenot, R. Does sample size matter in qualitative research? A review of qualitative interviews in research. Journal of Computer Information Systems, 54(1), 11-22. https://doi.org/10.1080/08874417.2013.11645667

Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Thousand Oaks, CA: Sage Publications.

Maxwell, J. A. (2013). *Qualitative Research Design: An Interactive Approach*. (3rd ed.). Thousand Oaks, CA: Sage Publications.

Melnick, A. L., Rdesinski, R. E., Marino, M., Jacob-Files, E., Gipson, T., Kuyl, M., ... & Olds, D. (2016). Randomized Controlled Trial of Home-Based Hormonal Contraceptive Dispensing for Women At Risk of Unintended Pregnancy. *Perspectives on sexual and reproductive* health, 48(2), 93-99. doi: 10.1363/48e9816

Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook.* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Mitchell, E., & Verbiest, S. (2013). Effective strategies for promoting preconception health – from research to practice. *American Journal of Health Promotion, 27*(3), 1-3. doi:10.4278/ajhp/27.3.c1

Mosher, W., Jones, J., & Abma, C.. (2012). Intended and unintended births in the United States: 1982-2010. *National Health Statistics Reports, 55*, 1-28. Retrieved from http://www.cdc.gov/nchs/data/nhsr/nhsr055.pdf

Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage Publications.

National Institutes of Health. (2013). *What is Prenatal Care and Why is it important.* Retrieved from https://www.nichd.nih.gov/health/topics/pregnancy/conditioninfo/Pages/prenatal-care.aspx.

Orr, S. T., Reiter, J. P., James, S. A., & Orr, C. A. (2012). Maternal health prior to pregnancy and preterm birth among urban, low income black women in Baltimore: The Baltimore birth study. *Ethnicity & Diversity, 22*(1), 85-89.

Pender, N. (2011). *Health Promotion Model Manual*. Retrieved from https://deepblue.lib.umich.edu/bitstream/handle/2027.42/85350/HEALTH_PROMOTION_MANUAL_Rev_5-2011.pdf

Pender, N. J. (1982). *Health promotion in nursing practice*. Norwalk, CT: Appleton-Century-Crofts., N. J.

Pender, N.J. (1996). *Health promotion in nursing practice* (3rd ed.). Stamford, CT: Appleton & Lange.

Pender, N. J., Murdaugh, C., & Parsons, M. A. (2010). *Health promotion in nursing practice, 6th edition*. Upper Saddle River, NJ: Pearson/Prentice-Hall.

Premberg, A. & Lundgren, I. (2006). Fathers' experiences of childbirth education. *Journal of Perinatal Education 15 (2),* 21-28. doi:10.1624/105812406x107780

Rosenbaum, S., Wood, S., Cunningham, M., Beeson, T., & Shin, P. (2014). *Health centers and family planning update: Implications of the 2014 family planning service guidelines issued by the CDC and the Office of Public Affairs.* Retrieved from http://www.rchnfoundation.org/wp-content/uploads/2014/07/Health-centers-and-family-planning-062514-for-releaseNEW.pdf .

Royer, P., Saltzman, H., Sanders, J., & Turok, D. (2016). Choice of emergency contraceptive and decision making regarding subsequent unintended pregnancy. *Journal of Women's Health,* (10), 1038-1045. doi:10.1089/jwh.2015.5625

Srof, B., & Velsor-Friedrich, B. (2003). Health promotion in adolescents: A review of Pender's health promotion model. *Nursing Science Quarterly, 19*(4), 366-373. doi:10.1177/0894318406292831

Stevens, L. (2015). Planning parenthood: Health care providers' perspectives on pregnancy intention, readiness, and family planning. *Social Science and Medicine, 139*, 44-52. http://dx.doi.org/10.1016/j.socscimed.2015.06.027

Strauss, A., & Corbin, J. (1998). *Basis of qualitative research: Grounded theory procedures and techniques* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Thielen, K. (2012). Exploring the Group Prenatal Care Model: A critical review of the literature. *Journal of Perinatal Education, 21*(4), 209-218. doi:10.1891/1058-1243.21.4.209.

Torres, M. E., Smithwick-Leone, J., Willms, L., Franco, M. M., McCandless, R., & Lohman, M. (2013). Developing a culturally appropriate preconception health promotion strategy for newly immigrated Latinos through a community-based program in South Carolina. *American Journal of Health Promotion, 27*(3), 7-9. doi:10.4278/ajhp.120117-CIT-42

Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative Social Work, 11*(1), 80-96.

Walker, J. L. (2012). Research column. The use of saturation in qualitative research. *Canadian Journal of Cardiovascular Nursing*, *22*(2).

Unite for Sight. (n.d.). Maternal and Child Health Online Course. Module 4: Preconception and Prenatal Care for Women. Retrieved from http://www.uniteforsight.org/women-children-course/preconception-prenatal-women.

Waggoner, M. (2013). Motherhood preconceived: The emergence of the preconception health and health care initiative. *Journal of Health Politics, Policy, and Law, 38*(2), 345-371. doi:10.1215/03616878-1966333

Waring, M. E., Simas, T. A. M., Rosal, M. C., & Pagoto, S. L. (2015). Pregnancy intention, receipt of pre-conception care, and pre-conception weight counseling reported by overweight and obese women in late pregnancy. *Sexual & Reproductive Healthcare, 6*(2), 110-111.

Williams, L., Zapata, L. B., D'Angelo, D. V., Harrison, L., & Morrow, B. (2012). Associations between preconception counseling and maternal behaviors before and during pregnancy. Maternal and child health journal, 16(9), 1854-1861.

World Health Organization. (2012). Meeting to develop a global consensus on preconception care to reduce maternal and childhood mortality and morbidity. World Health Organization headquarters, Geneva. Retrieved from http://apps.who.int/iris/bitstream/10665/78067/1/9789241505000_eng.pdf

World Health Organization. (2014). *Adolescents: health risks and solutions*. Retrieved from http://www.who.int/mediacentre/factsheets/fs345/en/.

Wray, R. E., Bachelor, B., Jones, R. M., & Newton, C. (2015). Bracketing human performance to support automation for workload reduction: A case study. In D. Schmorrow, C. Fidopiastic (Eds.) *International Conference on Augmented Cognition,* pp. 153-163, Cham, Switzerland: Springer International Publishing.

Yin, R. K. (2014). *Case Study Research Design and Methods* (5th ed.). Thousand Oaks, CA: Sage Publications.

Appendix A: Site Permission to Address Groups for Recruiting Participants

Request Permission to Recruit Participants for Doctoral Thesis

Dear Mr. Tom Bazacas, Newport Beach Athletic Club & Training Facility:

I am writing to request that you would grant me permission to recruit participants for a research study from your facility. I am currently enrolled in the Health Psychology program at Walden University in Minneapolis, MN, and am in the process of writing my Doctoral Thesis. The study is entitled "Perceptions of Preconception and Prenatal Care by Young Adult Women and Men at Risk for Unintended Pregnancies".

Participation in the study is completely voluntary and the [facility and/or the participants] may withdraw from the study at any time without consequence. There are no risks for participants of the study and confidentiality of all data will remain anonymous. Further, no costs will be incurred by either your facility or the individual participants and no compensation will be offered for participation in the study.

I am requesting that you would allow me to recruit 9 young adult women and 9 young adult men to anonymously participate in a brief one-on-one/face-to-face interview, who are between the ages 18 to 25 years, sexually active and either in cohabitating partnerships or living single and residing in the greater Los Angeles area. Individuals that would like to participate in the study and meet the studies inclusion criteria, will be given a consent form to be signed, at which time an interview date and time will also be scheduled. The one-on-one/face-to-face interviews consist of 13 questions centered on young adults' perceptions, beliefs and parenting knowledge about preconception health and prenatal care. Each interview will be audiotaped for accuracy and should take no longer than 45 to 90 minutes. The results of the study in its completion will be pooled for the Doctoral Thesis project and individual results of this study will remain absolutely confidential and anonymous. Should this study be published, only pooled results will be documented.

Your approval to recruit participants for the study from your facility will be greatly appreciated. I will follow up with an email/telephone call next week and would be happy to answer any questions or concerns that you may have at that time. You may contact me at my email address:Broderick.Crawford@Waldenu.edu or by phone at 949-266-4675

If you agree, kindly sign below

Sincerely,

Broderick Crawford, Walden University

Approved by:

Tom Bazacas OWNER — Tim Bazacas — 6-3-2017

Name and title | Signature | Date

Appendix B: Screening Checklist

Please tick the appropriate boxes below to determine whether you are eligible to participate in this study:

	YES	NO
I am between 18 and 25 years old	☐	☐
I live in the Greater Los Angeles area	☐	☐
I am sexually active	☐	☐

I am interested to participate in the research. You may contact me at:

Phone _____

Email _____

Appendix C: Interview Guide

Pseudonym: _____

Age: _____

Gender: _____

1. Are you aware of current risks for unintended pregnancy among people your age?
2. Please describe the risks involved.
3. How did you become aware of these risks?
4. Are you aware of the implications of unintended pregnancies?
5. What are the implications that you know?
6. How did you learn about these implications?
7. What do you know about child rearing and parenthood?
8. How did you learn about child rearing and parenthood?
9. What do you know about healthy preconception behaviors and optimal prenatal care?
10. How did you learn about healthy preconception behaviors and optimal prenatal care?
11. What do you think are the possible problems or challenges that may be encountered perinatal care for unintended pregnancies?
12. How do you think these problems or challenges may be addressed?

Appendix D: Invitation to Participate in Research

Walden University
100 S Washington Ave #900
Minneapolis, MN 55401

To Whom It May Concern:

I am a doctoral student from Walden University, and I am conducting a research study as part of my doctoral degree requirements. My study is entitled, "Perceptions of Preconception and Prenatal Care by Young Adult Women and Men at Risk for Unintended Pregnancies."

This is a letter of invitation to participate in this research study and is intended for young adults between the ages 18-25 years who are sexually active and are either in cohabitating partnerships or living single and residing in the greater Los Angeles area.

The purpose of this study is to understand the experiences of young adults regarding their willingness to use care facilities before and after conception (getting pregnant) in order to improve the outcome of birthing process and also the mother's and baby's overall health.

Your participation would involve an interview lasting no more than 45 minutes. Your participation would contribute to the current literature on the subject of preconception health and prenatal care for young adults.

No compensation will be offered for your participation, but if you would like to participate and meet the inclusion criteria discussed above, please contact I via email at Broderick.Crawford@Waldenu.edu or by phone at 949-266-4675.

I appreciate your time and consideration.

Sincerely,
Broderick Crawford