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Experiences and Perceptions of Pregnant Unmarried Adolescent Girls in Nigeria

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2014

Abstract

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MSN, Temple University, 2000

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Dissertation Submitted in Partial Fulfillment

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Abstract

Sexual activity among unmarried adolescents is a major public health problem in Nigeria, because unmarried pregnant girls are more likely to have multiple sex partners and are less likely to use contraceptives, putting them at greater risk for sexually transmitted diseases (STD), unplanned pregnancy, abortion, social isolation, and poverty. Teen pregnancy and STD rates are on the rise in Nigeria, yet few data exist on the experience of the adolescents themselves. This phenomenological study was designed to explore the in-depth experiences of 10 pregnant, unmarried adolescent girls aged 16–19, including the factors contributing to their sexual activity. An ecological model served as the conceptual framework to permit individual experiences to be understood in their social and ecological context. Semistructured interviews and Hycner's method of analysis were used to collect and analyze the data. Results showed that the decision to initiate sexual activity among these girls was influenced by many factors, including: the need for financial support and a socially condoned system of "sugar daddies" who support girls in return for sex; peer pressure to have a sex partner; a romantic knowledge of sexual behavior based primarily on the mass media; and inadequate sex education. As a result of their pregnancy, the girls experienced negative reactions from their families and community, and serious psychological and financial concerns about their prospects for future marriage and their child's identity. A comprehensive community-based reproductive health program is called for, with reliable sex education, cooperation from the mass media, and support from family and community members. The social change implication of this study is to potentially lead to a decrease in unplanned pregnancy, STDs, social isolation, and poverty among adolescent girls in Nigeria.

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Dedication

First of all, this dissertation is dedicated to my Lord God for his unfailing love, guidance, protection, strength, and courage throughout this long journey.

Second, to my brother-in-law, Chief Eric Aluka (Ome mgbe Ogbaraike 1) and his wife Lady Bridget Aluka, who took me in during my earlier years in life and not only showered me with love, but taught me values, gave me confidence, and allowed me to dream and become whatever my heart desired. My thanks are beyond measure. Daddy, the seed you sowed and watered not only survived, but it is blossoming.

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Chapter 1: Introduction to the Study

Recent research has indicated high rates of sexual activity among unmarried adolescents in Nigeria (Alo & Akinde, 2010; Fatusi & Blum, 2008; Morhason-Bello et al., 2008; National Population Commission [Nigeria] & ICF Macro, 2009; Okereke, 2010a) and in Imo State in particular, where this study was undertaken (Nwankwo & Nwoke, 2009; Okereke, 2010b). Early sexual activity among adolescents, and especially unmarried adolescents, is problematic because it can result in a variety of negative health, social, and emotional outcomes for mothers and their infants such as (a) little or no prenatal care, malnutrition, and anemia (Banerjee et al., 2009); (b) increased maternal morbidity and mortality (National Population Commission [Nigeria] & ICF Macro, 2009); (c) preterm deliveries, increased rates of low birth weight, and infant morbidity and mortality (Banerjee et al., 2009), and (d) increased rates of sexually transmitted diseases (STDs) including (HIV/AIDS; Olubunmi, 2011). Other social outcomes of adolescent pregnancy while unmarried include single motherhood, low socioeconomic status due to curtailed education and reduced skills required for high paying job, and ensuing poverty (Oyefara, 2009). Understanding the details associated with sexual activity among unmarried female adolescents may provide insight that could lessen the impact of those negative results on the study population of adolescents who engage in premarital sexual activity.

In this chapter, I provide a brief summary of the incidence and contributing factors to sexual activity among unmarried adolescents. In addition, I define the problem, explain the purpose, and present the research questions that guided this study, offer a summary of the nature of the study, and present the theoretical framework I used as a lens

for understanding the data I collected for this study. Also, I provide operational definitions for terms used in this study and discuss the scope, delimitations, assumptions, and limitations associated with this study. Finally, I discuss the significance of the study, including the potential for positive social change.

Background of the Problem

Adolescents, as defined by the World Health Organization (WHO, 2012), are people between the ages of 10 and 19 years of age who are experiencing a transitional stage of life during which they reach sexual maturity and are forced to confront choices with major implications for their later lives, including the choice to have or abstain from sexual intercourse. Research on premarital adolescent sexual activity in the behavioral health and social sciences fields has focused on decision making with regard to sexual activity and the factors that may influence those decisions (Commendador, 2007; Nwankwo & Nwoke, 2009). Factors identified as contributors to adolescent premarital sexual activity include peer pressure (Nwankwo & Nwoke, 2009; Okereke, 2010a), poverty, cultural norms related to sex and sex education, negative perceptions regarding contraceptives (Okereke, 2010b), curiosity, lack of sexual education, expression of love (Nwankwo & Nwoke, 2009), age, age at marriage, puberty (Alo & Akinde, 2010), and family structure (Olubunmi, 2011). Although research has explored factors related to adolescent premarital sexual activity in Nigeria in general, and in some instances in Imo State in particular, there remains a lack of understanding of the experiential perspectives of adolescents in Orlu, Imo State.

Adolescents are at greater risk of negative outcomes from premarital sexual activity than are people (women) of other age groups (Bearinger, Sieving, Ferguson, &

Sharma, 2007). Premarital sexual activity among adolescents can result in (a) the contraction of STDs (Joint United Nations Program on HIV/AIDS, 2005; Morhason-Bello et al., 2008; Shittu et al., 2007); (b) pregnancy and subsequent abortions (Shittu et al., 2007); (c) abortion-related complications (Shittu et al., 2007); (d) adolescent motherhood (Oke, 2004); (e) health-related complications for infants (Banerjee et al., 2009); and (f) maternal and infant mortality (National Population Commission [Nigeria] & ICF Macro, 2009). Unmarried adolescents in Nigeria are particularly susceptible to contracting STDs because they are more likely to engage in risky sexual behavior such as having multiple partners and lack of contraceptive and condom use (Nwankwo & Nwoke, 2009; Okereke, 2010b). In addition, unmarried adolescents in Nigeria are particularly susceptible to negative social and emotional outcomes of pregnancy because this condition is not condoned by the community, despite the social acceptance of adolescent pregnancy among married adolescents (National Population Commission of Nigeria, 2000) and because unmarried adolescents typically do not have the capacity to care for their infants as single parents (Makinwa-Adebusoye, 2006; Population Council, 2004).

Understanding the details of adolescents' personal experiences that influence their decisions to engage in premarital sexual activity may provide valuable data that can be used to design programs to decrease the rate of adolescent premarital sexual activity in Orlu. Ultimately, educating adolescents about the negative outcomes associated with premarital sexual activity may help decrease incidences of (a) negative health-related outcomes for those adolescents, (b) negative social and emotional consequences of adolescent motherhood; and (c) negative outcomes for infants of adolescents who become mothers.

Problem Statement

There is a high rate of sexual activity among unmarried adolescents in Imo State, Nigeria (Nwankwo & Nwoke, 2009), but a lack of understanding of the factors that contribute to these behaviors (Olubunmi, 2011). In particular, there is little research that explored the experiences and perceptions of unmarried pregnant adolescents in Orlu, Imo State, Nigeria about their sexual activity.

Although available data indicating rates of sexual activity differ among studies, depending on the region or part of the country where studies were conducted, overall, there is evidence that sexual activity among unmarried adolescent is a prevalent problem in most parts of Nigeria. In a study of adolescent sexual behavior in southwest Nigeria, more than 14% of participating adolescents had had sex before age 14, whereas 84% of the participants had had sex before age 20; of those sexually active participants, only 1.3% were married (Alo & Akinde, 2010). According to the Nigeria Demographic and Health Survey, 49.3% of adolescent Nigerian girls ages 15 to 19 and 25.6% of Nigerian boys in the same age range have initiated sexual activity (National Population Commission [Nigeria] & ICF Macro, 2009). Fatusi and Blum (2008) indicated lower rates, suggesting that one out of five adolescents in Nigeria reported sexual debut before marriage. In another study of adolescent sexual behavior in southwest Nigeria (Ibadan), at least one of every four in-school adolescents was sexually active and most of them engaged in unsafe sexual practices (Morhason-Bello et al., 2008).

In Imo State in particular, the majority of adolescent participants (47.4%) had had sex on a frequent basis and many had engaged in other risky sexual behaviors—such as having multiple partners and inconsistent or nonuse of contraception and condoms—

despite being aware of the consequences (Nwankwo & Nwoke, 2009). Okereke (2010a) also found high rates of premarital sexual activity in Imo. Results of Okereke's study indicated that 50.8% of the participants had had sex and that many engaged in risky sexual behavior (lack of contraceptive use). By exploring the experiences and perceptions of unmarried pregnant adolescents in Orlu, Imo State, Nigeria about their premarital sexual activity, I may address the gap in the literature, providing understanding of the circumstances associated with premarital adolescent sexual activity from the experiential perspective of adolescents.

Purpose of Study

The purpose of this study was to explore and develop an in-depth understanding of the experiences and perceptions of unmarried pregnant adolescents in Orlu, Imo State about the decision to engage in early sexual activity and the effects of STDs, pregnancies, and impending motherhood resulting from early sexual activity. The aim of this study was to share the findings from this research with state officials to prompt discussion of the problem of sexual activity among unmarried adolescents and motivate action for change. The goal of this study is to promote the development of state policy and behavioral interventions to reduce unsafe sexual activity among unmarried adolescents and ultimately prevent STDs and motherhood among adolescents in Orlu.

In this study I used a naturalistic research paradigm. A naturalistic research paradigm is one that relies "on field study as a fundamental technique, which views truth as ineluctable, that is, as ultimately inescapable. Sufficient immersion in and experience with a phenomenological field yields inevitable conclusions about what is important, dynamic, and pervasive in that field" (Guba & Lincoln, 1981, p. 55). Unlike more

scientific paradigms concerned with an ultimate truth, the naturalistic paradigm assumes multiple and often divergent patterns of truth that function to provide a broad understanding of the circumstances being explored (Guba & Lincoln, 1981).

Research Questions

There are four research questions:

Research Question (RQ) 1: What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regard to decision making about their past sexual activity?

RQ2: What are the experiences and perceptions of unmarried pregnant adolescents in Orlu about their pregnancies and related needs?

RQ3: What are the experiences and perceptions of unmarried pregnant adolescents in Orlu about their impending motherhood?

RQ4: What types of community support might be most helpful in teaching adolescents about a safe and healthy reproductive lifestyle?

Nature of the Study

In this study, I used a qualitative design and a phenomenological approach. Use of this design and approach afforded me the collection of data that allowed me to explore and develop an in-depth understanding of the experiences and perceptions of pregnant adolescents in Orlu, Imo State. In particular, this design and approach allowed me to uncover details about unmarried adolescents' decisions to engage in early sexual activity and the effects of pregnancies and impending motherhood resulting from that early sexual activity.

I collected data from 10 pregnant adolescents during individual interviews and using an interview protocol I designed. I used Hycner's (1985) method of content analysis for the phenomenological analysis of my interview data. I interpreted and organized the data according to emerging central themes that contributed to a rich description of the phenomenon experienced by the participants.

Theoretical Framework

This study was grounded in Bronfenbrenner's (1979) ecological-systems model. Based on earlier work by Lewin, Bronfenbrenner located the individual (microsystem) in three nested environments or social systems: relationships (mesosystem), community (exosystem), and society (macrosystem). Each of these social systems has dependent and interdependent influence on the others such that a change in one system causes effects in the others.

The ecological-systems model supports the use of the phenomenological approach I used to explore the experiences and perceptions of pregnant adolescents in Orlu. The phenomenological approach is based on the concept that a personal phenomenon in this case, early adolescent sexual activity can only be fully understood through the experience of the persons involved. Based on the ecological-systems model, to fully understand those experiences, it was necessary to understand the context or ecology of those experiences. Thus, I considered the ecological-systems model when developing my research questions and interview protocol to ensure I would collect data that would allow me to consider the broader scope of participant experiences during analysis. A more detailed discussion of this model and its application to this study is provided in Chapter 2.

Operational Definitions

In this study, the following concepts are operationalized as follows:

Adolescent: Traditionally, an adolescent is considered to be a person between the ages of 10 and 19 (Centers for Disease Control and Prevention, Health Resources and Services Administration, & National Adolescent Health Information Center, 2004; United Nations Children's Fund, 2011; WHO, 2012). Because pregnancy requires physical maturity, in this study, an adolescent was considered to be a person between the ages of 13 and 19.

Adolescent pregnancy: Early marriage is typical in Nigeria, with the median age for women at the time of their first marriage ranging by location—from 15.2 years (northwestern Nigeria) to 22.8 years (southeastern Nigeria; National Population Commission [Nigeria] & ICF Macro, 2009). "Populations in which age at first marriage is low tend to have early childbearing and high fertility rates. However, because a union is not a prerequisite to childbearing, some women have children before entering a formal union" (National Population Commission [Nigeria] & ICF Macro, 2009, p. 59). For this reason, in this study, adolescent pregnancy refers to adolescent pregnancy prior to marriage.

Sexually activity: Although some definitions of sexual activity include voluntary sexual behavior people engage in with themselves (Planned Parenthood of America, 2012) and contact or stimulation not involving penetration (Klein, 1998), for the purposes of this study and considering the population of pregnant adolescents, sexual activity refers to engagement in sexual activity within 9 months of participating in this study.

Scope and Delimitations

The scope of this study was limited to the experiences and perceptions of unmarried pregnant adolescents aged 13–19 in Orlu, Imo State with regard to the decision to engage in early sexual activity and the effects of pregnancies, and impending motherhood resulting from early sexual activity. Although WHO (2012) defined adolescent as ages from 10–19, I chose the age range from 13–19, slightly above the beginning age of adolescence, to increase my chances of getting enough participants, as with increased age, increased sexual activity is expected (Alo & Akinde, 2010). This focus allowed me to collect data that provided valuable information pertinent to the development of behavioral interventions to deter adolescent premarital sexual activity and ultimately prevent STDs, pregnancy, and motherhood among adolescents in Orlu, Imo State.

I delimited participant involvement to unmarried pregnant adolescents not only because of time constraints imposed during the data collection process as a result of international study, but also because only pregnant adolescents themselves can describe their own perceptions of their personal experiences. I delimited conceptual exploration to premarital adolescent sexual activity and did not attempt to determine cause and effect relationships or to identify factors of premarital adolescent sexual activity.

As Guba and Lincoln (1981) indicated is the case in qualitative research, I was not able to generalize results of this study to other populations or contexts. However, I considered potential transferability (applicability) of my study results to similar populations and contexts to be appropriate. I discuss this potential more thoroughly in Chapter 3.

Assumptions and Limitations

During the course of this study, I made assumptions and recognized limitations. I assumed that all participants were honest with regard to their age, marital status, pregnancy status, and residency status. This assumption may become a limitation because data I collected may not accurately reflect the conditions about which I intended to collect data. However, it was unlikely that adolescents would misrepresent themselves to participate in this study due to the nature of the study topic and the effort involved in their participation.

I also assumed that because participants have volunteered to participate in the study, they would answer interview questions honestly. This assumption is a limitation because participants might have answered questions in a fashion they felt appropriate to please me as an adult authority figure or as the researcher. It also is possible that because of cultural norms, participants did not feel their opinions are valuable and might have felt constrained in discussing sensitive topics. In addition, because participants might have been socially stigmatized in their communities, they might have felt uncomfortable discussing conditions related to their own pregnancies. These conditions may have created interview and response bias (Trochim & Donnelly, 2007, p. 113). To minimize the potential for this condition, I promoted participant trust by conducting interviews in private examination rooms at the health clinics and reminding participants of the value of their information, the importance of being honest in their responses, and that I would not identify them in any way when using their responses in my data analysis and presentation. Also, the use of a semistructured interview guide with probes ensured that

participants fully considered the questions and that there was consistency between interviews.

Finally, I assumed that I would be able to recruit 10 participants for my study. This assumption was a limitation because having too few participants could have created sample bias, which could diminish the depth of understanding I could draw from the data I collected (Trochim & Donnelly, 2007, p.38). However, I promoted recruitment of unmarried pregnant adolescents by offering boxes of diapers in return for participation in my study, and I did not anticipate having trouble recruiting my 10 needed participants.

Significance of the Study

Premarital sexual activity in Imo, Nigeria is problematic because adolescent premarital sexual activity can result in a variety of negative health outcomes as well as adolescent motherhood and consequent negative health, social, and emotional outcomes for infants of those mothers (Oyefara, 2009; Rector, 2002). For that reason, I explored the experiences and perceptions of unmarried pregnant adolescents in Orlu, Imo State, Nigeria with regard to their premarital sexual activity. By conducting this study, I may not only address a gap in the literature about the lack of understanding of circumstances associated with the phenomenon of premarital adolescent sexual activity from the experiential perspective of adolescents, but also generate insight that could lessen the impact of those negative results on the study population of adolescents who engage in premarital sexual activity.

Specifically, insight about the factors that influence adolescents' decisions to engage in early sexual activity—and more importantly the context in which those factors operate—could be used to design educational programs focused on particular factors in

particular contexts. Educating adolescents about the negative outcomes associated with premarital sexual activity may help decrease the incidence of (a) negative health-related outcomes for those adolescents, (b) negative social and emotional consequences of adolescent motherhood, and (c) negative outcomes for infants of those adolescents who become mothers. Ultimately, results of this study could promote positive social change by helping to keep adolescents healthy and in supportive environments that allow them to reach their full potential as young adults, which could lead to improved quality of life for adolescents in Orlu, Imo State, Nigeria.

Summary

Rates of adolescent premarital sexual activity in Nigeria are high. The research has indicated that factors contributing to these high rates include peer pressure, poverty, cultural norms related to sex and sex education, negative perceptions regarding contraceptives, and age at marriage and puberty. Negative outcomes of adolescent sexual activity include adolescent motherhood, abortion and its related complications, health-related complications for infants, maternal and infant death, and the contraction of STDs including HIV and AIDS. These conditions are especially problematic for unmarried adolescents because they are more likely to engage in risky sexual behavior and are particularly susceptible to negative social and emotional outcomes resulting from lack of community support for their condition.

The purpose of this study was to explore and develop an in-depth understanding of the experiences and perceptions of pregnant adolescents in Orlu, Imo State with regard to the decision to engage in early sexual activity and the effects of pregnancies, and impending motherhood resulting from that activity. I conducted this study using a

qualitative design and a phenomenological approach, guided by Bronfenbrenner's (1979) ecological-systems model. By delimiting my study population to unmarried pregnant adolescents and confining the scope of my study to the experiences and perceptions of pregnant adolescents in Orlu, Imo State, I was able to uncover details of adolescents' personal experiences that influence their decisions to engage in premarital sexual activity. Thus, this study was valuable because Orlu officials and agencies may use these details to design behavioral interventions focused on this particular population. Improved behavioral interventions may help decrease the rate of adolescent premarital sexual activity in Orlu and ultimately decrease negative outcomes associated with this activity. In Chapter 2, I present a review of the literature. In Chapter 3, I present my methodology for this study. In chapter 4, I presented the result of the study and discussed interpretation of findings, limitations, recommendations and conclusion in chapter 5.

Chapter 2: Literature Review

There is a high rate of adolescent premarital sexual activity in Orlu, Imo State, Nigeria (Nwankwo & Nwoke, 2009) but a lack of understanding of the circumstances associated with this phenomenon. In particular, there is little research that explores the experiences and perceptions of unmarried pregnant adolescents in Imo State, Nigeria about their premarital sexual activity. Thus, the purpose of this study was to explore and develop an in-depth understanding of the experiences and perceptions of pregnant adolescents in Orlu, Imo State about the decision to engage in early sexual activity and the effects of STDs, pregnancies, and impending motherhood resulting from early sexual activity. Data from this study may be used to promote the development of state-supported policy and behavioral interventions to deter adolescent premarital sexual activity and ultimately prevent STDs, pregnancy, and motherhood among adolescents in Orlu, Imo State. To conduct this literature review, I drew from relevant peer-reviewed professional journals from 2004–2013, books, published public health reports, and government and organization websites. I accessed sources from multiple databases: EBSCO*host*, Academic Search Premier, Ovid database, MEDLINE, SOC index, CINHL plus, SAGE Health Sciences collection, Psyc ARTICLES, Psyc BOOKS, Psyc INFO, ProQuest Dissertations and Theses database, and NTIS. Search terms and phrases I used included *teenage pregnancy in Nigeria, teen pregnancy perceptions, adolescent sexual activity in Nigeria, attitude and sex, belief and teenage pregnancy, sex education, phenomenology, sex,* and *rural adolescents and consequences of teen pregnancy*.

I include in this chapter a review of literature related to my key variables and concepts. Although I have included studies that demonstrate various methodologies,

many studies are qualitative phenomenological studies similar in nature to this study. I have organized my discussion by topic. Specifically, this chapter contains three major subsections: theoretical framework, factors contributing to adolescent premarital sexual activity, and negative outcomes associated with adolescent premarital sexual activity.

Theoretical Framework

Bronfenbrenner (1974, 1977, 1979, and 1994) developed the ecological model in the 1970s and continued to refine it until his death in 2005. Every version of the model has value in research, but based on a review of 25 studies, many researchers fail to use the theories properly (Tudge, Mokrova, Hatfield, & Karnik, 2009). In particular, many researchers have used only selected aspects of the model or used the ecological model without acknowledging that a more evolved version exists and without explaining their motives for using an earlier version of the model. For these reasons, here I provide a full explanation of the earlier model, which I use in my study, and a brief summary of a later version of the model. In addition, I provide my rationale for why the earlier model is more appropriate for my study

Embellishing the original description of American developmental psychology Bronfenbrenner (1974) first posed in 1973, Bronfenbrenner (1977) said "that much of developmental psychology is the science of the strange behavior of children in strange situations with strange adults for the briefest possible periods of time" (p. 513). Later, summarizing earlier work, Bronfenbrenner (1994) explained the development of the ecological model as the necessary expansion of those previous and limited human-development models for which the originating psychologists concentrated only on people's personal characteristics and failed to consider the influence of the multiple and

socially organized subsystems that comprise people's complete ecological-systems model that guides their personal growth and development. Thus, Bronfenbrenner's (1977) model reflects a broader approach for examining human development and behavior that considers the progressive interactions, in their immediate contexts as well as throughout an individual's life span, that occur between growing individuals and their environments. These environments exist as five unique structures, one embedded in the other and moving from the innermost level to the outside (see Figure 1).

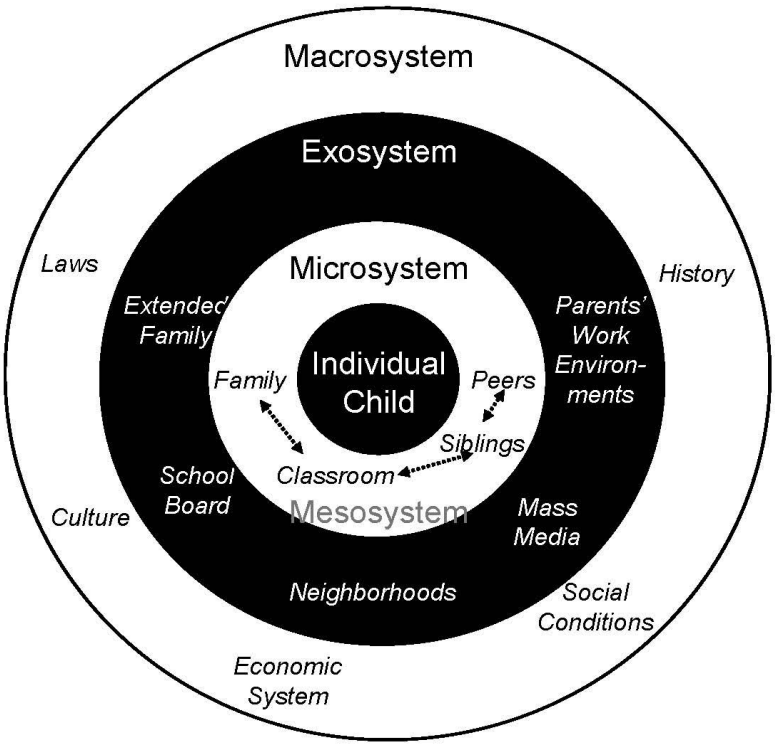

Figure 1. Bronfenbrenner's ecological model describing the set of nested environmental influences on a child. From Eisenmann and Gentile (2008)

As shown in Figure 1, the factors influencing human development are considered at five levels of organization. First are the factors inherent in the individual child. Then

there are the factors at four levels of systems that impact the individual: the micro-, meso-, exo-, and macrosystems.

The microsystem domain represents experiences and behaviors associated with interpersonal involvement with one's immediate environment (Bronfenbrenner, 1994). According to Bronfenbrenner (1994), examples considered as part of the immediate environment would be one's place of employment, peers, friends and classmates, and family. The content of the microsystem and how it is structured will influence the power any particular environmental element will have on the outcome of a person's development; specifically, the more interaction one has with any particular element of their immediate environment, the more influential that element will be (Bronfenbrenner, 1994).

The mesosystem domain represents the multiple potential relationships that can exist between any two microsystem elements (Bronfenbrenner, 1994). Examples might include mesosystems such as classmates and school, school and home, and friends and place of employment (Bronfenbrenner, 1994). Various mesosystems have varying levels of impact on the growing individual's behavior and development, as well as varying degrees of influence on other mesosystems (Bronfenbrenner, 1977). For example, a child's experiences in day care may influence how the child later behaves at home (Bronfenbrenner, 1977).

The exosystem domain represents both formal and informal relationships (Bronfenbrenner, 1977) between immediate settings in which a developing person is present and one or more settings in which the developing person is not present but which have an indirect influence on activities and behaviors of developing persons in their

immediate settings (Bronfenbrenner, 1994). Based on previous literature, Bronfenbrenner (1994) identified family social networks, parents' place of employment, and community-based settings as most likely to influence a developing person's immediate setting (p. 40). However, Bronfenbrenner (1977) also indicated that other recreational, social, and ecological settings may influence how people behave and the events in which they engage.

The macrosystem domain represents trends in the three subsystems, specifically with regard to cultural beliefs, customs, and lifestyle choices (Bronfenbrenner, 1994). However, these trends are most notably influential in social and psychological aspects associated with the macrosystem (Bronfenbrenner, 1994).

The chronosystem domain represents the changes or lack of changes that occur in developing persons or their environment over time (Bronfenbrenner, 1994). Changes in the environment may include changes associated with family processes, educational settings, and place of employment, whereas changes in the developing person may include changes associated with health, social class, or marital status (Bronfenbrenner, 1977). These changes or lack of changes may influence developing persons and their behavior and life experiences (Bronfenbrenner, 1994).

The most recent version of the model, the bioecological model, comprises four concepts: process, person, context, and time. The concept of process includes the idea that human development is dependent on regularly occurring complex and reciprocal interactions between people and their environments; the concept of person takes into consideration aspects of biology and genetics in one's development; the concept of context is made up of the microsystem, mesosystem, exosystem, and macrosystem of

Bronfenbrenner's (1974) earlier ecological model; and the concept of time is distinguished according to its duration: microtime, mesotime, and macrotime (the chronosystem of the original model; Tudge et al., 2009).

Numerous researchers have used Bronfenbrenner's (1977, 1994) ecological and bioecological models as a theoretical framework for their studies. According to Tudge et al. (2009), between 2001 and 2008, 21 researchers used the ecological model and four used the bioecological model. Because Tudge et al. indicated that their literature search was not exhaustive, additional studies may have been conducted during this time using one or both of the models. Since 2008, other researchers have conducted studies using the models. For example, Jordahl and Lohman (2009) used the bioecological model in their study, and Mmari and Blum (2009); Shim, Serido, and Barber (2011); Benson and Buehler (2012); Eliot and Tudge (2012); and Seshadri and Knudson-Martin (2013) used the ecological model in their studies. Although only 15 of the 31 identified studies related to adolescents and only two were related to premarital sexual activity, that so many researchers have used the models to understand factors that influence human development indicates the value of the models for understanding human behavior. In addition, as was the case in Tudge et al., my search of studies including the models was not exhaustive, thus it is likely that many more researchers have used these models in their studies.

Because the focus of my study is the experiences of adolescents about premarital sexual activity, the scope of my study does not include biological and genetic aspects of adolescence. Therefore, the bioecological model concept of person does not apply in my study (Tudge et al., 2009). Also, because my study represents adolescents' perspectives at

one time rather than over a period, the bioecological model concept of time does not apply in my study. Because I am unable to address all four concepts indicated in the bioecological model, I chose to use the ecological-system model as the theoretical framework in my study.

The ecological-systems model is appropriate for this study because it supports the use of the phenomenological approach in this study and provided an appropriate lens through which I can interpret and make sense of the data to answer the research questions posed in this study. In particular, the ecological-systems model supported the development of research questions focused narrowly on specific concepts regarding adolescents decision making on past premarital sexual activity, pregnancy and pregnancy-related issues, motherhood, and community support, but broadly viewing adolescents' experiences in general with regard to those topics. This phenomenological approach to the development of the research questions allows participants to share information that may demonstrate the effects of a wide range of possible combinations of relationships in and among the five domains of the ecological systems guiding their personal growth and development.

In addition, understanding that relationships exist between various domains in ecological systems helped me better prompt study participants during the interview process. Specifically, I was able to prompt participants to extrapolate on how the experiences they share relate to other potential domains in their ecological system. For example, if a participant shared that she does not talk to her friends about sex (microsystem), I might have prompted her to explain why she does not talk to her friends.

This line of questioning might uncover the influence of teachers or parents on either the participant (macrosystem) or the participants' friends (exosystem).

Also, using the ecological-systems model as a framework afforded me appropriate nomenclature and insight to consider how multiple factors working in multiple relationships in various contextual environments may impact adolescents' development and thus their decisions to engage in early sexual activity. Factors in contextual relationships may include individual factors (age, level of psychosocial development, sexuality education, cognitive and social skills, and adolescent reproductive health behavior [partner selection and contraceptive use]), relationship factors (parental expectations and guidance), community factors (peer and school influences), and societal factors (cultural norms related to sex, sexuality, and gender-role expectations). Understanding how these potential factors may work together in various ecological systems may be useful in developing interventions targeting specific influential factors or domain systems, which ultimately may increase the chances that interventions are successful.

Finally, researchers have called for increased use of the ecological-system model to explore factors associated with adolescent reproductive health in developing countries, including engagement in premarital sexual activity. Specifically, while reviewing published articles including the use of multivariate analysis to compare risk and preventive factors among variables, including premarital sexual activity for adolescents in developing countries, Mmari and Blum (2009) noted that researchers in the United States explored this topic almost seven times more often than those in developing countries. In addition, despite global evidence that environmental factors influence sexual

risk-taking behaviors, researchers in the United States were more likely to use an ecological model to explore this behavior (Mmari & Blum, 2009). Thus, by using the ecological-system model to explore the experiences and perceptions of unmarried pregnant adolescents in Orlu, Imo State about the decision to engage in early sexual activity, I may help lessen the gap in knowledge that exists about this population in at least one sub-Saharan African country.

Factors Contributing to Adolescent Premarital Sexual Activity

Research has indicated multiple factors that contribute to adolescent premarital sexual activity. When the literature indicated mixed results for any given factor, I have included both perspectives. Factors that contribute to adolescent premarital sexual activity included in this section are age, family characteristics, peer pressure, gender and gender roles, lack of sexual education, media exposure, economic status, and cultural norms.

Age (Individual Person)

Studies have shown that age is a contributory factor in adolescent sexual behavior in Nigeria. In a quantitative study, Moyosola, Ella, and Ella, (2012) determined patterns of sex stereotypes among adolescent and investigated the prevalence of sex stereotyping and its effects on sexual behavior. The authors studied 100 students, aged 14–20, randomly selected from Senior Secondary Class 3 students attending a government college in Keffi, Nigeria. Moyosola et al. (2012) found that sex stereotypes and age of respondents significantly influenced their tendency to be involved in risky sexual behavior. A chi-square value ($X^2 = 33.980$, $p < .05$).was obtained in the establishment of

the relationship between age and adolescent involvement in risky sexual behavior (Moyosola et al., 2012).

In another study using a cross-sectional design, Alo and Akinde (2010) investigated premarital sexual activities in an urban society in southwest Nigeria with 2,500 women aged 15–49 using a survey interview. The result of the study revealed that age at marriage and puberty are associated with high premarital sexual activity in the study location. Age was found to be a significant factor in adolescent sexual behavior. In fact, based on the logistic regression analysis of the study, the odds of a woman having premarital sexual activity increase with advancing age before marriage. Specifically the study revealed that women who married after age of 25 are more than three times as likely to have experienced premarital sex, whereas women in the age bracket of 15–19 are more than four times as likely to experience premarital sex than those less than 15 years of age (Alo & Akinde, 2010).This outcome is not surprising because it is believed that as people grow in age, they also increase their emotional and physiological needs, including needs for sexual experiences (Alo &Akinde, 2010).

In another descriptive study to investigate the attitude of Nigerian secondary-school adolescents toward sexual practices by Egbochukwu and Ekanem (2008), using 500 adolescents in Uyo Nigeria, the researchers found that exposure to pornographic films and peer influence most impacted adolescent sexual practice in this adolescent population, followed by contraceptive use and parental influence. Further, the researchers found no significant differences among attitudes of adolescents based on class. However, there were significant differences on the basis of age and gender. On the basis of age, the study showed that the older the adolescent, the more the inclination to experience sexual

activity, whereas on the basis of gender, boys were found to be more sexually active than girls (Egbochukwu & Ekanem, 2008).With parental influence ranking least in the factors that influence adolescent sexual practices in this study, Egbochukwu and Ekanem recommended that parents break their inhibition and give their children useful sexual education to prepare them for a healthy family life. The aim was to help reduce the influence of other negative factors such as pornography and peer influence that can negatively affect adolescent sexual practices and outcome.

Family Characteristics (Microsystem)

Family structure has been seen as the foundation of every successful society, however, certain family elements can increase the risk of sexual activity and pregnancy among unmarried female adolescents: single-headed family (mother), permissiveness and inadequate communication, residential mobility, adolescent female living away from home, and adolescent living in a home with a sibling who got pregnant as an unmarried adolescent (Mmari & Blum, 2009).

Studies have shown that family characteristics play a role in adolescent sexual activity in sub-Saharan African countries, including Nigeria. For example, Mmari and Blum (2009) studied risk and protective factors that affect adolescent reproductive health in developing countries, including 10 sub-Saharan African countries, one of which was Nigeria. To do this, Mmari and Blum conducted a systemic review of 61 published quantitative studies on adolescent health outcomes completed between 1990 and 2004; one of the health outcomes was engagement in premarital sex. Mmari and Blum found that (a) of the two studies that examined residential mobility and engagement in premarital sex, both found a significant relationship between the two variables; (b) of the

two studies that examined adolescents' perceptions of parental marital instability and engagement in premarital sexual activity, both found a significant relationship between the two variables; (c) of the two studies that examined whether adolescents lived away from home and engaged in premarital sexual activity, both found a significant relationship between the two variables; and (d) of the three studies that examined whether other siblings in the home became pregnant as adolescents and engaged in premarital sexual activity, all three found a significant relationship between the two variables. Therefore parental marital status, single-headed families (mother), residential mobility, adolescent female living away from home, and adolescent living in a home in which another sibling has become pregnant as an adolescent are all associated with a higher risk of unmarried teen pregnancy.

Mmari and Blum (2009) acknowledged study limitations based on small and restricted study samples, limited settings and study designs (including the use of endogenous variables), and narrow inclusion criteria that excluded unpublished studies. However, the study results indicated factors that contribute to sexual-health outcomes, in particular the behavioral trends and environmental influences discussed above that can be used to develop programs to reduce the incidence of negative adolescent sexual-health outcomes, including premarital sexual activity. Specifically, the researchers suggested programs that target multiple risk factors simultaneously (Mmari & Blum, 2009).

To investigate the prevalence of premarital sex and factors that influence the incidence of premarital sex, Adeoye, Ola, and Aliu (2012) conducted a descriptive study of 300 randomly selected students (176 boys and 124 girls in a private tertiary institution in Nigeria. Results indicated that family background was a contributing factor to

premarital sexual activity for students, who ranged in age from 14 to 25 years. In addition, family background contributed to premarital sexual activity ($\beta = 0.439$, $t = 4.174$, $p < .05$) to a greater extent than both age and gender (Adeoye et al., 2012). The authors explained they were not surprised to find a relationship between family structure and premarital sexual activity, considering that family structure is foundational to any successful society.

In a similar study, Olubunmi (2011) surveyed 388 Nigerian adolescents (128 boys and 148 girls), aged 16–19, to determine whether family/home type was a predictor of adolescent premarital sex and if there were differences in sexual behaviors between adolescents from intact families and those from one-parent families. Based on measures of adolescents' attitudes toward sexual activity and their engagement in premarital sexual activity, and parental involvement (a combined rating of parental–child relationship and communication levels) as a contributor to home type, Olubunmi found that 34.7% of adolescent premarital sexual behavior can be attributed to home type and that home type was a significant predictor of premarital sexual activity among this population ($r = 0.569$, $r^2 = 0.347$, $f(1,218) = 56.47$, $p < .05$). In addition, Olubunmi found differences between adolescents from one-parent families and those from intact families. Specifically, the researcher found adolescents from single families were almost 1.3 times more likely to have engaged in premarital sexual activity than adolescents from intact families. The researcher suggested that cultural factors and lack of strong parental relationships may contribute to these differences.

These findings were confirmed by Ugoji (2009). In a descriptive study of the predictors of sexual behavior of 1,200 female secondary-school students in Nigeria:

single parenthood was associated with a higher rate of adolescent pregnancy than was the presence of a two-parent family. Ugoji (2009) also found that family characteristics related to media exposure and religious practices were predictors of adolescent sexual behavior. These are addressed under specific sections below. The author believed that a permissive and inadequate relationship with parents, combined with a lack of sex education in the community, may predict early unprotected sexual activity among teenage girls. The reasoning behind this is that, if sex education is available neither at school nor at home, and parents are permissive in their attitudes toward their daughters, then girls will tend to seek sex-related information from peers—especially sexually active men whose information may be inaccurate and self-serving.

Peer Pressure (Microsystem)

Researchers suggested that peer pressure contributes to the occurrence of adolescent sexual activity. In a quantitative study of 496 adolescents aged 10 to 19 in Nkpa, a rural town in southern Nigeria, Okereke (2010a) explored the social context of sexually transmitted infections among adolescents. Okereke found that premarital sexual activity is a common practice among the adolescents: 62% of the participants had had premarital sex, with a mean age of 15.6 years. Of those sexually active adolescents, 53.2% has had multiple sexual partners. When Okereke examined the factors contributing to this condition, peer pressure (46.8%) was the most influential in an adolescent's decision to engage in adolescent sexual activity.

Egbochukwu and Ekanem (2008) also studied adolescent sexual practices and the influence of factors related to those practices among adolescents in Nigeria. To explore those practices and the influence of those factors, Egbochukwu and Ekanem conducted a

quantitative study of 500 secondary school adolescents in Uyo and used Pearson's correlations to determine levels of influence. The researchers found that among adolescents who reported having sex, peer pressure had a 61.2% correlation of influence on adolescent sexual activity, second only to pornography, with an influence level of 65.1%.

Using a descriptive survey design to study 1,008 adolescents ages 10 to 19 in Owerri Municipal, Nigeria, Nwankwo and Nwoke (2009) explored the rates, types, and factors that influenced adolescent risky sexual behavior. The researchers found that almost half the participants (47.4%) reported having had sex. Of those, the majority (n = 302) 63.2% reported having had sex five or more times in the 6 months prior to the study and 16 adolescents (3.4%) reported having had sex six or more times in the 6 months prior to the study. According to Nwankwo and Nwoke, the majority of adolescents (52.3%) reported peer pressure as the influencing factor in their decision to engage in risky sexual behavior.

Although some researchers found that peer pressure is a significant contributor to adolescent sexual activity in general and risky sexual activity in particular, Shittu et al. (2007) did not find this to be true. In a quantitative study of 580 secondary school students aged 12 to18 in Oworonshoki, Lagos, Nigeria, Shittu et al. explored negative health outcomes related to adolescent sexual behavior and found no connection between peer pressure and adolescent sexual activity. Similarly, in a quantitative study of 896 adolescents aged 10 to 19 in Owerri, Nigeria, Okereke (2010b) found no connection between peer pressure and adolescent risky sexual behavior.

It is possible that Shittu et al. (2007) and Okereke (2010b) did not find peer pressure was a factor in adolescent risky sexual behavior because of differences in study locations. Both Shittu et al. and Okereke (2010b) conducted their studies in cities, whereas locations for the Okereke (2010a), Nwankwo and Nwoke (2009), and Egbochukwu and Ekanem (2008) studies were more rural. It is likely that peer pressure is less influential in city locations because adolescents in cities have access to more information about sexual activity and thus are better positioned to make educated choices about their participation in sexual activity. In many rural areas of Nigeria, little access to radios and even less to television limits the information available to this population of adolescents. A subsequent section includes further discussion of the lack of sexual education on adolescent sexual activity.

Gender and Gender Roles (Mesosystem)

Studies have shown that gender and gender roles are contributory factors in adolescent sexual behavior in Nigeria. For example, in Mmari and Blum's (2009) study of risk and protective factors that affect adolescent reproductive health in developing countries, the researchers found that of 10 studies in which researchers examined gender and engagement in premarital sexual activities, nine studies indicated a significant relationship between the two variables. Specifically, Mmari and Blum found that men were more likely to engage in premarital sexual activity than were women. The researchers indicated that results from this variable may be skewed because of cultural expectations that men are rewarded for expressing their sexuality whereas women are discouraged from doing so. In their study of factors influencing the prevalence of premarital sex among Nigerian students, Adeoye et al. (2012) also found that gender is a

significant contributory factor to adolescent sexual behavior ($p > .05$). The researchers suggested this result might be reflective of general differences assumed between men and women, in particular that men tend to be more sexually reactive than women.

Moyosola et al. (2012) conducted a quantitative study to investigate the prevalence of sex stereotyping and its effect on the sexual behavior of 100 students (67 men and 33 women aged 14–20) who were randomly selected from a senior secondary class at a government college in Keffi, Nigeria. A significant number of participants reported strong agreement with multiple stereotypical statements, including "Boys have greater need for sex than girls," "Sexual drives in human beings are not controllable," "Decent people do not openly discuss sex," and "A person who is sexually active before marriage, usually makes a good spouse" (p. 27). Results of chi-square analysis indicated that students with high levels of sex stereotypes had a greater tendency to engage in risky sexual behavior and those male students formed the overwhelming majority who reported high levels of sex stereotypes (Moyosola et al., 2012). Female participants were more likely to indicate moderate levels of sex stereotypes (Moyosola et al., 2012). The researchers did acknowledge the possibility that differences found between the men and women in the study might have been the result of individual differences rather than differences between the two genders and the way they experience the world and interpret those experiences.

In a another study, Ugoji (2011) used a descriptive survey design to investigate romanticism and gender identity as predictors of sexual behavior among graduate students in Nigeria university using 400 participants aged 19–28 with mean age of 24. The results of the study revealed a significant relationship between romanticism, gender

identity, and sexual behavior using Pearson's product-moment correlation statistic. A combined effect of romanticism and gender identity on sexual behavior was assessed using multiple regression, $r = 558$ and an r^2 of 311, which showed a combination of the variables (romanticism and gender identity) accounting for 31.1% of sexual behavior of participants in this study. However, when each variable effect on sexual behavior was further assessed using an F ratio, the result showed an F ratio of 525587, significant at the .05 alpha levels, indicating that romanticism is a predictor of sexual behavior. It is not clear why there are differences in the results between the two studies, but differences in the framing of questions, numbers of participants, and location of the studies or ages of the participants could all be factors. The study showed romanticism and gender play large roles in adolescent sexual behavior, with male dominance in most activities including sexual activity.

Lack of Sexual Education (Mesosystem)

Lack of sexual education is one of the factors identified as contributory to adolescents' premarital sexual behavior. Shittu et al. (2007) conducted a quantitative study to explore the negative health outcomes related to adolescent sexual behavior among secondary students 12–18 in Owuronshoki Lagos Nigeria. More than half (61.5%) of sexuality information received by participants was from peer/friends who were also misinformed in sex education; 80% of respondents were not aware that pregnancy can occur even from one's first sexual intercourse experience, and 51% of respondents lacked basic knowledge about safe behavioral practices and attitudes concerning STDS/HIV/AIDS. Shittu et al. concluded that this population is vulnerable for

STDs/HIV/AIDs and for unintended pregnancy due to lack of/ misinformation related to sexuality education.

Olubunmi (2011) found significant lack of education among the study population. The author saw the education of children about sexual matters, especially adolescents, as the responsibility of parents. However, in a traditional Nigerian family, people are quite reserved about sexual matters. As a result parent–child discussion on sexual matters is obscured by parental inhibitions and intergenerational tension; most Nigeria parents tend to shy away from such discussions, due to their general belief that such discussions would result in sexual experimentation among adolescents (Olubunmi, 2011). Olubumni concluded that, based on the high prevalence of adolescent sexual outcomes such as teenage pregnancy, STDs and HIV/AIDS, adolescent sexual education should be made a joint effort of parents, teachers, counselors, curriculum planners and even government, with counselors taking the first step. In addition, Olubumni (2011) recommended encouragement of skill development among adolescents to aid in warding off intimidating peers or those who may be luring them into risky sexual practices.

Nigerian parents fear and assume that discussion of sex and sex-related matters may result in adolescent sexual experimentation. These fears may be unfounded: Based on the results of a study by Bimbola and Ayodele (2007), adolescent girls who are exposed to family life education (sex education), are less likely to have early sex due to the availability of more and possibly accurate information, as well as a better sense of sexual responsibility. As a result Bimbola and Ayodele recommended that parents, schools, and other stakeholders provide adolescents with facts and information related to

their sexual functioning and consequences of sexual activity at early and appropriate ages, using reliable as well as sensitive strategies.

Okereke (2010b), in a qualitative study with adolescents 10–19 in Owerri, saw the issue of recurrent unintended pregnancy and inability to seek or receive treatment post abortion as a vivid indication of lack of adequate education or counseling about reproductive health and clearly a failure of the programs that may have been initiated for increasing adolescent awareness of STDs including HIV/AIDS, coupled with poverty and illiteracy that is common in the study location. Okereke recommended the use of the most accessible, more acceptable, convenient, and familiar cost-effective strategy for information dissemination to enhance adolescent understanding of STDs.

Although other researchers have found that lack of education regarding sex is a contributing factor to adolescent risky sexual behavior, Nwankwo and Nwoke (2009) found that this was not the case. In contrast, the researchers found that peer groups were the main source (55.6%) of sexual information for adolescents and indicated this often was the result of parental embarrassment over talking to children about sex. However, the researchers also found that 100% of the adolescents in the study were aware of the multiple negative outcomes associated with risky sexual activity, including STDs, pregnancy, and loss of educational opportunities, family rejection, and abortion (Nwankwo & Nwoke, 2009, p. 143). That adolescents may understand the risks associated with sexual activity suggests that lack of education regarding sex may not be a contributing factor to adolescent risky sexual behavior.

Media Exposure (Exosystem)

Media influence has been seen as a contributory factor to adolescent sexual behavior In Nigeria. In a descriptive study of 1,200 female adolescent secondary school students in southernmost Nigeria, Ugoji (2009) found that parental marital status, media factors, and religion could significantly predict sexual behavior of participants. However, among female students', media factors were seen as the best predictor of sexual behaviors. Ugoji suggested that most movies, drama, comedies, and other forms of media viewed by female students routinely contained "sexually intoxicating and provocative scenes," which could explain the strong predictiveness of at least some kinds of media consumption for female adolescent sexual behavior (Ugoji, 2009, p. 114).

In another qualitative study Ankomah, Mamman-Daura, Omoregie, and Anyanti (2011) investigated reasons to delay or engage in early sexual initiation in Nigeria using 30 focus groups with unmarried 14 to 19 year old adolescents in four geographically and culturally dispersed Nigerian states. Their study described early sexual activity by themes, such as "the push" (parental exposure of young girls to street trading/hawking); "the pull" (viewing locally produced sex movies); peer influence for boys and transactional sex for females (exchanging sex for gifts, money, or other favors); the "coercive factor" (rape and coercion); and the "restraining factors" (including religious injunctions (e.g., fear of pregnancy, dropping out of school, or bringing shame to the family, which may hinder girls from finding a good husband, p. 82). In this study, media were categorized as pull factors and perceived by participants as having both positive and negative effects on the adolescents' sexual behavior. Television for example, was regarded as a positive influence when used for education of young people to restrain or

delay sexual activity, but negative when used to show nude pictures of boys and girls and even picture of young people having sex, which entices especially the men who claim that they have natural uncontrollable sexual urges. Their drive is compounded by what is shown on television and makes it difficult for them to abstain from sexual activity (Ankomah et al., 2011).

In another descriptive and analytical study to evaluate household socioeconomic status and sexual behavior among Nigerian female youth, using data on 1,831 never married women aged 15–24 from the Nigeria Demographic and Health Survey, Isiugo-Abanihe and Oyediran (2004) found that 31.5% of respondents had had sexual intercourse, and more than half of these had had an affair in the month preceding the survey. The mean age of sexual debut in this population was 17, with little variation based on socio-demographic indices including poverty. In this study, high-socioeconomic-status adolescents who had access to the media were more sexually exposed than those who had less access to media or fewer household appliances. The level of sexual activity was positively related to the amount of media information accessible to respondents. Those with low access to medical information started sexual activity 2 years earlier than those with greater access to media information. Bivariate analysis suggested that access to media was directly related to age at initiation of sex (Isiugo-Abanihe & Oyediran, 2004).

Economic Status (Macrosystem)

Poverty has been identified as one of the contributing factors in adolescent premarital sexual activity in Nigeria. In the Danjin and Onajole (2010) exploratory cross-sectional study of attitudes toward HIV and HIV risk awareness among 395 secondary

school students in Gombe Nigeria, 8% reported, exposure to substance abuse, 47.7% to early sexual initiation, and 14.1% exposure to multiple life sexual partnerships. Over half (54.4%) reported being HIV negative, 9.4% reported being HIV positive, and 36.2% did not know their HIV status. The prevalence of HIV among this group was higher than in the overall state rate. The author identified poverty and sex-for-money or -favor as one of the contributory factors for risky sexual behavior among 9.8% of the students, though the report did not indicate what percentage were men or women.

In another study to explore the social context of sexually transmitted infections among adolescents in rural Nigeria. Okereke (2010a) found that premarital sex is common among adolescents, with 62% having their sexual debut at a mean age of 15.6 years. When asked the reason, 46.8% stated that their decision to engage in sex was greatly influenced by peers, and 37.1% reported the need to get money or other material assistance, indicating that poverty was a contributory factor in this population. This was not surprising, given that 43% of the participants were unemployed and from a poor socioeconomic background, with most of their parents being subsistence farmers and petty traders (Okereke, 2010a). A similar finding emerged from a systemic review of 61 quantitative studies to evaluate risk and protective factors in adolescent reproductive health in developing countries conducted between 1990 and 2004. The authors identified sex for money or gifts as a significant factor contributing to adolescent sexual activity and sexually transmitted and HIV infections (Mmari & Blum, 2009).

Although some researchers found poverty to be a contributory factor to adolescent risky sexual behavior, other researchers have not found this to be the case. For instance, Nwankwo and Nwoke (2009) conducted a descriptive study with 1,008 in-school

adolescents aged 10–19 in the Owerri region, in which they found cultural norms and economic situations influenced risky sexual behavior. Okereke (2010b) also did not find any connection between poverty and adolescent risky sexual behavior. A possible explanation is that although both study have many similarities, Nwankwo and Nwoke's adolescent population was comprised only of in-school students, whereas Okereke's (2010a) adolescent population was comprised of both in-school and out-of-school adolescents who had a tendency to be unemployed and had limited sources of income, unlike in-school students, who usually have pocket money. In another quantitative study with 500 secondary-school adolescents in Uyo Nigeria, Egbochukwu and Ekanem (2008) did not identify any connection between poverty and adolescent risky sexual activity, perhaps because Uyo is one of the affluent regions of Nigeria due to oil wells and other natural resources located there, and proximity to the sea.

In their qualitative study to investigate reasons for delaying or engaging in early sexual initiation among adolescents in Nigeria, Ankomah et al. (2011) used 30 focus groups of unmarried adolescents aged 14–19 years from four states. The study showed several reasons for early sexual activity categorized into four themes: the push, the pull, the coercive, and the restraining factors. Poverty and transactional sex were part of the push factor, as participants discussed how they got financial and material rewards from trading and sexual interaction. Participants indicated that among the rewards that motivated them to have sex, were cash, gifts (especially mobile phones), and in the educational arena, favors related to offers of admission and examination success. As indicated by one of the female participants, "most times if you are from a poor family and

a boy promised to give you something (financial rewards), you will decide to do it so that you will get money to solve your problems" (Ankomah et al., 2011, p. 81).

Cultural Factors (Macrosystem)

Okereke (2010b) suggested that one reason adolescents tend not to take advantage of available contraception is because of the cultural perspective that premarital sex is considered deviant, and therefore the use of any sexually related paraphernalia, especially condoms, is taboo (p. 44). In a quantitative study of the reproductive health needs of 896 adolescents in Owerri, Nigeria, Okereke (2010b) found that religious and socio-cultural values made the use of contraception explicitly and morally unacceptable, and because adolescents in Nigeria do not use them, they engage in risky sexual behavior. Ultimately, adolescents' lack of use of protective contraception contributes to the high rates of reproductive tract infections and STDs (Okereke, 2010b).

Other researchers have not found any connection between cultural norms and adolescent sexual behavior. For example, Nwankwo and Nwoke (2009), in their descriptive study with 1,008 in-school adolescents, did not find any connection between cultural norms and adolescent risky sexual behavior. Egbochukwu and Ekanem (2008), in their quantitative study with in-school adolescents did not identify cultural norms as a contributory factor to adolescent risky sexual behavior. A possible explanation is that this type of study and framing of questions may have impacted participants' answers. For example, qualitative studies that allow participants to say more without the restrictions of quantitative research, is able to bring out more detail from the participants.

Negative Outcomes Associated With Unmarried Adolescent Sexual Activity

Sexually Transmitted Diseases

STDs are one of the negative outcomes of adolescent sexual activity and are a public health burden all over the world. According to Action Health Incorporated (AHI, 2005), every year one of every 20 adolescents becomes infected with STD and 80% of HIV infections in Nigeria are contracted through sexual intercourse. More than 1 million teenage men and women acquire a STD in Nigeria yearly. From 1990 to 1999, there was a consistent increase in AIDs cases in Nigeria from 1.8% in 1990, to 3.8% in 1993, 4.5% in 1995, to 5.4% in 1999, which means at least 5,400,000 Nigerians are infected with the AIDs virus (AHI, 2005). As reported by Guide for Action, young people are at risk for STDs as well as HIV/AIDs due to (a) having little knowledge of STDs/HIV/AIDS, even when they are sexually active; (b) engaging in multiple-partner sexual relationships; (c) not protecting themselves from getting infected, even when they are sexually infected and have knowledge about STDs/HIV/AIDs; (d) being reluctant to seek treatment when infected with STD/HIV/AIDS, (e) young people, especially females, exchanging sex for money; and (f) many young people being coerced into explosive sexual relationships in which they have little control over their homes, school, or work environments (AHI, 2005).

Studies have shown that sexually active adolescents are at greater risk of contracting HIV/AIDS infections and other STDs, possibly due to their poor or inconsistent use of condoms and contraceptive. In their quantitative study of the negative impacts of adolescent sexuality problem among secondary school students in Lagos Nigeria, Shittu et al. (2007) found that STD prevalence was 34%, and that 73% of

respondents had used one form of contraceptive or another. Morhason-Bello et al. (2008), indicated that learning from friends, parents, or media could be a source of incorrect information. They concluded that one of every four in-school adolescents in the study location are sexually active and most engage in unsafe sexual practices that make them vulnerable to health issues such as STDs/HIV/AID and genital cancer. Okereke (2010a) found that 29.0% of the study population has had STDs, mostly gonorrhea and syphilis, with a recurrent infection rate of 55.6% and nontreatment rate of 16.7%. Okereke (2010b) also found that 27% of the study populations have had STDs, mostly gonorrhea and syphilis, and that 19.6% of the females have had an abortion (Okereke (2010b).

Even though married adolescents suffer from more occurrences of AIDS than unmarried girls (Makinwa-Adebusoye, 2006; Population Council, 2004), those in the age group 15–24 have the highest overall rate of HIV/AIDS among any age group in Nigeria (National Agency for the Control of AIDS, 2012). In particular, the fact that older men seek sexual relations with young girls without using contraceptives, results in transmission of HIV/AIDS (WHO, 2004). In addition, in high prevalence HIV/AIDS countries, men are reported to even purposely have sexual relationships with young girls in an attempt to avoid becoming infected with HIV (WHO, 2004). The presence of other STDs such as syphilis, gonorrhea, and Chlamydia may increase the risk of transmission during labor (WHO, 2004). The health consequences of contracting STDS, including HIV/AIDS, includes chronic lower abdominal pain, menstrual problems, urinary retention, infertility, ectopic pregnancy, and death (AHI, 2005).

Pregnancy-Related Complications

According to WHO (2013), an estimated 16 million adolescents, aged 15 to 19, give birth each year, and are responsible for 11% of all births worldwide. The majority of adolescent births occur in the middle- and low-income countries, with the average adolescent birth rate in middle-income countries being twice that of high-income countries, and the rate in low-income countries being five times higher. Interestingly, seven countries account for 50% of all adolescent births worldwide: Bangladesh, Brazil, the Congo, Ethiopia, India, Nigeria, and the United States (WHO, 2013). Okereke (2010b), in a study in Nigeria, found that 30.2% of female adolescents had had unintended pregnancies and 73.3% of those who had an unintended pregnancy also had repeat pregnancies. Although adolescents (aged 10–19) accounted for 11% of all births worldwide, they also account for 23% of all pregnancy-related and childbirth complications (WHO, 2013).

Over 300 million women worldwide suffer from complication of pregnancy and delivery, of which obstetric fistula is one of the most severe forms of this pregnancy-related outcome in women (WHO, United Nations Children's Fund, United Nations Population Fund [UNFPA], & World Bank, 2012). An estimated 2 million women live with obstetric fistula in developing countries and more than 50,000 new cases occur each year (WHO, 2010). Although fistula can occur at any maternal age, younger women are most at risk for this devastating pregnancy-related complication. Due to their young, physically immature bodies, adolescent mothers are at especially high risk of prolonged and obstructed labor that can result in obstetric fistula, a condition that leaves affected women with constant incontinence, shame, social segregation, and other health problems

(UNFPA, n .d.). As reported by WHO (2013), 65% of women living with fistula developed this during adolescence. Female adolescents aged 15 in Africa have the highest probability of dying from pregnancy-related causes, one in 26, and adolescent girls between the ages of 15 and 19 are twice as likely to die during pregnancy or childbirth as women in their 20s; the risk is five times higher for adolescents under the age of 15 (UNFPA, n d.). In their cross-sectional study to determine the contributory factors of vaginal fistula among Sudanese women, Elsadig et al. (2009) found that 44.2% of the 52 study participants were 18–24 years old and more than half (58.8%) were teenagers at the time of their marriage.

Anemia has been identified as one of the health problems common in pregnancy and particularly in adolescent pregnancy, where it is associated with negative birth outcomes (WHO, 2013). In a cross-sectional comparative study in India to assess the extent of teenage pregnancy complications using adolescent mothers15–19 as the study group and mothers 20–24 years as the control, Banerjee et al. (2009) found that the prevalence of anemia was significantly higher (62.96%, $p < .05$) among the teenage group compared to controls (43.59%). Although severe anemia (Hgb8gm) was only found in the control group, none of the babies born from mothers in the control group were below 1.5 Kg, which suggests that anemia may have more negative health outcomes for adolescents and their infants than for older mothers and their infants. Olanrewaju and Olurounbi (2012) reported that adolescent mothers in Nigeria are at greater risk of anemia and preeclampsia because they are less likely to receive prenatal care. These authors also found that adolescent mothers are at risk for vitamin deficiency, inadequate

weight gain, premature labor, inadequate development of the pelvis resulting in difficult vaginal deliveries, and a higher incidence of caesarean births.

Abortion

Each year an estimated 42 million abortions take place, 22 million safe and 20 million unsafe (Shah & Ahman, 2009). Unsafe abortions account for 70,000 maternal deaths and cause another 5 million temporary or permanent disabilities each year, resulting in a higher rate of maternal morbidity in regions with restriction on abortion laws than in regions with few or no restriction on abortions (Shah & Ahman, 2009). Although unsafe abortion is a health risk for all women, Shah and Ahman (2009) found that younger women are more vulnerable and have more immediate and long-term disability and death related to unsafe abortion. Shah and Ahman found that 40% of all unsafe abortions in 2003 were performed on women under the age of 25 and that in Africa, 25% of all unsafe abortions were performed on adolescents aged 15 to 19, and about 60% on young women under the age of 25. According to Shah and Ahman, the African region has the highest rate of unsafe abortion exposure among adolescents and young women, followed by the Asian region.

WHO (2013) also reported an estimated 2.5 million adolescents have unsafe abortions every year, adolescents experience more severe complications related to abortion than older women, and adolescents 15–19 who live in middle- and low-income counties account for 14% of all unsafe abortions. The reasons suggested by Shah and Ahman (2009) for seeking abortion among Africans includes premarital pregnancy or pregnancy resulting from nonconsensual sex, whereas in Asia, abortion is sought to terminate childbearing after achieving the desired number of children.

In Nigeria, abortion is very common, despite a law that restricts abortion. In their qualitative descriptive cross-sectional study of 521 adolescents 10–19 years old in central Nigeria, Aderibigbe, Aroye, Akande, Monehin, and Babatunde (2011) found that 28% of participants were sexually active. Female participants who have ever been pregnant constitute 5.7% of all sexually active female participants, out of which 66.3% have been pregnant only once while 33.3% have been pregnant more than once. All the female participants who reported ever been pregnant also reported aborting the pregnancy, thereby making abortion prevalence for women in the study 100%. In contrast, of the 17% of all the sexually active boys who have ever impregnated a girl, 87.5% advised the girls to abort the pregnancy, whereas only 12.5% of the boys had partners who delivered their babies. As indicated by the author, all the abortions were carried out by unqualified personnel. The authors concluded that the prevalence of teenage pregnancy and induced abortion among the study population was high. Reasons given by the study population for resorting to abortion included being in school, not being married, being too young, and being unwilling for their sexual partner to father (claim) the child (Aderibigbe et al., 2011).

In a similar study to assess the negative impacts of adolescent sexuality problems among secondary-school students in Oworonshoki Lagos in Nigeria, Shittu et al. (2007) found that 60% of the respondents between ages 12 and 18 has had unsafe abortions with 11% having more than two abortive procedures. Of respondents who had abortions, 65% identified fear of dropping out of school and financial problems as reasons.

Abortion-Related Complications

Studies have shown that induced unsafe abortions expose women to various dangers from minor to severe complications, or even death. As has previously indicated, regions in the developing world, and especially Africa, are affected most by the negative impact of unsafe abortion. One of the related complications is maternal death (mortality). Shah and Ahman (2009) found that although Africa accounts for 25% of all births and has 13% of all women of reproductive age and an unsafe abortion rate of 28%, it has more than half (54%) of all unsafe abortion-related deaths. Of the 70,000 who die from unsafe abortions each year, most were in developing regions, with over half occurring in Africa, and 34% in the least developed countries (Shah & Ahman, 2009). In addition, 5 million women suffer temporary or permanent disability due to complications of unsafe abortion (Shah & Ahman, 2009). In contrast, Asia accounted for 50% of all unsafe abortions in the region, but has a lower rate (43%) of all maternal deaths related to unsafe abortion. In 2005, Asia had an estimated 30,100 maternal deaths related to unsafe abortion (Shah & Ahman, 2009).

Vaginal bleeding was one of the complications related to unsafe abortions. In a quantitative study of sexual behavior of adolescents, Shittu et al. (2007) found that one of the major complications of abortion was vaginal bleeding. In another study by Henshaw et al. (2008), using a survey of women and their providers in 33 hospitals and eight states across Nigeria from 2002–2003 to investigate the severity and cost of unsafe abortion, 2,093 patients in Nigerian hospitals were being treated for complications of abortion. Some of the serious complications found in the study population were sepsis (24%), pelvic infection (21%), and instrumental injury (11%), whereas 22% had hemorrhages

that required blood transfusions. Although about 10% required abdominal surgery, more than 2% died. Women who have experienced prior attempts to induce abortion with private clinics and other methods before going to the hospital were noted to seek induction at the later stage of gestation, have expensive and complicated procedures, and have more severe complications. Women who went to the hospital without prior attempts at induction, in contrast, had less complicated and less expensive procedures with few or no complications.

In another quantitative study to investigate the causes and consequences of induced abortion among university students in Nigeria, using 187 participants, the authors found that unmarried adolescent women are more prone to abortion (85%) than those who were married, possibly due to lack of proper sex education or sexual knowledge (Wahab & Ajadi, 2009). As to consequences of abortion, the authors found that 40.7% of participants believed abortion can lead to infertility, 26.7% to infection, nearly 30% to death, with 2.7% not responding. Wahab and Ajadi (2009) concluded that for young women aged 15 to 19 worldwide who engage in the act of abortion, it is the leading cause of disease, infertility, birth complications, and death. The majority of respondents believed that teaching sex education could curb unwanted pregnancy and subsequently abortion.

Maternal Mortality

Worldwide, more than 500,000 women and girls die of complications related to pregnancy and childbirth each year and more than 99% of those deaths occur in developing countries such as Nigeria (U.S. Agency for International Development [USAID], 2005). In addition, for every woman or girl who dies as a result of pregnancy-

related causes, 20 to 30 more will develop short- and long-term disabilities, such as obstetric fistula, a ruptured uterus, or pelvic inflammatory disease (USAID, 2005).

In 2010, an estimated 287,000 maternal deaths occurred worldwide, making a maternal morbidity rate of 210 maternal deaths/100,000 live births (WHO, UNICEF, UNFPA, & World Bank, 2010.) As indicated by WHO, UNICEF, UNFPA, and World Bank (2012), in 2010, sub-Saharan Africa (56%) and southern Asia (29%) accounted for 85% of the global burden of maternal death (245,000). For country-level indicators, two countries accounted for a third of global maternal deaths: India and Nigeria at 19% (56,000) and 14% (40,000) respectively (WHO, UNICEF, UNFPA, & World Bank, 2012). Although about 360,000 women die from pregnancy-related causes yearly, another 10–15 million are reported to suffer from severe pregnancy-related disabilities (UNFPA, 2010). According to UNFPA (2010), in Africa and South Asia, pregnancy and childbirth-related complications are the leading cause of death for women of childbearing age, and women aged 15–20 are twice likely to die in childbirth as those in their 20s, whereas women under the age of 16 are four times more likely to die from maternal causes (Mangiaterra, Pondse, McClure, & Rosen, 2008). Globally, the two leading causes of death in women of reproductive age are AIDs and pregnancy; and childbirth-related complications and recent analysis in south and east Africa have shown strong connection between those factors and maternal mortality (UNFPA, 2010). Maternal mortality is a representation of disparity of health related to economic power between wealthy and poor countries, and within countries, between the rich and the poor (UNFPA, 2010). As a result, the risk of a woman in sub-Saharan Africa dying from pregnancy-related complication is 1:31, compared to 1:4,300 in developed countries (UNFPA, 2010). In

Africa, hemorrhage, sepsis and the impact of HIV/AIDS also contribute significantly to maternal deaths (USAID, 2005).

Negative Social and Emotional Outcomes

Early pregnancy (before 18 years of age) is usually unintended, especially when it is outside marriage (Action Health Incorporated, 2005). Nigeria has high level of early unwanted/unintended pregnancy, which is attributed to such factors as (a) limited access to accurate and comprehensive information on sexual and reproductive health; (b) ineffective use of contraception by sexually active persons (societal, parental, or partner pressure on young women to bear children); and (d) unwanted sexual relations, sexual exploitation, and abuse (AHI, 2005). The socioeconomic consequences for adolescent pregnancy include termination of education, poor job prospects, loss of self-esteem and broken relationships (AHI, 2005).

In a descriptive cross-sectional study exploring teenage pregnancy and poverty, Oke (2004) conducted interviews and focus groups with 400 pregnant and un pregnant adolescent women. In the study, the researchers found that 68% of pregnant adolescents had prematurely terminated their education. Assuming that pregnant adolescents continued their pregnancies and delivered their babies, Oke suggested that adolescent mothers, then, would be more apt to be undereducated and thus they and their children would live in poverty. Although it is typical for adolescents to be married and have children, it is socially unacceptable for adolescent women to have children out of wedlock in most of Nigerian society (Itua, 2012).

Infant Morbidity and Mortality

Studies have shown that preterm delivery is more prevalent in children born of adolescent mothers than in children born of mothers older than 20 years. WHO reported that the rate of infant-mortality complications such as preterm birth and low birth weight are higher among children born of mothers below 20 years of age, which increases the chances of death and future health problems for these children. In addition, WHO reported that still birth and death within the first week of life are 50% higher among babies born of adolescent mothers than babies born of mother older than 20 years? Banerjee et al. (2009), in their comparative study, found that the rate of preterm delivery was significantly higher in the study group (51.72%) than the control group (25.88%). In the same study Banerjee et al. found that the study group had a significantly higher incidence of low birth weight (65.52%) than the control group (26.37%). The authors concluded that anemia, preterm birth, and low birth weight are more common among adolescent mothers than mothers older than 20.

Children born of adolescent mothers are at higher risk of health, social, and emotional problems than children born of older mothers (Olanrewaju & Olurounbi, 2012). According to Olanrewaju and Olurounbi (2012), children born of adolescent mothers are also at higher risk of sickness and death within the first year of life than older mothers, possibly because of the inadequate nutrition of adolescent mothers during pregnancy. In Nigeria, where there is extreme poverty in most families, little or no government aid for the poor, and where adequate medical and nutritional care is difficult to find, malnutrition during pregnancy is common, especially for adolescents and in situations where the pregnancy is unintended and unwanted.

Economic Hardship

Globally, pregnancy can be a distraction from adolescents' life goals. In Nigeria, most if not all pregnant girls withdraw themselves from school voluntarily or involuntarily (Oyefara, 2009, p. 4). With the changing socioeconomic situation in Nigeria, educational attainment has become a measure of status for both men and women. Thus, interruption in the educational process due to pregnancy and childbirth may restrict an adolescent's future opportunities for socioeconomic advancement, which may result in persistent low socioeconomic status and failure to contribute to society in general (Oyefara, 2009).

Studies have shown that adolescent motherhood affects not only the adolescent involved, but also the child, the social, economic and, educational status of the adolescent, as well as their family, community, and the nation at large. In a cross-sectional survey study to examine the socioeconomic consequences of adolescent childbearing in Osun state, Nigeria with 1,000 women of reproductive age (15–49 years), Oyefara (2009) found a high prevalence rate of 15.8% of single parenthood among adolescent mother, compared to 2.6% among older mothers. The study also showed a strong relationship between age at first childbirth and marriage stability, with 10% of adolescent mothers having separated and 3.4% divorced, compared to 4.6% and 2.6% for older mothers, respectively. An explanation of this pattern of marital status is that young men who impregnated young women are themselves still dependent on their parents, which in most cases results in the young men's refusal to claim paternity of the unborn child, leaving the woman without social and economic support; this outcome usually leads the women into polygamous marriages (Oyefara, 2009).

As to adolescent motherhood and education, “Education has been identified to be one of the major determinants of social status in the contemporary society” (Oyefara, 2009, p. 14). The results from this study clearly revealed the negative effects of early childbirth on the educational status of women in the study location. The study result showed adolescent mothers with higher education before childbirth was 0.2% compared to 17.0% of older mothers and an after-childbirth level of education of 18.2%, compared to 0.6% of adolescent mothers.

With regard to effects of adolescent fertility on the possibility of returning to school and apprenticeship after the first childbirth, Oyefara (2009) found that 42.6% and 28.2% of adolescent mothers were in school and apprenticeship, respectively, compared to 6.8% and 13.6% of older mothers in same category. Also, 77.8% of older mothers were already working compared to 26.2% of adolescents in the same category when they had the pregnancy of their first child. Childbirth resulted in the high dropout rate from school for both adolescent and older mothers: a total of 212 of 213 adolescent mothers and 33 of 34 older mothers dropped out of school due to childbirth. However, only 3.7% of adolescent mothers who dropped out of school were able to return to school, compared to 8.5% of older mothers who were able to return to school after delivery. Although childbirth was a disruption to both adolescents’ and older mothers’ education, a high proportion of adolescent mothers’ education was truncated, compared to a small proportion of older mothers. The study showed a significant level of relationship of .05 and the degree of association of 0.106, which is relatively substantial (Oyefara, 2009). Further in same study, Oyefara found that for employment, 13.6% of adolescent mothers were unemployed, compared to the less than 1% (0.8%) among older mothers.

As revealed by the findings of the study, adolescent fertility truncates the process of formal education among women in Osun State, Nigeria. Because education has been a pillar holding so many aspects of modern life, it is not unexpected to see adolescent mothers occupying low status in the socioeconomic structure of Osun State, Nigeria, due to lack of education and skills required to compete in a higher paying job.

As noted in the study, adolescent mothers are more likely to be seen in the informal sector of the economy with poor income. Consequently, majority of adolescent mothers in the state cannot afford good schools for their children, good accommodation to live in and basic necessities of life. Finally, adolescent mothers in Osun State are incapacitated to contribute efficiently to the general wellbeing of their personal lives, those of their children, and families. In summary, age at first childbirth has a significant effect on women's empowerment. (Oyefara, 2009, pp. 14-15)

Summary

I have searched and reviewed relevant studies through peer-reviewed professional journals, books, published health reports, and government and organization websites using multiple databases and relevant search terms related to my topic. In this chapter, three major subsections were presented: the theoretical framework of the study, contributory factors to adolescent sexual activity, and the negative outcomes of adolescent sexual activity in Nigeria. Using the ecological system model, the factors contributory to sexual activity among unmarried adolescents in Nigeria were presented and discussed. These included age, family background, peer pressure, gender role, lack of sexual education, media exposure, socioeconomic status, and cultural factors. Detailed discussion of the negative outcome of adolescent sexual activity included unplanned

pregnancy, STDs, abortion and related complications, negative health effects to mother and child, and the negative economic effects to individual and the society. The relationship between factors that increase the risk of unmarried adolescents' becoming pregnant, and the negative outcomes of pregnancy for unmarried adolescents were discussed. In Chapter 3, I present my methodology for this study.

Chapter 3: Methodology

The goal of this study was to explore and develop an in-depth understanding of the experiences and perceptions of unmarried pregnant adolescents in Orlu Imo State about their decision to engage in sexual activity and their perceptions about pregnancy, impending motherhood, and its effects. The purpose was to provide data for the development of a state policy to reduce sexual activity among unmarried adolescents and ultimately prevent STDs, pregnancy, and motherhood among adolescents in Orlu, Imo State. In this chapter, I discuss my choice of research design and approach as well as the rationale for both choices. In addition, I explain my role as the researcher and study methods, including steps for participant selection and recruitment, instrumentation, data collection, and data analysis. (I provide a complete schedule for the collection and analysis of my data in Appendix A.) Finally, I discuss issues of trustworthiness and ethical research procedures.

Research Design and Rationale

The focus of this study was adolescent sexual activity among unmarried adolescents in Orlu, Imo State, Nigeria. As defined in this study, adolescent premarital sexual activity refers to the engagement in sexual activity by unmarried persons aged 13 to 19. To explore this phenomenon, outlined in the purpose of the study, I developed four research questions:

RQ1: What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regard to decision making about their past sexual activity?

RQ2: What are the experiences and perceptions of unmarried pregnant adolescents in Orlu about their pregnancies and related needs?

RQ3: What are the experiences and perceptions of unmarried pregnant adolescents in Orlu about their impending motherhood?

RQ4: What types of community support might be most helpful in teaching adolescents about a safe and healthy reproductive lifestyle?

To elicit data necessary to answer the research questions, I chose a qualitative design and a phenomenological approach for this study. Qualitative research typically is used when researchers seek to develop an in-depth understanding of a phenomenon or problem, identified by individuals or social groups, because the complexity of that phenomenon or problem has not adequately been developed in the existing literature (Creswell, 2009, p. 4). According to Denzin and Lincoln (1994), qualitative researchers are concerned with the socially constructed nature of reality and seek to understand how social experiences are created and what those experiences mean to the population involved (p. 5). Thus, for qualitative researchers, participant perspectives are critical (Denzin & Lincoln, 1994). In the qualitative tradition, researchers collect data in a participant's natural setting using observations and interviews that can be conducted individually or in groups and that generally include open-ended questions to allow researchers the flexibility to probe participants for details (Creswell, 2007, p. 40). When analyzing qualitative data, researchers use inductive methods that focus on determining common patterns, themes, or categories (Creswell, 2003).

Unlike in qualitative research, researchers typically use quantitative research to test objective theory through examination of the relationships between variables (measured with instruments), which results in numerical data that can be analyzed using statistical procedures (Creswell, 2009, p. 4). According to Denzin and Lincoln (1994),

quantitative researchers typically sacrifice a degree of participant perspective for empirical data. Quantitative researchers typically use predetermined, closed-ended questioning that limits participant answers, and control for alternative explanations so results may be generalized and findings may be replicated (Creswell, 2009, p. 15).

In this study, I sought to develop an in-depth understanding of adolescent premarital sexual activity, a complex social issue in a specific population that has not been adequately explored in the literature. I used open-ended questions in individual interviews to collect data from participants in their natural settings. Specifically, I sought to collect data that represented participants' perspectives about their own experiences. Finally, I analyzed the data I collected for common patterns and themes. For these reasons, a qualitative research design was appropriate in this study.

Phenomenology refers to a study's focus on the commonalities of participants with regard to a particular phenomenon, as described by those participants (Creswell, 2007). Researchers use a phenomenological approach to their research when they explore the way particular phenomena appear to humans through their experiences or consciousness (Finlay, 2008) and do so using interviews, discussions, and observations (Creswell, 2007). Researchers use the phenomenological approach to research to understand what experiences are like for study participants and what those experiences mean to those participants. Ultimately, the purpose of using a phenomenological approach to research is to understand the essence of the human experience underlying the phenomenon under investigation.

In this study, I used interviews to explore the experiences and perceptions of pregnant adolescents with regard to a particular phenomenon: the decision to engage in

early sexual activity and the resulting outcomes of that activity. The purpose of this study is to develop an in-depth understanding of those experiences and perceptions. For these reasons, a phenomenological approach to this study was appropriate.

Role of the Researcher

As the principal investigator in this study, I was responsible for all aspects of data collection including recruitment of participants, procurement of the research site, and facilitation of interviews. Although I recorded observations of nonverbal body language I noticed during interviews, my primary purpose of the interview was to gather verbal responses from participants rather than to observe them. Thus, my role as researcher in this study was that of a participant. I also was responsible for the analysis of data. Although I enlisted the help of a second coder/independent investigator to ensure the accuracy of my interpretations, the second coder/independent investigator analyzed only deidentified portions of data for comparative purposes; I remained in control of the data-analysis process at all times and was solely responsible for the final interpretations and presentation of results.

Although I grew up in Orlu and as a young adult participated in volunteer projects in the community, I have not spent any length of time in Orlu in the last 20 years. Therefore, I do not have any professional connections to the community nor did I anticipate having any personal connections with participants. Throughout the study, I was not aware that a participant in my study was the relative of a previous schoolmate or neighborhood acquaintance with whom I was familiar in my youth. Creswell (2007) indicated that it is necessary for the researcher to develop some type of rapport with participants to establish trust and promote free communication between the researcher

and the participant. Although I worked to develop rapport with my participants, I did not consider this interaction to be a personal or professional relationship.

Creswell (2007) indicated that participants often will inherently perceive a power relationship between themselves and the researcher, but that this perceived inequality could be diminished in three ways: (a) by explaining how participation in qualitative research can provide participants with a voice and thus be empowering, (b) by developing a rapport with participants, and (c) by collaborating with participants. With this understanding, I worked to diminish the potential for a perceived power relationship when interacting with study participants. First, while recruiting participants and sharing the purpose of the study, I stressed the value participants' perspectives may have for helping other young people in their community. Second, I worked to develop a rapport with participants during the interview process, but especially during the recruitment process when I had more time to interact casually with potential participants. Third, I collaborated with participants during the member-checking process when I ask them for their assessment of my interpretations and to note any discrepancies they identified.

Potential for researcher bias exists because my personal religious beliefs do not support sexual activity before marriage. However, as an adult and scholar, I did understand how others may not share my perspectives. However, my experience with friends who have family members who became pregnant as unmarried adolescents, coupled with concern for my own daughter, was one of the reasons for choosing this topic. In addition, as instructed by Hycner (1985) and described in the data-analysis section later in this chapter, I suspended any presuppositions I may have about the condition I was studying to allow for the collection of true data and so that the essence of

those data could emerge during analysis. Thus, I did not anticipate that my personal perspectives would interfere with the collection of my data or my data analysis.

I did not offer monetary incentives to the participants for agreeing to be interviewed. However, because traveling to and from the clinics to participate in my study may be time consuming and expensive for participants, I (a) reimbursed participants for travel expenses, (b) provided a snack during the interview, and (c) presented each participant with two boxes of diapers as a thank-you gift for her time. Because nurse counselors were available on site in case their services were needed during the interviews, I presented the nurse counselors with small thank-you gifts for remaining on site during the interviews. According to Grant and Sugarman (2004), the use of incentives in research typically is not problematic unless the subject is somehow dependent on the researcher or has a strong aversion to participating in the study, which only can be alleviated with a significant incentive, or the research is risky for or could be degrading to the participant. In my study, participants were not in a dependent relationship with me, nor were they offered anything of significance for participating, and thus it is unlikely they would have participated if they held a strong aversion to my study. In addition, my study did not pose significant risk to participants nor did it result in the degradation of the participants. Thus, I did not see these provisions posing any threat to ethical practices in my study.

Sample Selection

The research participants in this study were unmarried pregnant adolescents aged 13–19 who live in the Orlu communities of Imo State, Nigeria.

The specific inclusion criteria required that participants must have

- been between the ages of 13 and 19,
- been unmarried,
- been pregnant,
- lived in Orlu, and
- understood and spoke English (language of local educational instruction).
- been pregnant due to interaction with a boyfriend/sexual partner

I excluded adolescents whose pregnancies were the result of rape or incest and any participant whose relatives were acquainted with me from the time I lived in Orlu (prior to 1984). These inclusion criterions ensured I recruited participants who were able to understand the informed consent and who provided data most relevant to the study and necessary to answer my research questions. Excluding participants who may have been victims of rape or incest helped minimize the risk of distressing or stigmatizing adolescents who may have engaged in sexual activity against their will. Excluding participants whose relatives may have been acquainted with me helped reduced the risk of perceived coercion to participate in the study.

Creswell (1998) recommended including up to 10 people in a phenomenological study. Based on this information and to accommodate the logistics and time constraints associated with overseas data collection and preliminary data analysis, I included 10 participants in my study. I used purposive and snowball sampling to recruit participants. Both purposive and snowball sampling are non-probability sampling methods (Trochim & Donnelly, 2007). According to Creswell (2007), purposive sampling is used when researchers need to recruit particular participants to collect data about a particular topic,

or to answer particular research questions best suited to those particular participants. Because my phenomenological exploration of the experiences of unmarried pregnant adolescents required that I collect data from unmarried pregnant adolescents, using purposive sampling was appropriate in this study. Snowball sampling is a process by which potential, current, or prior participants recruit other participants for the study and is beneficial when a target population is especially unique or may be difficult to reach (Trochim & Donnelly, 2007). Because this study population is unique (unmarried pregnant adolescents in Orlu) and may have been difficult to reach because of poor technical infrastructures in Orlu and social stigma associated with pregnancy out of wedlock, snowball sampling was an appropriate method to use.

I recruited participants in several ways. First, approximately one month prior to the start of data collection, I provided the clinics with flyers to post about the study. The flyers identified the main focus of the study and eligibility criteria for participation, as well as providing my contact information and the dates for which that contact information was applicable. Although flyers were posted in health clinics, nurses passed out flyers to any potential participant who asked for one. Also, consent forms were available in the clinics so potential participants had full access to the details about the study. The consent forms were clearly marked so potential participants knew which one or ones applied to them. The flyers and consent forms helped potential participants screen themselves; however, I used screening questions to confirm participant eligibility (see Appendix B). I screened potential participants using the screening questions when they contacted me to schedule an interview and again when they arrived for their interviews to ensure that I did not collect data from any participant who did not meet the eligibility

criteria or who did meet the exclusion criteria. I also recruited participants at the health clinic myself during my first week in Orlu. Finally, I asked potential and confirmed participants to tell other unmarried pregnant adolescents about my study (see Appendix C).

Community Healthcare Setting

The immediate setting for this study (sites for data collection) was four health clinics in Orlu, Imo State, Nigeria. Two clinics were in Orlu townships (urban areas) and two clinics were in Orlu villages (rural areas). I was able to recruit 10 participants for this study at these data collection sites. Most state health clinics and centers, which are run through local governments, are within 10 kilometers of each other (approximately a two-hour walk apart), and have similar basic infrastructures: a waiting room, an interview (screening) room, an examination room, a delivery room, two bathrooms, a medical-records room, and a small laboratory/medicine dispensary. I conducted my interviews in the interview rooms, each of which have a door that can be closed and thus are private. The clinics also have working electrical connections, fresh piped water, an emergency vehicle, a refrigerator/freezer for immunization storage, and an autoclave for sterilization.

The clinics are staffed by a combination of medical and administrative personnel: a visiting physician/medical officer, two community health officers (community nurse and midwife), a community health-education worker, an environmental health officer, a laboratory technician, a medical-records officer, a health attendant, and a security guard. Urban clinics had an additional midwife, community health-education worker, or environmental-health officer, depending on the size of the population being served. The clinics provide local residents with family health education, outpatient services such as

routine immunizations, treatment of minor illnesses such as anemia and malaria, and prenatal and delivery care.

Data Collection

As the primary researcher in this study, I was responsible for collecting all data in the study. Prior to collecting data for this study (a) I sought and was granted permission to conduct my study by the Orlu, Imo State, Nigeria Local Government health commissioner (see Appendix D), (b) I procured permission from Walden University's Institutional Review Board, and (c) I attained a community-partnership agreement letter with the health clinics (the research sites; see Appendix E). I also ensured that I procured appropriate consent forms from adult participants as well as signed assent forms from child participants, who also needed to submit signed consent forms from their parents. The adult consent form was for participants 18 and 19 years old, who did not require parental permission to participate in this study (see Appendix F). The parent- consent form was for parents of participants who were under the age of 18 (see Appendix G). I did not accept children into the study whose parents did not consent to allow their children to participate in this study. The assent form was for participants under the age of 18 (see Appendix H). In the consent/assent forms, I (a) explained who I am and described the project and its purpose, (b) described what was expected of participants if they agreed to participate in my study, (c) provided sample questions, (d) explained the voluntary nature of the study and the compensation for participating, (e) identified benefits and potential risks of participation, (f) ensured that I protected participants' privacy, and (g) provided my contact information and that of Walden University.

To collect data for this study, I conducted semistructured interviews using an interview protocol (see Appendix I). I asked additional probing questions to elicit more details from participants when I deem their initial response to be unclear or incomplete, or when the participant introduced a relevant topic of interest I had not previously considered (Guba & Lincoln, 1981; Merriam, 1998). Most data were collected during these initial interviews, but additional very minimal data were also collected when I conducted member checking during follow-up meetings to confirm the accuracy of my interpretations. The interviews lasted approximately one hour each and the follow-up interviews lasted approximately 30 minutes each. I scheduled the initial interviews over the course of 4 days: 2 days each for the urban and rural clinics. I staggered the interviews in 2-hour increments to accommodate interviews that may have run over the anticipated hour and to provide myself with breaks and time to write down initial thoughts about the data after each interview, as needed. I scheduled the member-checking interviews over the course of 2 days: 1 day each for the urban and rural clinics. I staggered the member-checking interviews in 1 hour increments to accommodate interviews that may have run over the anticipated 30 minutes and to provide myself with breaks, as well as time to write down initial thoughts about participant feedback after each interview, as needed, and to travel between clinics. I did not have any interviews that ran over the scheduled time. I had a little difficulty with participants' attendance the first 2 days but the problem was corrected the following day and the rest of the study schedule flowed smoothly.

I recorded all verbal data using a digital recorder and kept a back-up recorder on hand in case of mechanical failure of the recorder. Fortunately one recorder served for all

the data collection. I also made hard copy notes about any nonverbal body language I observed, as well as questions or ideas that came to mind during the interview. Although I considered the member checking meeting the exit procedure for participants, I explained to participants that they could stop participating in the study at any time during the interview or follow-up meeting if they became upset, at which time I planned to refer them to the nurse counselor retained onsite for this specific purpose. I did not experience a problem with any of the participants. I provided to any participant who arrived for an interview a thank you gift of a package of diapers. Participants who met me for the follow-up interview received a second package of diapers.

Instrumentation

In this study, I collected data using an interview protocol for individual participant interviews (see Appendix H). The protocol included space to collect administrative data for basic record-keeping purposes, an introduction to the study including a brief reminder of the purpose of the study, and 18 interview prompts, organized by the research questions they helped answer. The interview prompts were semi- structured and open ended. Because sexual activity is a sensitive topic in Orlu culture, I included three ice-breaker questions that were related to sex and pregnancy but focused on other adolescents in the community.

I based my decision to use a semistructured interview protocol with open-ended questions on the literature I reviewed about data collection methods in qualitative studies when developing my methodology for this study. Semistructured, open ended interview questions are helpful when a researcher is trying to collect data about participants' views, opinions (Creswell, 2009, pp. 181–182), and impressions concerning a phenomenon

(Trochim & Donnelly, 2007). In addition, individual interviews provide researchers the opportunity to interact directly with respondents and follow up immediately to ask for clarification or to probe for additional details (Trochim, 2006). This characteristic of semistructured interviews also is beneficial because it allowed me to compensate for any weaknesses in my original interview questions.

Because this study was qualitative and the purpose was to explore participant experiences rather than measure a social construct, determining content validity of the instrument was not applicable for my study (see Guba & Lincoln, 1981). However, I discuss the concept of validity again and in more detail in a subsequent subsection of this chapter. I determined sufficiency of my data collection instrument to elicit data necessary for me to answer my research questions based on feedback from my dissertation committee and university research reviewer. I also assessed two initial interviews to ensure that the wording and order of questions were effective.

Data Analysis

After collecting data, I used Hycner's (1985) method of content analysis for the phenomenological analysis of the interview data, which I interpreted and organized by identifying emerging central themes that contributed to a rich description of the phenomenon, as experienced by the participants. Because Hycner's process was designed especially for students and built on the most relevant elements of established analytical methods offered by Colaizzi (1978), Giorgi (1975), Keen (1975), and Tesch (1980), it was especially relevant for use in my study. Hycner's method included 15 steps.

1. Transcribing: This step includes not only the verbatim transcription of recorded interview data, but also the notation of identified verbal cues such as

tone and inflection that might help the researcher better interpret the meaning of the data during later analysis (Hycner, 1985).

2. Bracketing and phenomenological reduction: According to Hycner (1985), bracketing refers to entering the unique world of the participants with openness to accepting and understanding a phenomenon and its meaning based on the point of view of participants, rather than the researcher's expectations. This step directs the researcher to identify personal presuppositions as a means of helping the researcher suspend those presuppositions. Bracketing allows the meaning of the data to emerge with the least amount of researcher influence possible during the reduction of data (Hycner, 1985).
3. Listening to the interview for a sense of the whole: This step requires the researcher to listen to the recorded interviews and read the transcripts in their entirety several times to get a general sense of the data, and is most beneficial after the researcher has successfully bracketed presuppositions about the data; this process provides a context for specific units of meaning and themes that emerge during further analysis (Hycner, 1985). Hycner (1985) advised that it may be helpful during this stage to confirm that the transcript has captured unstated verbal cues.
4. Delineating units of general meaning: Delineation refers to expressing the essence of the meaning expressed in a word, phrase, sentence, paragraph, or significant nonverbal communication. It is crystallization and condensation of what the participant has said, still using as much as possible the literal words

of the participant (Hycner, 1985, p. 282). At this stage, a researcher may make notes in the transcript margin to provide a coherent meaning for the expressed data (Hycner, 1985).

5. Delineating units of meaning relevant to the research question: In this step, the researcher begins to examine the units of meaning with respect to the research question; if it is determined that a participant's response contributes to an understanding of the research question, the comment is noted as a unit of relevant meaning (Hycner, 1985). Although Hycner (1985) suggested that it is always better to err on the safe side, statements that clearly are unrelated to the focused topic are not recorded.
6. Training an independent judge to verify the unit of relevant meaning: To check for reliability of researcher-determined units of relevant meaning, Hycner (1985) suggested that independent judges also examine the data to identify relevant units of meaning and provide a basis for comparison and confirmation; in cases of discrepancy, the researcher should consult with the dissertation committee. The researcher should train the independent judge using Hycner's process and the same analytical steps the researchers used (Hycner, 1985).
7. Eliminating redundancies: This step involves eliminating redundancy in units of relevant meaning and provides a result in a condensed version of units with which the researcher may more easily work in the next step (Hycner, 1985). Because redundancy in units of relevant meaning can signify the importance of those units, Hycner (1985) suggested keeping track of the number of

redundant units that are eliminated for each unit of meaning. In addition, because nonverbal and paralinguistic cues may alter literal meanings, the researcher should consider these cues when determining redundancy of meaning (Hycner, 1985).

8. Clustering units of relevant meaning: In this step, the researcher determines if there are naturally clustering units of relevant meaning; the researcher can do this by examining the essence of the relevant units of meaning (Hycner, 1985). Because this process involves subjective insight on the part of the researcher, Hycner (1985) cautioned student researchers to consider using independent judges in this step as well.
9. Determining themes from clusters of the meaning: During this process, the researcher carefully looks through all the clusters of meaning to make a determination of possible central themes that express the essence of the clusters (Hycner, 1985). Themes may change during the interlaced examination of clusters and formation of potential themes (Hycner, 1985).
10. Ensuring dependability of results by engaging a second coder in the data-analysis process (Guba & Lincoln, 1981): During this process, a second coder analyzes a portion of the data and determines themes, and the researcher and second coder compare and discuss outcomes. Discrepancies are noted, after which time the researcher returns to the analysis to make adjustments based on the discussion of compared themes.
11. Writing a summary for each individual interview: In this step, the researcher writes a summary of the interview that clearly references the determined

themes to provide an overall sense of the interview as a context for the described themes.

12. Returning to the participants with the summary and theme: In this step, the researcher shares the interview summaries with each participant to validate the researcher's findings and interpretation of the data.
13. Modifying theme and summary: If the researcher collects new data while reviewing the interview summaries with participants, the researcher should repeat Steps 1 through 10, then review and modify the themes as necessary (Hycner, 1985).
14. Identifying general and unique themes among the interviews. This step requires the researcher to compare themes among the individual interviews to look for unique and common overall themes; the combination of themes "should not obscure significant variations within that theme" (Hycner, 1985, p. 293).
15. Contextualizing themes: In this final step, the researcher should examine the overall themes while considering the original phenomenological context from which the data emerged; this process of understanding the phenomenon's role in the context can help the researcher better understand the meaning of the phenomenon itself (Hycner, 1985, p. 293).

Following these procedures allowed me to analyze data into themes that directly address my research questions. I found multiple themes that I organized into theme clusters, based on the topics of my research questions on decision making for adolescent premarital sexual activity, premarital sexual activity, pregnancy and pregnancy-related

issues, concerns over impending motherhood, and community support. I included any discrepant data in my analysis.

Validity and Reliability

Because qualitative research does not use formal standards for sampling or methods for numeric measurement of outcomes, qualitative researchers have suggested that it does not meet the criteria of quantitative research (Guba & Lincoln, 1981; Trochim, 2006; Trochim & Donnelly, 2007). For that reason, qualitative research cannot be considered the nonnumeric extension of quantitative research; therefore, its validity cannot be judged by the same parameters (Guba & Lincoln, 1981; Trochim, 2006; Trochim & Donnelly, 2007). Thus, qualitative researchers have argued that qualitative research should be evaluated based on whether the study has been conducted using ethical practices (Merriam, 1998, p. 198) as well as the (a) meaningfulness of the conclusions reached, (b) depth of understanding gained about the issue, and (c) usefulness of the results rather than whether the results functioned to confirm any preestablished truth (hypothesis; Trochim & Donnelly, 2007, p. 148).

In particular, Guba and Lincoln (1981) suggested that, rather than considering traditional elements of internal validity, external validity, reliability, and objectivity, qualitative researchers should consider the concepts of truth value, applicability, consistency, and neutrality. Based on Guba and Lincoln's definitions of these concepts, Trochim (2006) renamed the concepts so they more intuitively expressed their meanings: credibility, transferability, dependability, and conformability, respectively. Meeting the test of rigor using these four concepts is a requisite in the establishment of trust in the outcome of a qualitative study (Guba & Lincoln, 1981).

Credibility (truth value) refers to the use of participant perspectives to provide a deep understanding of the essence of the phenomenon under study (Guba & Lincoln, 1981). The underlying assumption of this concept is that participants will have the most accurate and thorough understanding of the phenomenon because they are immediately immersed in it, in contrast to researchers who are exploring the phenomenon from an external perspective (Guba & Lincoln, 1981). According to Guba and Lincoln (1981), credibility can best be achieved using the process of member checking. To achieve credibility in my study, I also used member checking. To do this, during the second meeting with participants, I asked them to listen to my interpretations of the analyzed data and tell me if they thought my understanding of the general perceptions of their experiences as pregnant adolescents in Orlu was correct. Almost all participants thought my interpretations were correct, except one participant with a minor correction; I made changes to my work to more accurately reflect the conditions I was trying to capture and describe.

Transferability (applicability) refers to the degree to which a qualitative study can be generalized to other contexts or populations (Guba & Lincoln, 1981). According to Guba and Lincoln (1981), it is almost meaningless to transfer or generalize results of a qualitative study to another population because qualitative research is concerned with human behavior and its unique relationship to the context in which it is studied. However, in a situation where a researcher (a) is involved with working hypotheses, (b) has extensive knowledge of the original context, and (c) develops a thick and thorough description of the central research assumption, findings from one study may be discussed in terms of its fit for another similar population or context (Guba & Lincoln, 1981).

Although I recognize that in my study I was not able to generalize results to other populations or contexts, I consider the transferability (fit) of my results to similar populations and contexts to be appropriate.

Dependability (consistency) refers to the researcher's ability to adapt to changing settings and to identify adaptations made as the result of those changing settings (Guba & Lincoln, 1981). Dependability is based on the understanding that because qualitative research reflects the multiple realities expressed by study participants, it would be impossible for researchers to replicate the study (Trochim, 2006). According to Guba and Lincoln (1981), dependability of study results can be established by recording the research process and using a second investigator to audit researcher findings. To establish dependability in this study, I digitally recorded the collection of data (participant interviews), hand coded the data during analysis so a record of my thought processes was captured, and engaged a second coder/independent investigator to review (deidentified) portions of the data for independent analysis and comparison to determined themes.

Confirmability refers to the degree to which other researchers can confirm a study's results by considering the original researcher's processes and outcomes (Guba & Lincoln, 1981). Because each researcher brings a unique perspective to a study, to provide other researchers an opportunity to confirm results, it is essential that a researcher processes outcomes free of bias and clearly, systematically, and accurately reports results (Guba & Lincoln, 1981). According to Guba and Lincoln (1981), a researcher can develop confirmability using data auditing and disclosure of potential researcher biases. To establish confirmability in this study, I discussed the potential for bias and my plans to reduce any noted bias.

According to Lombard, Snyder-Duch, and Campanella Brocken (2010), intercoder reliability refers to the extent to which independent coders reach the same conclusions when they evaluate a characteristic of a message or artifact. Trochim and Donnelly (2007) described reliability as the degree to which different raters or observers give consistent estimates of the same phenomenon. Researchers use this process to measure the level of consistency of content analysis and thereby make suggestions about the validity of research analyses (Lombard et al., 2010).

Trochim and Donnelly (2007) identified two commonly used methods to assess intercoder reliability: percent of agreement between categories among raters and calculation of correlations between rater responses, especially when the measure is continuous or discrete. Because my measures are not continuous or discrete, in this study, I used the percentage-of-agreement method to judge the reliability of my data analysis. Although Stemler (2004) indicated that acceptable agreement values may range from 75 to 90%, Creswell (2007) indicated that 80% agreement is acceptable to establish reliability of analysis. In this study, I used 80% agreement as my index for determining reliability of data analysis. However the agreement between the independent investigator and me was 95%.

Protection of Human Participants

At all times while conducting my study, I adhered to ethical research practices. I requested and received permission from the Orlu Local Government health commissioner to conduct my study in health centers in the Orlu Local Government Area. In addition, I familiarized myself with the National Code of Health Research Ethics developed by the National Health Research Ethics Committee of Nigeria (Federal Ministry of Health,

Nigeria, 2007) and determined that my study plans met the expectations of ethical research outlined in the document with regard to social value, methodological validity, participant recruitment, minimizing risks to participants, informed consent, and respect for participants and their best interests during the research process. I also received permission to conduct my study from Walden University's Institutional Review Board before I started collecting any data with approval number of 12-20-13-0055372 and expiration date of December 19, 2014.

To recruit participants for this study, I sought the help of clinic workers (nurses) to post flyers on my behalf prior to my arrival in Nigeria. Also, as part of the recruitment process and to allow potential participants to self-select, I provided clinic workers with copies of the consent forms, which they made available to potential participants in the clinic who showed interest in participating in the study. However, to ensure the privacy of potential participants during recruitment, no clinic workers were directly involved in the recruitment process. I was solely responsible for engaging with potential participants during the recruiting period. I instructed clinic workers to direct any potential participant questions to me. I was available to answer questions by e-mail and phone before I arrived in Nigeria and during the onsite recruitment period during my first week in Nigeria.

The use of appropriate consent forms is especially critical when working with vulnerable populations. The Council for International Organizations of Medical Sciences (CIOMS, 2002) defined vulnerable populations as those who may not be able to safeguard their own personal or legal rights and interests and thus subject themselves to harm or exploitation in some capacity, and identified children as a vulnerable population. In my study, I may be working with this vulnerable population. Although the legal age of

adulthood in Orlu is 18, based on my inclusion criteria, it was likely that I would recruit adolescents between the ages of 13 and 17. In these instances, I required the written consent of a parent or legal guardian. I created consent and assent forms. The consent form was intended for participants 18 years and older and for parents/legal guardians of participants under the age of 18 years. The assent form was for participants under the age of 18. In both cases, I used Walden University's consent- and assent-form templates to ensure I included the necessary information: (a) an introduction to who I am as the researcher of the study; (b) background about the purpose of the study, and (c) an explanation of the inclusion criteria, expectations of participants, voluntary nature of the study, and benefits of participating. Also included on the form is a statement ensuring participant privacy and university and my contact information, should a participant have questions about the study before or after participating.

Although women are not always considered a vulnerable population (CIOMS, 2002), for the purposes of this study, I considered this population vulnerable. According to CIOMS (2002), women may be considered a vulnerable population because in many countries where gender inequality exists, social expectations may lead women to feel pressured to participate in studies because they view the researcher as an authority figure. Because women in Nigeria traditionally have been excluded from positions of power (British Council Nigeria, 2012), they also might have felt pressured to participate in my study if they viewed me as an authority figure. To be sure participants joined my study voluntarily and without pressure, as suggested by CIOMS, I allowed ample time for the recruitment process, so I could ensure potential participants had time to ask questions about the study and consider their participation before committing to becoming a

participant. Also, I stressed to participants that they did not have to participate in my study and that there would be no repercussions if they chose not to participate.

Of particular concern among vulnerable populations are pregnant women, because of risk to the unborn child (CIOMS, 2002). Although I did not expose participants to physical interventions, it is possible that because of the sensitive and personal nature of the study, participants would become upset during the interviews, which may have caused undue stress to the unborn child. To mitigate this risk, I stressed to the participants that they could stop participating in the study at any time. In addition, if it appeared that any participant was getting upset or if any participant stated she was getting upset, I planned to stop the interview process immediately, until she felt ready to continue or refer her for evaluation to the nurse counselor who was standing by for this purpose.. Although there are no free clinics in Orlu, there are low-cost mental health services available. If the nurse counselor deemed a participant needed additional counseling services or if the participants themselves asked for additional services, I planned to provide them with contact information for the department of social welfare services, the local agency with the authority to provide referrals for low-cost medical and mental health services. None of the participants in this study needed to see the nurse counselor or expressed a need for additional mental health help.

Ethical considerations regarding data collection include confidentiality of participants and the study data. To ensure confidentiality of the participants, I used participant-chosen pseudonyms. Allowing the participants to choose their own pseudonyms also may have served as an ice-breaking activity to put participants at ease and to build researcher–participant trust. At no time did the pseudonyms appear with the

participants' personal information (names on consent or assent forms) and all collected data remained deidentified. This also ensured that participant confidentiality was maintained when I provided the second coder/independent investigator with a sample of the collected data for analysis.

Although I protected the confidential data I collected in this study, if any participant disclosed information to me that indicated she was in physical danger, I felt obligated to report the condition to social-welfare authorities. I planned to follow local procedures for reporting incidents of child abuse or neglect, as appropriate. I indicated my plans to report such incidents on each version of the three consent forms. No such disclosure was received. In addition, because the goal of this study was to promote the use of the information I generated in the development of programs to promote healthy adolescent sexual activity and safe life style, I will share the results of this study with community leaders in Orlu via e-mail or presentations. To develop a support base for these community leaders, I also will share the study results with healthcare groups and schools that service adolescents in the community. Finally, I will share the study results with participants and parents in the community via e-mail, local mail, or hand delivery. In the academic and professional arenas, I will present my study results at applicable conferences and publish my results in appropriate scholarly journals. However, no shared information will include personal or identifying participant information.

To ensure confidentiality of the study data, I kept the data secure. Although I provided the second coder with a sample of the deidentified data for analysis, only I have access to the data in its storage location. While in Nigeria, I kept all electronic data on a password-protected computer in my temporary personal office and kept the office locked.

I kept my digital recorders and hard-copy documents in the same office in a locked cabinet to which only I had access. I followed these same safety procedures to secure my data once I returned to the United States. For travel, I transferred the electronic files to two flash drives. During travel, I kept the flash drives and all hardcopy materials in a locked travel case that I took with me on the airplane as carry on luggage. After 5 years, as required by Walden University, I will destroy all original data.

Summary

In this qualitative study, I used a phenomenological approach to gather data to develop an in-depth understanding of the experiences and perceptions of pregnant adolescents in Orlu Imo State. Using a phenomenological approach was helpful to generate data about unmarried adolescents' decisions to engage in early sexual activity, pregnancies, and impending motherhood resulting from that early sexual activity. I used individual interviews and an interview protocol I designed to gather data from 10 pregnant adolescents (16–19 years of age) who live in Orlu. I analyzed the data using Hycner's (1985) method of content analysis for phenomenological data, which I interpreted and organized by themes that emerged during analysis. To determine the reliability of my analysis, I conducted intercoder reliability testing and considered an 80% agreement index indicative of reliable analysis. At all times, I protected my participants from harm and maintained confidentiality of personal participant information, as well as ensuring the safe storage of the data.

Chapter 4: Results

Introduction

The purpose of the study was to explore the lived experience and perceptions of unwed adolescent mothers in Orlu community in Nigeria, and the environmental factors that contributed to their pregnancy. This was a phenomenological study using Hycner's (1985) guidelines for the phenomenological analysis of interview data. The research questions identified in Chapter 1 and the methodology discussed in Chapter 3 are presented in this chapter along with the data analysis. The four research questions that formed the foundation of the study are presented below.

RQ1. What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regards to their decision-making about past sexual activity?

RQ2. What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regards to their pregnancies and pregnancy related needs?

RQ3. What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regards to their impending motherhood?

RQ4 What type of community support might be most helpful to teaching adolescent safe and healthy reproductive life style?

Chapter 4 contains six sections. The first identifies the population of unmarried pregnant adolescents in Orlu, Nigeria. The next section presents data collection procedures and the protocols for data collection using semistructured observations and interviews and for recording information. The third section shows the demographic profile of participants, derived from the demographic survey (see Appendix B) completed by each participant. The fourth section describes the data-analysis process. The fifth

section presents the interview data. The final section presents a brief summary of the findings.

Setting

The study was started immediately after December, which tends to be a very busy and hectic time in Igbo land (regional name for the study area), as most abroadians (indigenes who moved from the villages and live in townships) who came back for a Christmas visit were getting ready to go back to their respective stations. At the same time, those who live in the villages were setting their goals and objectives for the New Year. I believe that selecting this period of the year may have contributed to my initial problem of no attendance by participants until I followed up with phone calls.

Population Sample

The goal of the study was to explore the perceptions and experiences of unmarried pregnant adolescents aged 13–19 who live in the urban and rural Orlu communities of Imo State, Nigeria. I recruited a purposeful sample using flyers and snowball sampling.

Due to the sensitivity of my study topic, approximately one month prior to the start of data collection, I provided health clinics with flyers to post about the study. The flyers (see Appendix C) described the study, eligibility criteria for participation, my contact information, and the dates for participation. Flyers were posted in health clinics, and nurses passed them to any potential participant who asked for one. Also, I made consent forms available in the clinics so potential participants could have full details of the study. These forms were clearly marked so potential participants would know which would apply to them. The flyers and consent forms were intended to help potential

participants screen themselves, but prior to their acceptance into the study, I also administered screening questions to confirm participant eligibility (see Appendix B). Participants completed the screening questions prior to being scheduled for an interview, and again when they arrived for their interviews, to ensure that data were not collected from any participant who did not meet the eligibility criteria. Participants were recruited at the health clinics and by asking potential and confirmed participants to tell other unmarried pregnant adolescents about the study.

The snowball sampling method was effective in increasing the sample size. I asked the sample participants, at their individual discretion, to give me the name and contact information of other unmarried pregnant adolescents who might be interested in participating in the study. Snowball sampling is often beneficial when a target population is especially unique or difficult to reach (Trochim & Donnelly, 2007).

The criteria for inclusion in this study were that the girls should be between the ages of 13–19, unmarried, pregnant, live in an urban or rural Orlu community, be able to speak English, and be pregnant by having sex with a boyfriend/sexual partner. This last criterion ensured that the girls made the decision to have sex and in so doing, girls who were victims of rape or other forms of forced sexual act were excluded, as the study focused on girls' decision making regarding sex. These criteria ensured that eligible participants would be able to provide data that would answer the research question of the study related to defining factors perceived to contribute to adolescent decision making regarding their sexual activity, personal experiences regarding pregnancy and pregnancy-related issues, as well as about their impending motherhood and their perceptions of community support that might be most helpful in teaching adolescents about a safe and

healthy reproductive life style. The final sample size was 10, which Creswell (1998) reported is sufficient for a phenomenological study. The parents of all girls aged 18 or younger gave their consent, in addition to the girls themselves assenting.

Recruitment and Data Collection Procedures

The data collection process began by contacting respondents by phone to briefly go through the screening questions and schedule an interview with participants and parents, for those under 18. Information packages containing the consent forms for adolescent 18 and 19-year olds (see Appendix F), assent forms for girls aged 17 years and younger (see Appendix H), and parental-consent forms (see Appendix G) were made available by nurses at the clinics. On their arrival at the clinic for the first time, the girls were asked the screening questions (see Appendix B) to collect personal information about them and ensure they met the eligibility criteria. Those found eligible for the study, and their parents where appropriate, were again given an explanation of the purpose and nature of the study, including the research questions, the need for their signed consent and the consent of their parents/guardians where applicable, the confidentiality procedures, the voluntary nature of the study, and the benefits and risks of participation. Respondents were told that their privacy and identity would be protected, and that their real names would not be used, but that they would be identified by numbers. In addition, participants and parents were told there would be no monetary reward for their participation, but that a thank-you gift of boxes of diapers would be given to them at the end of the study. Participants were also informed that their transportation would be reimbursed and snacks would be made available.

Participants whose eligibility status was confirmed, and who were above 17 years of age, and who gave their consent, were given a face to face in-depth interview using the protocol in Appendix I. This consisted of semi- structured open-ended questions about their decision making concerning sexual activity, their perceptions and experiences regarding pregnancy and related issues, about their impending motherhood and the types of community support that might be most helpful in teaching adolescents a safe and healthy reproductive life style. I asked additional probing questions when initial responses seemed to be unclear or incomplete, or when participants introduced a relevant topic of interest that I had not previously considered (Guba & Lincoln, 1981; Merriam, 1998). I asked eligible participants under the age of 18 years who did not have signed consent of their parents to take the information pack and have their parents sign the consent form (see Appendix F); I asked these participants to bring in their signed assent form (see Appendix G) or to sign it in my presence.

The recruitment flyer (see Appendix C) was posted at the health clinics in early December 2013, and a month later I arrived in Nigeria for the data collection. I scheduled all interviews through a phone conversation between the participants and me, conducted in private rooms in the health clinics, and digitally recorded with permission from participants. Each interview started with the words "Thank you for taking the time to honor my invitation to participate in this important study." During this face-to-face interview, I reminded participants of the purpose of the study and told them that I understood the sensitive nature of the topic under discussion and would encourage them to try as much as possible to be honest and open in providing detailed information about their experiences as unwed pregnant adolescents. I reminded them that they were free to

omit any question that they did not feel comfortable discussing with me. I reassured all participants that their identities would not be revealed, and that their information would only be used to identify common themes and patterns among all the interviewees' responses. Most interview sessions lasted about an hour. With the exception of two participants who were very shy and tearful, all participants shared their experiences comfortably.

The timing of the interviews had to be adjusted after 2 days. The first two participants came at the scheduled date and time, but none of participants scheduled for the next 2 days showed up. I therefore decided to call participants and ask for their most convenient time for the interview, and then made a reminder phone call the night before the scheduled interview. This strategy improved interview attendance significantly. I gave participants follow-up appointments dates and times for member checking at the end of each initial interview session. At the end of each day, I listened repeatedly to each audio tape to ensure accuracy, then transcribed the interviews verbatim. Hycner (1985) indicated that repletion (going through the recording several times while listening) of the audio recording of each interview is necessary to developing a holistic sense. One to 2 days after each initial interview, I conducted a follow-up interview session to check the accuracy of the transcription and clarify or make changes where necessary. All but one participant agreed the transcripts were accurate; one made slight corrections. I then coded the data. To add trustworthiness, I gave a second coder part of the transcribed data to identify themes, and compare and discuss them with me. This strategy ensured the dependability of my results, as recommended by Guba and Lincoln (1981). The second coder and my theme analysis was 95% in agreement.

Data Analysis Process

I carried out analysis of data using Hycner's (1985) method of phenomenological analysis, as follows:

1. Transcription: This first step includes not only the verbatim transcription of recorded interview data, but also the notation of identified verbal cues such as tone and inflection that might help the researcher better interpret the meaning of the data during later analysis (Hycner, 1985). I listened to the recorded interview, familiarizing myself with the words of each participant, developing a sense of the whole. I then transcribed the interviews verbatim the same evening (Hycner, 1985).

2. Bracketing and phenomenological reduction: According to Hycner (1985), bracketing refers to entering the unique world of the participants with openness to accepting and understanding a phenomenon and its meaning, based on the point of view of participants, rather than the researcher's expectations. This step directs the researcher to identify personal presuppositions as a means of helping the researcher suspend those presuppositions. Bracketing allows the meaning of the data to emerge with the least amount of researcher influence possible during the reduction of data (Hycner, 1985). After completing each transcript and with openness of mind, I looked closely at the information without any pre-supposition or judgment to allow meaning to emerge and to hear what the participant was saying. I have some personal bias about having had a child out of marriage, but having such a bias did not allow for better understanding of what is being communicated by participants. It was very important to understand their part of the story and their world. I was conscious of my personal bias as I went through the data with an open mind to understand what participants were saying.

3. Listening to the interview for a sense of the whole: This step requires the researcher to listen to the recorded interviews and read the transcripts in their entirety several times to get a general sense of the data, and is most beneficial after the researcher has successfully bracketed presuppositions about the data. This process provides a context for specific units of meaning and themes that emerge during further analysis (Hycner, 1985). Hycner (1985) advised that it may be helpful during this stage to confirm that the transcript has captured unstated verbal cues. I continued to bracket, listening and reading the transcribed information several times for a sense of whole, the gestalt. I also paid close attention to the non-verbal and paralinguistic levels of communication. In the case of my participants, I recorded sobbing, pauses, tearing, or frowning and, in so doing, those perceptions did not interfere with my attempt to bracket interpretations and biases while trying to stay as true to the interviewee's meaning as possible.

4. Delineating units of general meaning: Delineation refers to expressing the essence of the meaning in a word, phrase, sentence, paragraph, or significant nonverbal communication. It is crystallization and condensation of what the participant has said, still using the literal words of the participant as much as possible (Hycner, 1985). As I continued to bracket my presuppositions as much as possible, I tried to stay as true to the data as possible, as well as have a sense of the whole of the interview as a context. In my attempts to delineate units of general meaning, I went over every word, phrase, sentence, and paragraph noting significant nonverbal communication and made notes in the script margin to provide coherent meaning for the expressed data (Hycner, 1985). In the process of delineating units of general meaning, I included all general meanings, even redundant ones and even statements for which I was uncertain they constituted a discrete unit of

general meaning. The end of this phase of data analysis resulted in 19 data sets that Hycner (1985) called units of general meaning.

5. Delineating units of meaning relevant to the research question: In this initial critical phase in the explication of data, the researcher begins to examine the units of meaning as they relate to the research question; if the researcher determines a participant's response contributes to an understanding of the research question, the comment is noted as a unit of relevant meaning (Hycner, 1985). Although Hycner (1985) suggested that it is always better to err on the safe side, statements that clearly are unrelated to the focused topic were not noted. To further delineate the unit of general meaning to clarify units of meaning relevant to the research questions, and while continuing to bracket my presuppositions and remain open to the data, I made a closer and more careful evaluation of the data in relationship to the research questions, to determine whether each participant's response illuminated the research questions. In using this rigorous process of listening and going back and forth over the data, I was able to identify statements that illuminated the research question as units of relevant meaning. Because there were four semi-structured open-ended questions to aid in answering each central research question, multiple units of relevant meaning emerged for each research question. The accuracy of these identified units of meaning was further verified by an independent judge, as noted below.

6. Training an independent judge to verify the unit of relevant meaning: To check for reliability of researcher-determined units of relevant meaning, Hycner (1985) suggested that an independent judge also examine the data to identify relevant units of meaning and provide a basis for comparison and confirmation; in cases of discrepancy,

the researcher should consult with the dissertation committee. Hycner recommended that the researcher train the judge using a specific process that includes the same analytical steps the researcher used. Following the completion of the elicitation of the units of relevant meaning, and to ensure reliability, I followed these steps to retrain a coder/independent judge who I had trained for this purpose before traveling to Nigeria for data collection. This person independently evaluated the units of relevant meaning I had identified and reached 95% agreement with my results, according to Hycner's methods.

7. Elimination of redundancies: This step involves eliminating redundancy in units of relevant meaning and provides a result in a condensed version of units; the researcher may then more easily work in the next step (Hycner, 1985). Because redundancy in units of relevant meaning can signify the importance of those units, Hycner (1985) suggested keeping track of the number of redundant units that are eliminated for each unit of meaning. In addition, because nonverbal and paralinguistic cues may alter literal meanings, the researcher should consider these cues when determining redundancy of meaning. To abide by the above recommendation and to eliminate redundancy, I took a close look at the list of units of relevant meaning to eliminate those that were redundant. At the same time, while being careful to bracket my own views, I followed Hycner's recommendation to not merely rely on the literal content, but also attend to the number of times a meaning was mentioned and how it was mentioned. The actual number of times a unit of relevant meaning is listed can indicate its significance to participants. Carefully evaluating to eliminate redundancy, I was cognizant of the presence and importance of non-verbal and para-linguistic cues and how they can alter the literal meaning of words. I was also cognizant that though two units of

relevant meaning might use the same words, the actual meaning might be different due to the chronology of events.

8. Clustering units of relevant meaning: In this step, the researcher determines if there are naturally clustering units of relevant meaning, usually by examining the essence of the relevant units of meaning (Hycner, 1985). Following the elimination of redundancy and listing of non-redundant units of relevant meaning, I determined when any units of relevant meaning naturally clustered together. Because of the pattern of my research questions (multiple general questions with semi-structured open-ended sub-questions), this clustering was centered on each individual research question. For example, units of relevant meaning whose essence pointed to reasons the individual participant started having sex, or the emotional and physiological reactions that occurred during the experience under investigation (pregnancy), were centered on Research Questions 1 and 2 respectively, and units of meaning were placed together accordingly. Because this process involved some subjectivity on my part, there was a danger that my presuppositions might interfere, which prompted Hycner (1985) to caution student researchers to consider using independent judges in this step as well. Based on this recommendation, I engaged my independent judge to verify the accuracy of the cluster of meaning, for which the results showed a 96% agreement. I then summarized each individual interview, and made a follow-up member-checking visit to verify facts and possibly modify the text. All participants agreed with the summaries of their interview except one, who made minor corrections. After eliciting clusters of relevant meaning, Hycner recommended determining themes that express the essence of each cluster.

9. Clustering units of relevant meaning: In this step, the researcher determines if there are naturally clustering units of relevant meaning; the researcher can do this by examining the essence of the relevant units of meaning (Hycner, 1985). Following the elimination of redundancy and listing of non-redundant units of relevant meaning—again, while bracketing my suppositions and remaining open to the facts emerging from the data—I determined where units of relevant meaning naturally clustered. For example if there were units of relevant meaning whose essence pointed to the importance of emotional or bodily reactions during an experience under investigation, I placed those units of meaning together. Because this process involved some subjectivity on my part, I used my independent judge in this step as well. The independent judge verified the validity of 96% of the clusters of units of meaning I identified.

10. Determining themes from clusters of meaning: After identifying the clusters of meaning, I determined themes for each cluster. During this process, I carefully looked through all the clusters of meaning, going back and forth among the clusters to make a determination of possible central themes that expressed the essence of each cluster (Hycner, 1985). I identified the following general themes from the four central research questions:

1 need for financial support,

2. peer pressure to establish a steady sexual relationship and start to have sex,

3. lack of knowledge about reproductive health, risky sexual behaviors, and barriers to safe sexual practices.

4. negative emotional reaction to being pregnant,

5. physiological challenges of pregnancy,

6. need for health care,

7. negative family and community reactions,

8. lack of family and community support,

9. worries about emotional and financial support,

10. other worries about the future,

11. worries about poor prospects for future marriage,

12. worries about child identity and rearing,

13. lack of reproductive health support for adolescents,

14. current sources of sex education, and

15. need for sex education.

Evidence of Trustworthiness

I achieved credibility using the process of member checking. I conducted member checking with each participant during the second meeting. With a copy of their transcribed interview, I asked them to read through my interpretations of the analyzed data and tell me if what I wrote was correct and reflected a correct understanding of what they had told me about their perceptions of the experiences of being a pregnant adolescent in Orlu. I also asked them to tell me where they think there was a need for corrections. Only one participant made a minor correction, which I corrected immediately.

I established dependability of study results by recording the research process and using a second investigator to audit researcher findings. To establish dependability in this study, I digitally recorded the collection of data (participant interviews), hand coded the data during analysis so a record of my thought processes was captured, and engaged a

second coder/independent judge to review the data (deidentified) for independent analysis and comparison of determined themes; we achieved 95% agreement.

I established confirmability in this study by discussing my potential bias against out-of-wedlock pregnancy. However, by bracketing my presuppositions and staying open to the data, this bias was reduced.

I recognize that I am not able to generalize results to other populations or contexts, but I consider the transferability (fit) of my results to similar populations and contexts to be appropriate.

Participant's Demographic Profile

Pseudonyms were substituted for names of participants and the part of the community from which they came. To protect their privacy and maintain confidentiality, each participant's name was replaced with the first letter of the part of community they came from, R or U plus a number. For example, participants from rural areas have pseudonyms R001–R005 and those from urban area were coded as U001–U005.

Table 1

Demographic Data

p	Age	Where live	Gestational age	Pregnant by BF/SP	Level of education	Health clinic
1	19	Rural	6 months	BF	SS3, 12th grade	Rural
2	18	Rural	4 months	SP	SS3,12th grade	Rural
3	18	Rural	3 months	BF	SS2,11th grade	Rural
4	17	Rural	3 months	BF	SS2, 11th grade	Rural
5	17	Rural	3 months	BF	SS2, 11th grade	Rural
6	16	Urban	6 months	BF	JS3,9th grade	Urban
7	16	Urban	3 months	BF	SS1, 10th grade	Urban
8	17	Urban	5 months	BF	SS2,11th grade	Urban
9	17	Urban	4 months	SP	SS2,11th grade	Urban
10	16	Urban	5 months	SP	JS3,9th grade	Urban

Note. BF = Boyfriend; SP = Sex partner

Participants ranged in ages from 16–19 years old. Three of the 10 participants were 16 years old, four were 17 years old, two were 18 years, and one was 19. Gestational periods ranged from 3 months (four participants) to 6 months (two participants), with two participants at 5 months and two participants at 4 months. All participants were students before they became pregnant but most have withdrawn from school since they became pregnant. Two of the 10 participants were in the equivalent of 12th grade, five were in 11th grade, one was in 10th grade, and two were in ninth grade. All participants were born and raised in Orlu community. Five were born and are being raised in rural areas, and five in urban areas of the community.

Results

Research Question 1: What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regards to their decision making about past sexual activity?

Participants' decisions to start sexual activity were influenced by factors such as age, need for financial and psychological support, peer pressure, and lack of knowledge about reproductive health and risky sexual behaviors. Participants' age at first sexual intercourse ranged from 15–19 years. One was 15, two were 16, five were 17, one was 18 and one was 19.

Please explain what circumstance made you decide to start having sex? Most participants—from both urban and rural areas—expressed the same reasons for having decided to initiate sexual activity: a need for financial support (60%), peer pressure to start having sex, and a need to establish a steady sexual relationship (40%). The following responses arose in response to this question.

> R00: " I was an orphan and lonely and need money. So I decided to start having boy friend to help me with things I need and keep me company. That is how I started having sex with him."
>
> R002: " I was looking for some money to pay for inter-house sports fee in the school. My parents could not help me with the payment, so I started sleeping with one of my classmate who promised to give me the money if I sleep with him and he did when I agreed to start sleeping with"
>
> R003: " My friends laughed at me. They said that "I am a mugu (antisocial) that is why I don't have a boyfriend. " So I started to look for a boy friend and when I

found one, who is also my class mate we decided to have sex and after three times, I became pregnant”

R004: “ I wanted to try what other teenagers are doing to see how it feels”

R005: “ I needed financial help and my parents did not have any. I asked my boy friend and he promised to give me the money if we have sex.”

U001: “ I feel that I am old enough to start having sex especially now am in secondary school”

U002: “ Because my friends tell me am old enough to have sex and that I will feel like a grown woman when I start having sex with my boy friend”

U003: “ I was having financial problems, and could not get help from my parents and relative but I find man who promised to be giving me money and all the material things I need for my school if I will be having sex with him” So I started to sleep with him and he did as he promised.

U004: “ I needed some financial assistance for my school provisions, my parents are trying to help but they have other children to care for, so there is this boy who is a trader and who gives me some money when I go to his store, so we started having sex together very often and he will give me money and buy me provisions and wears after I sleep with him”

U005: “ I was having financial problems, and could not get help from my parents and relative but I find person who promised to be giving me money and all the material things I need for my school if I will be having sex with him. So I started to sleep with him and he did as he promised”

Boyfriends were either fellow classmates from well-to-do families who were able to provide the girls with financial, sexual, and psychological support or boys/men with whom the girls liked to share emotional and intimate times with or without financial obligation. “Sex partners” were rich business men (married and unmarried; “sugar daddies”) who provided these girls with material and financial support in exchange for sexual intimacy. Six of the 10 participants indicated the relationship between them and the man responsible for their pregnancies was a boyfriend, whereas the remaining four were sex partners.

Did you and your sex partner have any concern about pregnancy or STD while having sex? What type of protection if any did you use before sex? In response to the following question, 80% of the participants indicated having concerns about pregnancy and STDs, 20% had no concern. Sixty percent did not use protection—due to shyness (20%), discouragement/refusal by the boyfriend (20%), or trust in the boyfriend (20%)—while 40% inconsistently used protection.

Although the participants did not directly express lack of knowledge about reproductive health and risky sexual behavior, the fact that almost all the participants expressed concern about pregnancy and STDs while at the same time reporting no use or inconsistent use of contraceptives showed a lack of knowledge related to reproductive health, risky sexual behaviors, and barriers to safe sexual practices.

> R001: “We did not have any concern because we were having sex with nobody else. We did not use any protection because my boyfriend did not want to use any thing but he withdraws. That is the only thing we do. I became pregnant four months after we started having sex”.

R002: “ Yes we did but my partner said I was the only person he has sex with and we will not worry about STD and that if I became pregnant, he will marry me and his parents can take care of me and the child. We did not get married. No protection at all”.

R003: “Yes, but both of us were shy to go to the chemist to buy condom. We did not want people to know we have started having sex and I did not know I will become pregnant just after three times of having sex. No protection used”

R004: “Yes we had concern about pregnancy and HIV but my boyfriend said don’t worry about it now unless I want him to look for another girl, so I agreed but now he is about to deny that he is the baby father . We did not use any protections because my boyfriend did not want it at all”.

R005: “ Yes, we were concerned about pregnancy and HIV, but we were shy to go to the Chemist store to ask for condom. We did not use protection because we did not know how to get them or how we will use them if we get it”.

U001: “ No we did not have any concern. We did not use any protection because we trusted each other and I did not think I will become pregnant because we only have sex during my safe period”.

U002: “Yes, we used condoms when we have them available and when it is not available we use the withdrawal method”.

U003: “Yes we did have concern. Mostly we use condoms when we have them but when we don’t have them but in the moment we will go ahead without anything”

U004: “Yes, we were more concern with STD than pregnancy. We used condoms but not all the times only when he wants or when it is available”.

U005: “Yes we did. We used condoms but not all the time, but most of the times we did”.

Research Question 2: What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regards to their pregnancies and pregnancy related needs?

The main themes developed from analysis of participants’ response were negative reactions, physiological challenges, negative family and community reactions, lack of family and community support, and a need for health care. These themes arise from the data presented for each interview question below.

How did you feel when you first learned that you were pregnant? In response to this question, most participants indicated feelings of shame (40%), sadness (40%), and fear (40%). Some felt they had disappointed their family (40%) and two mentioned being afraid that their father would kill them. Their own words are reported below:

R001: “I did not know that I was pregnant until when I started getting tired, having problem to get up in the morning to go to school. I felt so sad, scared for my life and my family and ashamed of myself. I feel like I have disappointed my parents”.

R002: “I was sad, fearful, scared and worried about what people will say to me and my parents”

R003: " I was shocked, scared ashamed and embarrassed and feel that I have disappointed my parents. I was the hope of the family for good education before this".

R004: " I was very scared, I felt ashamed, felt I betrayed my parent's trust on me"

R005: " I feel so bad-o, ashamed of myself and disappointed"

U001: " Sad, regret, hopeless".

U002: " I was so afraid, especially about my father that he will kill me, and I ran away from our compound, because I never believe it will happen to me".

U003: " Sad, afraid, and disappointed at myself".

U004: "I feel sad because I will not be continuing with my school, but I was a little happy that my partner can take care of me and the baby".

U005: " I was afraid that my father will kill me and I was also afraid that my partner may deny being responsible for the pregnancy which leaves me with nowhere to go".

Describe the challenges related to pregnancy you have had since you became pregnant. In reference to the above question, participants reported experiencing symptoms such as vomiting (40%), feeling sleepy (60%), change in appetite (60%), weight gain (20%), and feeling sick, weak, and tired (30%). Twenty percent reported changes in color, and 10% reported breast enlargement. Responses included:

R001: " I was sick, vomiting most of the time and sleepy"

R002: " I eat so much food, sleep most of the time and I am becoming fat".

R003: " I have been sick, very weak, vomiting and sleepy. My boy friend said my color has changed also. I don't have any appetite to eat and when I eat, I will vomit. Soon I will stop going to school because they will not allow me to come if they find out that I am pregnant".

R004: "Vomiting, tired all the time, and me I spit all the time even now and I don't even go to school anymore because the teachers will know".

R005: " Nothing yet. I just eat so much now and am getting fat".

U001: " I am sick, vomiting most of the time and sleepy".

U002: " I eat so much food, sleep most of the time and I am becoming fat".

U003: " I don't feel any different yet. The only thing is that my breasts are larger and my sisters said my color changed and that I look like I have no blood in me and my face looks a little bigger than before".

U004: " In the beginning I felt sick, weak and sleepy and don't have appetite to eat, now I feel better but am looking fat"

U005: " I feel lazy, weak and don't have appetite to eat".

Do you get healthcare for you and your unborn baby? If so tell me about it.

With regards to the above question, 60% of the participants had registered for antenatal care and 40% had not. The main reasons reported for not registering were: the belly had not yet started welling (10%), family anger (10%) and a lack of courage and money (20%). Below are participants' responses.

R001: " I come to the health clinic for check up. I am taking multivitamin".

R002: " I registered at the health clinic and I go there when I don't feel well and my clinic days."

R003: "I have not started going to the health clinic for antenatal because my belly has not started showing yet. I plan to go and register".

R004: " I go to the health Center for antenatal visit and I am doing well"

R005: "Yes, I go to the health center for antenatal check up and they say the baby is doing well".

U001: " No health care yet because everybody is still angry at me in my family and I am still shock this is happening to me".

U002: " I am planning to register with the health center when I get the money and the courage to go".

U003: " I have registered for antenatal care at the health center"

U004: "Yes I go to the health Center for antenatal visit and I am doing well".

U005: " Not yet but I will register for antenatal care as soon as I get the courage to go".

Describe for me how your parents, family members and the Orlu community feel about you being pregnant? In response to this question, 40% of the participants reported family rejection, 30% had been kicked out of their homes, 20% reported parental anger, 30% reported family disappointment and shame, and 30% community disappointment. Two of the girls reported being physically beaten. Below are the participants' words.

R001: “ Everybody has rejected me; nobody wants to do anything with me, even my boyfriend does not want to see me anymore. I have no parents which makes it worse for me”.

R002: “ My parents are devastated about my pregnancy and my mom especially feels that she did not raise me well. Both of my parents beat me every day for becoming pregnant and have now completely rejected me and will not allow me to come back to our home. I am now squatting (sharing a place) with a friend”.

R003: “ My parents have rejected me and chased me out of the house and ask me to go to my boyfriend’s parents, but when I went there they also rejected me and asked me to go back to my parents. Everybody who is related to me feels ashamed of me now and nobody wants to talk to me”.

R004: “ My parents were disappointed, angry at me and my dad had to beat me almost every day for putting shame on my family but now he has stopped beating me but still angry at me. He wants me to get out of the compound because he did not welcome me in the family”.

R005: “ My parents were very angry at me, my friends feel so bad for what has happened, and everybody in the community see me as a girl who go around having sex but there is nothing I can do about it now”.

U001: “ My parents are not happy at all and they said they are ashamed of me as their child. My other family members were very angry in the beginning but they are feeling sorry for me now and helping me the much they can but they are also students and don’t have much to give. No help from the community at all”.

U002: “ You know! nobody is happy about it or with me. My parents and sibling are very disappointed about me being pregnant, and the whole community is also disappointed and talks bad about me everywhere”.

U003: “ My parents were angry disappointed and embarrassed, my other family members feel ashamed, and the community is disappointed and people talk bad about me and point at me as I pass in the street. I don’t even go to church since I become pregnant because of how people react to me”

U004: “ My parents are so angry, disappointed and embarrassed by my behavior. My other family members were disappointed with me, but I think the Orlu community saw me as one of those girls who did not do what they were sent to school to do that is to study”.

U005: “ My parents are embarrassed and ashamed of me, family members are angry at me and the Orlu community is disappointed at the whole situation”.

What type of support have you received from friends, family, the community or the state since you became pregnant? For the question above, 20% reported getting some support from their aunties, 20% from parents, 20% from sex partners, and 10% from the boyfriend. Twenty percent reported no support from family or friends. None of the participants reported receiving any help from the community or the state.

R001: “ No support, they told me to register at the health clinic, but when I go they still ask for money for my visit, which I do not have. I am a student, I have no job. But thank God my aunty has forgiven me now and helping me with everything I need till I have the baby”.

R002: “ The only support I get is from my boy friend. He gives me some money and comforts me but I don’t know if he will continue to help and for how long. He says that the parents don’t know about me yet”.

R003: “ I have not received any support from family, friends or the community except my aunty who allowed me to stay in her house (crying)”.

R004: “No support, every member of the family even mom is angry at me. All my friends don’t want to come near me and no community support for people like me. I hear about the social welfare but am not sure how much they can help”.

R005: “ My parent let me continue to live in their house and still feeding me and buy clothes for me some times they give me pocket money. That is the only help I get. My boyfriend is a student and does not have money to give”.

U001: “ No help from anybody”.

U002: “ My parents called me back home, and are feeding and clothing me. That is the only help I have been getting”

U003: “ My parents are still feeding and clothing me, and very few of my friends come to give me advice but nothing special from the community or the state”.

U004: “ I get financial and material support only from my partner. Every other group has deserted me even my parents”

U005: “My partner is still helping me with feeding money and emotional support. My mom and sisters gives me some emotional support, but I have not

received any support from the community or the state. Ok I remember the church sent two people to come and see me last 2 weeks but that was it".

Research Question 3: What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regards to their impending motherhood?

With regards to their perception of impending motherhood, participants' worries ranged from financial, emotional support, marriage prospect, educational future and identity of the unborn child.

What concern if any do you have about becoming an unwed mother? All participants expressed worries about financial support, 40% expressed worries about lack of respect from the community, 30% expressed concern about emotional support, and 10% had concerns about the unknown nature of their future. Individual responses were as follows:

R001: " I will have nobody to raise my child with me and will not be able to finish school, to have a good job, to get money, to take good care of my child, and both of us will suffer in life".

R002: " I will not have any kind of support for me and the baby, and I may not have any money to train my child to have a good education. My partner promised that he will take care of me and the baby, but he is also a student, does not have a job and depends on his parents for helping me".

R003: " I am concerned nobody will help me raise my child; my child will not have a father and may not have good education because of lack of money"

R004: “ I don’t know how I will take care of the child being that I don’t have any job and will not be able to buy clothes, food, and medicine or even send him to school to get education”.

R005: “There will be no money to send my child to school or to give the child what he will need to grow up like food and clothes. My child will not have a father unless my boyfriend’s family decided to take him”

U001: “ I have concern that people will not respect me, and that I will suffer with my child, and will not continue with my schooling and not have money to take care of my child when the time comes”

U002: “ I have many concerns, lack of respect for me and my child. I lost my right in the church as a Christian and lack financial and emotional support”.

U003: “ There will be no respect for me and my child from the community and no emotional or financial support”.

U004: “ Well, I hope that my partner and I will decide to get married. But if we did not get married, things will be hard for me and the baby. I will have no support at all and I don’t have a job and did not finish with school”

U005: “ Lack of financial and emotional support, There will be no respect for me and my child from the community in general”.

Do you think being an unwed mother will affect you and your child’s future? If so how? In response to this question, 60% of the participants expressed concern that the future does not look bright for either them self or the unborn child, 10% expressed concern about being unable to care for the child, and 30% were concerned that the future would be hard.

R001: "Yes I think this child will have no future because if I do not have money to give good education in today's society what future will the child or I have?"

R002: "There will be no father to help me with all that the child will need to grow well. Now that I have dropped out of the school because I am pregnant, I may not go further in my education and without education in this country; there is no future for us."

R003: " Yes, now I will not be able to go back to school because nobody to support me, and pregnant girls are not allowed in the school and without good education, I will not be able to take care of my child"

R004:" Yes, being unmarried I will be the only person to care for this child and it will be hard for both of us hence I don't have education or good job".

R005: "Yes, I think me and my baby don't have any bright future now unless things changes like if I am able to go back to school after I deliver the baby but it will be very hard to get that kind of opportunity again".

U001: "Yes I know it is going to affect both of us well .Things will be hard for both of us. People can call my child a bastard and will not treat or respect him/her. I may not have good education to do well in his life. My own education has already stopped half way".

U002: " Unfortunately for me I made this mistake, now I cannot continue with my school so I can get good education and perhaps good job and get good pay so I can give my child what he needs including education. But you see now, I don't think both of us have a bright future at all (subbing)"

U003: " There will be no father to help me with all that the child will need to grow well. Now that I have dropped out of the school because I am pregnant, I may not go further in my education and without education in this country; there is no future for us".

U004: " As I said before I hope to get married with my partner. But if that did not happen I will be in big trouble in life and the future for me and the baby is not looking bright at all. What kind of future will I have as a girl without good education or learning a good trade and how can I be able to take care of my child. My child will have no father and people will look down on both of us"

U005: "Yes, my child will not have money to get education and all other things he will need to grow as a person. Myself, I am not sure of my own future now that I did not complete secondary education. Nobody will like to send me back to school after I give birth to this child even if my partner decide to marry me, What future do I have without education or a good trade. To be a housewife in Nigeria these days is very hard"

What challenges do you expect as an unwed mother raising a child? Do you have help to raise your child after birth? In response to this question, 80% of the girls expressed concern that they may not get married, and 20% were worried that life would be hard. Below are participants' own words.

R001: " First I will have nobody to help in disciplining my child, and I will have no hope of ever getting married again because no man will want to marry me because I have a child with another man. They will only ask for friendship but not for marriage"

R002: “ I may not be able to get married again. If I get married, it may not be the type of husband I could have had if I did not became pregnant before getting married. It may be a very old man. In addition, if my child is a boy whose name is he going to bear unless my partner decided to claim him. I hope. Otherwise they will be calling him bastard if he has no father, and that will hurt my heart so much”

R003: “Me and my child will be poor all our lives because of lack of support. If that will become the case I might consider giving the child up for adoption if possible. It may not be possible again for me to marry except if I find an older man who does not have any child who needs children”.

R004: “ I just told you now”.

R005: “ I have told you that before. Things will be hard for me and the baby. I will suffer well .Also it will be hard for me to get a life partner if my boyfriend did not marry me. You know, no man wants to marry a woman who has a child with another man. Or if I am lucky to marry it will be as a second wife (she sighed)”

U001: “ Like most girls who have made this kind of a mistake I made, I may not get married for the rest of my life because no man wants to marry a woman who already has a child by another man. If I do get married it may be an old man, or as a second wife. That is if am lucky”.

U002: “That means I will suffer all my life. I might not get married again. Men will look at me as public latrine. They will like to have sex with me but will

not like to marry me because I have a child with another man. No one wants to take such a responsibility"

U003: "Everybody will see my child as a lot of responsibility especially men and they will not like to have any marriage relationship with me and if they do, it will not be people within my age; it will be old people or people who are seeking to have children".

U004: "No husband for financial and emotional support for both of us. It will be difficult if not impossible for me to get married in my life".

U005: " I will have no body to share responsibility of caring for the child with me. I may be lonely for the rest of my life, as I may not get to marry because I already have a child out of wedlock".

Do you have help to raise your child after birth? In response to this question, five of the participants (50%) were not sure if their children would be accepted, one (10%) was hoping to get married to the boyfriend, and four 4 (40%) indicated they would have no help. One of these last four was considering adoption.

R001: " I don't have help to raise this child, after birth, I have no parents and am not sure my boyfriend's parents will claim the child. I may consider giving the child for adoption if I am not able to take care of it by myself".

R002: "Right now only my partner is helping me by giving me money for the things I need, but I don't know how long he will stand by me hence he said his parents don't know anything about me yet. I don't have any other help to raise the child after birth"

R003: “ No help, that is why am thinking about adoption unless my parent or my boyfriend’s family changed their mind later”.

R004: “ For now, I don’t have help. I am hoping my parents will somehow forgive me and take me back or my boyfriend’s parents will claim their grandchild. If nobody wants to help me, I will then consider giving the child up for adoption”.

R005: “ I don’t know yet. I will only know that after the baby is born. I hope my family will claim and helps me to raise the baby. I am not sure yet”.

U001: “ No help as far as I know now”.

U002: “ I am not sure of any help yet. My parents are still very angry and am not sure if my boyfriend’s parents will claim the child. I will try my best to take care of the child if not; I will give the child for adoption for better life”

U003: “ I don’t have help for now and I don’t know what to do until the child is born”

U004: “ I am hoping that I will become a wife to my partner and he will be the help. Otherwise I have no other help for raising this child”

U005: “ The only help I have now is my partner, but I don’t know how long he will be there to help. I think after the child is born if it is a boy he may like to continue to help me, but if a girl he may decide to stop helping. I don’t know yet”.

Research Question 4: What type of community support might be most helpful to teaching adolescent safe and healthy reproductive life style?

What type of support related to reproductive health did you receive from the community before getting pregnant? In answer to this question, 100% of the participants reported receiving no support from the community.

R001: " No community support for reproductive health"

R002: "No support related to reproductive health from the school or church for adolescents. I learned the little I know by reading books, the radio and from my friends".

R003: " I did not receive any community support related to reproductive health before I became pregnant. I regret that now. They did not teach us any sex education in the school too"

R004: " I did not receive any support".

R005: " I did not receive any".

U001: " I did not receive any support".

U002: " None, not from the School or the church".

U003: " None".

U004: " None from the church or school".

U005: " I did not receive any support from the community".

Do you know of any programs to educate adolescent girls about sex and sex related issues before getting pregnant? Over 70% of the participants indicated that they have heard about sex education or HIV prevention program, and 20% knew about a family planning program but it was only for married people.

R001: " I have heard about sex education but I did not get any because it is not thought in the schools or in the church. The little I know is from reading books, TV or from Classmates which did not help me much as you can see" .

R002: " No, but I have heard about the HIV prevention program and the family planning program but it is for married girls"

R003: " I think sex education and HIV prevention education would have help me if they introduced them in the school".

R004: " I do not know but I have heard about sex education for adolescents, but I don't know what it is all about".

R005: " Yes, I have heard about sex education and HIV prevention".

U001: " I know family planning but that is for married people. I have heard about the Aids prevention program and sex education program but we don't have them here"

U002: " I can't remember any one now but I know that there are such programs. Yes I know there are sex education programs but I did not have any".

U003: "Yes I have heard about sex education but I did not receive any".

U004: " Yes I have heard about sex education but I did not get any. I also have heard about the HIV prevention campaign".

U005: " I know the family planning program but it is for married people, but I have heard about sex education for teen, but did not receive any till now".

Did you receive any reproductive education before getting pregnant? If yes, from who? With regards to this question, 40% of the participants reported receiving sex

education from peers and the media, 40% from a family member and the media, 10% from peers and reading and 10% from family members only.

R001, Peers, TV, Radio, still did not help me.

R002: TV, Radio, classmate, reading, nothing from community program.

R003: Peers, TV/Radio, my boyfriend.

R004: Friends reading books, nothing from school.

R005: Sister, Friends, T/V Radio.

U001: From Mom and sister, lecture about boys.

U002: From mom, friends, TV/Radio and books.

U003: Friends, TV/radio.

U004: Mom, TV/radio, mostly reading.

U005: Sister, Friends, TV/Radio.

Do you think there should be program to help adolescent girls from getting pregnant or getting a disease? If so what kind of program? 100% of the participants agreed that there is a need for a sex education program for adolescents in the community, 60% of the participants suggested such a program should be started early from primary six (6th grade).

R001: "Yes, sex education program, HIV club. It will be good if that is started from primary six then the rest of secondary school and even in the University."

R002: "Yes I think there is a need for a program to help adolescent girls to understand more about sex, diseases and having children, so sex education starting from primary to secondary school will be good"

R003: “ I think sex education from primary six to secondary school will be very helpful for teenagers”.

R004: “ Yes, yes, girls need some program like sex education to help them know what to do when the time comes. Look at me now. I think if I have had such education in the primary school or while in the secondary school that could have helped me”.

R005: “Yes I positively think there is a need for a program to help growing girls take care of themselves. I don’t know a particular program but anything is better than nothing at all. You know!”

U001: “Yes I think we definitely need a program to help young girls at this period of confusion. A program like sex education program will help us. It will be good if that is started from primary six and up to secondary School”

U002: “ Yes there is really a need for a program to help adolescent girls to better manage their sex life. This can be started as early as from primary six, then up to secondary school. That will be good”

U003: “ Yes I think there is a need for a program to help girls to prepare for a better reproductive life, any sex education program is better than nothing”.

U004: “ I definitely think we need a kind of program to teach adolescents about how to handle their reproductive life safely. Any kind of sex education will work. The family planning education is working but it is for married women. Any program should be started from primary six to secondary schools”.

U005: “ Yes I think there should be sex education programs that should be started from primary to secondary schools to help adolescent girls like me”.

Summary of Themes Arising from the Data

Research Question 1 (What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regards to their decision making about past sexual activity?)

Need for financial support. Most of the girls expressed a need for financial support as one of the reasons for their having entered into sexual activity in the first place, and continuing until they became pregnant.

Peer pressure to form a steady sexual relationship and start having sex. Many of the girls indicated that peer pressure was the reason they initiated a sexual relationship, started and continued having sex, and are now pregnant.

Lack of knowledge about reproductive health, risky sexual practices, and barriers to implementing safe sexual practices. All the girls lacked knowledge about reproductive health, risky sexual practices and barriers to safe sexual practices and felt that this resulted in their becoming pregnant and possibly exposed to STDs. Almost all of them had been concerned about pregnancy and STDs, but, none of the girls from the rural community reported using any protection before sex, and the girls from the urban community who reported using condoms used them inconsistently. In addition, it is obvious that the boys/men with whom the girl had sex pressured the girls into the risky sexual practice of non- or inconsistent contraceptive usage by making false promises such as getting married that never materialized.

Research Question 2 (What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regards to their pregnancies and pregnancy related needs?)

Negative emotional reactions to their pregnancy: All the girls experienced a negative emotion, such as fear, sadness, regret, disappointment, or shame when they found out they were pregnant, and none expressed any positive emotion. Although some of the girls mentioned their male partners gave them monetary or emotional support, there was no mention of any negative reaction by the men or from the community or even the families toward the boys/men involved. This lack of negative reaction could be due to the cultural perspective that cheers boys/men for sexual expression but shames girls/women who exhibit the same expression.

Physiological challenges of pregnancy: All the girls reported experiencing similar physiological changes related to their being pregnant. Some of the challenges expressed were nausea and vomiting, anorexia, sleepiness, and generalized weakness, which caused them difficulties in getting up to go to school. Thus, most of them withdrew from school.

Prenatal care: Most of the girls reported registering for and receiving prenatal care. Some reported registering but not having started to attend due to feeling shy or discouraged. Others reported they had not registered due to lack of money or because they did not think the time was appropriate for them to start prenatal care.

Negative family and community reaction: Most of the girls reported experiencing negative reactions and rejection from parents, family members, and the community because of their unwed pregnancy status. These emotions included

disappointment, shame, and anger at what was felt to be a betrayal of trust and family disgrace. Some girls reported being physically beaten.

Lack of family and community support: Most of the girls reported a lack of support from their families and communities. However, a few reported receiving support with housing, food, clothing, and pocket money from some family members. None reported any kind of support from the community.

Research Question 3 (What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regards to their impending motherhood?)

Worries about emotional and financial support: All the girls expressed worries about their future financial and psychological support, because they were pregnant and unmarried, had not completed their high school education, and had no job.

Other worries about the future: All the girls expressed worries about other unknown future challenges for them and their children, using such expressions as "I don't think both of us have a bright future" and "life will be hard for both of us."

Worries about poor prospects for future marriage: All the girls expressed concern about the possibility of future marriage relationships, saying that it would be difficult for them because they have had a child out of wedlock and most men in Nigeria do not like to marry a woman who already has a child with another man.

Worries about the child's identity and rearing: Most of the girls were worried about the future and cultural identity of their child, and about finding help rearing (or even claiming) the child after birth.

Research Question 4 (What type of community support might be most helpful to teaching adolescent safe and healthy reproductive life style?)

Lack of reproductive health support for adolescents: All the girls reported a lack of support related to reproductive health education, and most had no knowledge of any formal sex-education programs.

Current sources of sex education: The sources of sex education reported by most of the girls were peers, family members (especially mothers and sisters), the television and radio, and books or magazines.

Need for sex education: All the girls expressed a need for sex-education programs to help adolescents in the communities with reproductive health issues.

Summary

In Chapter 4, I described the purpose and research questions of the study, the research setting, methods of data collection and analysis, and evidence of trustworthiness. I also presented the demographics and characteristics of study participants and the results of the interviews, by research question. Finally, I presented the principal themes emerging from the data. In Chapter 5, I summarize, analyze, and interpret the findings in the context of the theoretical framework.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to explore and develop an in-depth understanding of the experiences and perceptions of unmarried pregnant adolescents in Orlu, Imo State, Nigeria, about their decision to engage in early sexual activity, the effects of their pregnancies, and their impending motherhood. The goal was to share the findings from this research with state officials to prompt discussion of the problems of sexual activity among unmarried adolescents, and to motivate action for change.

I used a qualitative design and a phenomenological approach because these allowed me to develop an in-depth understanding of the experiences and perceptions of these girls, thereby addressing a gap in the literature concerning the experience of adolescent sexual activity among pregnant unmarried adolescents in Nigeria.

Interpretation of Findings

Unmarried Girls' Decision to Initiate Sexual Activity

The decision by the girls in this study to initiate sexual activity was influenced by (a) their age, (b) their needs for financial support, (c) peer pressure to initiate and establish a steady sexual relationship, and (d) their lack of knowledge about reproductive health, especially risky sexual practices.

Age. Age was a factor in initiating sexual activity reported by Alo and Akande (2010) and Egbochukwu and Akanem (2008). Unmarried females aged 15–19 are more than four times as likely to experience sex than those younger than 15 years of age (Alo & Akinde, 2010). It is not surprising that age appears to be a factor in my data also

because this is the period of puberty and sexual awakening among adolescents all over the world.

Need for financial support. This finding confirmed the results of Okereke (2010a) and Mmari and Blum (2009), both of whom identified poverty and the practice of sex for money or gifts as a significant factor contributing to adolescent sexual activity and sexually transmitted and HIV infections. Ankomah et al. (2011) also identified poverty and transactional sex as part of the push factor; participants in their study described getting financial and material rewards from trading sexual interactions.

Although most cultures in Nigerian society do not permit premarital sexual activities or pregnancy before marriage, sexual activity among unmarried women and men is common. However, due to gender roles and cultural factors, men are cheered for involving themselves in sexual activity outside of marriage whereas women are frowned upon and shamed. In Nigeria, extra-marital sex among men is very common, especially among wealthy men, *sugar daddies,* who tend to prey on young college students, especially those from poor family backgrounds, whom they influence with their money in exchange for sex. The present study confirmed that scenario. Moyosola et al. (2012), in a study of sex stereotyping and its effect on the sexual behavior of senior students in a government college in Keffi, Nigeria, found a significant number of participants reported strong agreement with multiple stereotypical statements, including "Boys have greater need for sex than girls," "Sexual drives in human beings are not controllable," "Decent people do not openly discuss sex," and "A person who is sexually active before marriage, usually makes a good spouse" (p. 27). In their study of factors influencing the prevalence of premarital sex among Nigerian students, Adeoye et al. (2012) also found that gender is

a significant contributory factor to adolescent sexual behavior. The researchers suggested the result might reflect the general differences assumed between men and women, in particular that men tend to be more sexually reactive than women.

Unlike in the developed world, where laws guide sexual behavior, exchanging sex for money with men, no matter the age of the woman involved, is not regarded as an offense in Nigerian society. This absence of policies and laws to control such acts in Nigerian society may be why rape and other forced sexual activities are hardly ever reported in Nigeria. Further, extra-marital sexual activity by boys and men is almost regarded as the norm in Nigeria. Not only does this influence how men and women are involved in sexual activities, it also affects their acceptance of protection during sex. For example, Okereke (2010b), in a study of adolescents in Owerri, suggested that one reason adolescents tend not to take advantage of available contraception is because of the cultural perspective that contraceptives, especially condoms, are tools used by immoral people. The use of any sexually related paraphernalia, especially condoms, is therefore, taboo.

A logical conclusion of this situation is that the only people who could potentially protect girls from risky sexual behaviors and unwanted pregnancy are parents or other close family members or friends—by giving them sexual education, and physical protection (e.g., closely supervising or chaperoning them) or (if they become pregnant) by providing for their emotional, financial, and material needs until they marry or become more independent. Families that are sufficiently educated and comfortable discussing sex and sex-related topics could be educating their children—especially the girls, but also the boys—who need to learn about responsibility in sexual relationships.

Uneducated and low-income families may be just as concerned about the safety of their girl children, but do not have the facts and or feel comfortable discussing such topics with their children.

I believe that because much secondary education is conducted at boarding schools where the girls live in dormitories where they are easily exposed to sexual relationships, parents try to protect their girls by insisting they attend school as day students. This gives parents better supervision over their children, especially during after-school hours when the girls are usually picked up by sugar daddies. For low-income parents, having their children attend school from home carries the additional advantage of saving them money. In some instances, parents remove their girls from schools at sixth grade to prevent pregnancy, because of their concern that living in a dormitory will expose their daughter to a sugar daddy. In addition, I believe the educational system, the public health authorities also has a responsibility. There should be education throughout the community to change these cruel, misogynistic traditions where men can prey on teenage girls without responsibility.

Peer pressure. As a contributory factor for initiating adolescent sexual activity, peer pressure was previously identified by Okereke (2010a), Egbochukwu and Ekanem (2008), and Nwankwo and Nwoko (2009). Because peers tend to share sex-related information among themselves, it becomes important to ensure that shared information is accurate. A comprehensive government-sponsored sex-education program would promote change in the sexual-behavioral norms of seeking information from peers. The present lack of sex education leads to the unsafe/dangerous situations described in this study.

Girls' attitudes toward their own pregnancy

All participants in this study experienced (a) negative emotions due to their unwed pregnancy status, (b) negative reactions from their parents, family members, and the community, and (c) no special support from family members, the community, or the state. This is the first time this information has been reported in the literature, and is deeply disturbing. Because this is the first study of this type, especially in the study location, and possibly in Nigeria as a country, this finding is important for further research studies, policy formulation, and informing program interventions on adolescent sexual behavior.

Concerns about pregnancy and future motherhood

All participants expressed concerns about being pregnant and becoming a mother. Some worried about not having sufficient financial and psychological support. Others worried about their future prospects for marriage, or the cultural identity of their child, or raising the child. Again, as no prior study explored the perceptions of unwed adolescents and their concerns about impending motherhood in Nigeria, no data is available to compare with these results. As with the previous finding, this information on unwed adolescent mothers' perceptions about their impending motherhood extends stakeholders' knowledge and can be used to develop policies or program interventions for adolescent sexual behavior. It is sad and concerning to know that these adolescents, due to their unwed pregnancy status, could be faced with the difficult future they described. As reported by AHI (2005), the socioeconomic consequences for adolescent pregnancy include termination of education, poor job prospects, loss of self-esteem, and broken

relationships. In addition, adolescent mothers are more apt to be undereducated and thus they and their children would live in poverty (Oke, 2004).

Healthcare Availability

All these girls experienced similar physiological changes in their pregnancy and most were registered for health care for mother and baby. This finding does not support findings by Olanrewaju and Olurounbi (2012) who reported that adolescent mothers in Nigeria are at greater risk of anemia and preeclampsia because they are less likely to receive prenatal care. These authors also found that adolescent mothers are at risk for vitamin deficiency, inadequate weight gain, premature labor, inadequate development of the pelvis resulting in difficult vaginal deliveries, and a higher incidence of caesarean births.

This could be an indication that these girls are willing to improve their lives and that of their unborn babies, irrespective of all the negative reactions and lack of support from their families and communities.

Reproductive Health Education

The lack of government sponsored reproductive health education in the community. A lack of government-sponsored sex education may have contributed to the pregnancy status of the girls in this study. This finding confirms the work of Shittu et al. (2007), who concluded that the high level of sexual activity in the adolescent population in their study in Nigeria created a high risk of STDs and unintended pregnancy because of the lack of accurate information related to sex education. Olubunmi (2011) also concluded that a lack of adolescent sex education in Nigeria is responsible for the high

prevalence of teenage pregnancy, STDs, and HIV/AIDS, and that education should be made a priority.

Instead, these adolescents relied on friends, family, and mass media sources that seem unreliable for the adolescents in this community. Lack of knowledge about risky sexual activities and other aspects of reproductive health were identified by Okereke (2010b), Olubunmi (2011) and Shittu et al. (2007) in their respective studies in Nigeria. This result also confirmed the work of Ugoji (2009), who believed that a permissive and inadequate attitude by parents, combined with a lack of sex education for girls in the community, predicts early unprotected sexual activity among teenage girls. Ugoji's reasoning was that, if sex education is available neither at school nor at home, and parents are permissive in their attitudes toward their daughters, then girls will tend to seek sex-related information from peers, and especially from sexually active boys whose information may be inaccurate and self-serving.

Peers/friends. Peers were one major source of sex education for the girls in this study. As indicated earlier, this finding confirmed studies by Okereke (2010a), Egbochukwu and Ekanem (2008), and Nwankwo and Nwoko (2009), all of whom identified peer influence as an important source of sex education for adolescents in Nigeria. Shittu et al. (2007) found that the adolescents in Nigeria who get most of their sex education information from peers/friends are vulnerable to STDs, HIV/AIDS, and unintended pregnancy. Although the participants in this study may have received sex education from peers, the information may have been inaccurate, which could have resulted to their pregnancies. Indeed, Ugoji (2009) reported that sex-related information from peers, especially sexually active boys, tends to be inaccurate and self-serving.

Family members. Mothers and sisters in particular were another important source of sex education in this study. This confirmed Olubunmi (2011), who reported that inaccurate or lack of parental involvement and communication accounted for 34.7% of adolescent premarital sexual activity, and was a significant predictor of premarital sexual activity among this population. This means that girls with uninvolved parents are more likely to have early sex and get pregnant. Also Mmari and Blum (2009), in their study, identified single-mother-headed families and having a sibling living at home who has become pregnant as factors associated with early adolescent sexual activities and pregnancy. However, these factors were not explored in the present study.

Although participants identified mothers and sisters as sources for sex education in this study, which could have served as a protective factor for this population, not all of the participants indicated having sexual education from mothers or sisters, and the extent of this education is not known. My understanding of sexual education among the Ibo people (who live in the study location) is that most people regard sex as a secret topic that should not be discussed with adolescents because this would result in sexual experimentation. Even when the topic is discussed in families, it is usually only with the girls, with the instruction "do not go near the boys," which does not give enough of information to prevent pregnancy or disease! Therefore, sex education by family members may not be a reliable source of health education, which may have contributed to the problem under discussion.

TV and radio. Media was another source of sex education mentioned in this study. This outcome confirmed the results of a study in Niger by Ugoji (2009), who identified the media as one of the factors that could significantly predict sexual behavior

of participants. Specifically, female students who watched more television were more likely to know about sex and engage in sexual activities. My findings also confirm the Ankomah et al. (2011) study, in which researchers found that television was one of the sources of sex education that can be regarded as a positive influence when used to teach young people to restrain or delay sexual activity, but negative when used to show nude pictures of boys and girls and even picture of young people having sex. In this respect, Isiugo-Abanihe and Oyediran (2004) found that the extent of sexual activity among adolescents was *positively* related to the amount of media information accessible to them, and that those with low access to medical information starting sexual activity 2 years earlier than those with greater access to media information. Access to media was directly related to age at initiation of sex (Isiugo-Abanihe & Oyediran, 2004). Again, the media may be a source of sex education but the accuracy of this education is variable, which makes the media an unreliable source of sex education for this population.

Need for sex-education programs

The last finding in this study was the need for a reliable government-funded sex-education program for adolescents in the community. Although study participants identified peers, the media, and family members as sources of sex education, the accuracy of information received from these sources was not known, and inaccuracy may have resulted in the pregnancy of the participants. Therefore, adolescents in Orlu community need a government-sponsored sex education program that is scientifically designed, with facts about the information evaluated for accuracy and appropriateness. In addition, such a program will need to be incorporated with the school curriculum and should be started at an appropriate age when children are old enough to understand the information.

Specifically, the age of 11 and up would be an appropriate age. To ensure effective implementation of such a sex-education program, parents, schools, community leaders, and government policy makers should join to create a policy that will guide effective design, implementation, and evaluation of a sex education program for effectiveness. By doing so, accurate sex information will be imparted; thus, sex-related information shared among the peers will have a greater chance of being accurate.

Findings in the context of the social-ecological model

This study is grounded on Bronfenbrenner's (1977) model, which proposes a broad approach to human behavior, considering the multiple factors and environments or systems that influence individuals, and that change throughout an individual's life span. These influences and environments or systems are embedded in one another, moving from the innermost level to the outside. First are the factors inherent to the individual. Then are factors at four levels of environment that impact the individual: the micro-, meso-, exo-, and macrosystem.

Microsystem factors (Physiology)

Individual factors include many aspects of physiology and personality, though in this study, the major significant factor was age. These girls ranged from 16 to 19 years, when changes in psychological and emotional need, including the need for sexual activity, increase.

Mesosystem factors (Family)

The mesosystem includes the family and its socioeconomic background, which were both clearly major contributory factors in this study. Poverty was a major reason for these girls to start engaging in sexual activity—not only to have sex, but also to get

money for their material needs. The family was also an influence in the sexual behavior of these girls**.** Family members, especially mothers and sisters, were sources of sexual education, however in a culture that does not encourage discussion of sex and sex-related issues due to fear of sexual experimentation. The accuracy of information given by family members is unknown and wrong information may have been disseminated and may have resulted to the pregnancy status of the participants. Also, in a community where sex education is not normally discussed in families or is regarded as a secret, open discussion and detailed information about sex may not be given even by mothers or sisters and could worsen the situation as incomplete education could be more dangerous than none.

Mesosystem factors (peer pressure)

Peers and friends are part of the microsystem of these girls, and clearly influenced their behavior. In this study, peer influence was among the major reasons participants started to establish sexual relationships, so they could have some sense of belonging. Other sources of information in this study originated with family members (microsystem) and the media (exosystem). None of these sources of sex education appear to be reliable. Sadly, the school (mesosystem), which could have been a source of scientifically designed accurate and appropriate information about sex and sex-related issues, was not part of sex education in this study location, which may have contributed to the problem of risky sexual behavior and subsequently the negative outcome of unwed pregnancy status in this community.

Exosystem factors (media exposure)

The media was identified as one of the sources of sex education in this study. In Nigeria where there are little or no government-sponsored sex-education programs available, the media is the most readily available source of sex education. Ugoji (2009) identified the media as the best predictor of sexual behaviors among female participants. Ankomah et al. (2011) identified the media as a source of sex education, and media were categorized as pull factors and perceived by participants as having positive and negative effects on adolescents' sexual behavior. Specifically, television was a positive influence when used to educate young people to restrain or delay sexual activity, but negative when used to show nude pictures of boys and girls and even picture of young people having sex, which entices especially the men, who claim they have natural uncontrollable sexual urges. Participants' use of the media as source of sex education in combination with other sources such as peers and family members may have had a positive or negative influence on participants' risky sexual activity and subsequently resulted in being pregnant.

Macrosystem (cultural factors)

Although no obvious indication of the role of cultural factors on the sexual behavior of the participants in this study emerged, cultural factors and gender roles have a major influence on adolescents' sexual behavior in Nigeria, as discussed early in this chapter. Nigerian society condones and even encourages extra-marital sexual activity among men and boys, and shames or condemns the same action among girls or women. For example, in Mmari and Blum's (2009) review of risk and protective factors that affect adolescent reproductive health in developing countries, the researchers found that of 10 studies they examined, gender aligned with engagement in premarital sexual

activities; and nine studies indicated a significant relationship between the two variables. Men were more likely to engage in premarital sexual activity than women, with a cultural expectation that men would be rewarded for expressing their sexuality whereas women would be discouraged from doing so (Mmari & Blum, 2009). Gender roles and cultural factors have a significant influence in premarital sexual behaviors among adolescents in Nigeria. The tragedy of the situation is that Nigeria, perhaps due to its multi-cultural and male-dominated cultural practices, has no laws or policies to guide these offensive behaviors. Even where such policies and laws are in place, due to Nigeria's participation in international agreements sponsored by WHO, they are not implemented or taken seriously. To improve sexual health in Nigeria, these policies and laws need to be implemented.

This study revealed a difference in the pattern of behavior regarding the use of protection between participants from urban and rural communities. For example, although all five participants from the rural community expressed concern about STDs and pregnancy, surprisingly none of them reported using any type of protection. In particular, due to gender role and perhaps cultural influence, the decision to use or not to use protection by participants was made by participants' boyfriends, and the decision did not benefit the participants. In contrast, most urban participants expressed concern about STDs and pregnancy, and most reported using some type of protection, though inconsistently. I believe there must be some cultural influence to encourage participant use of any type of protection before sex, especially for participants from the rural area. To improve the sexual health of adolescents in Orlu community, this male-dominated culture must change in regard to sexual behavior in the community. I recognized the

resistance that would be encountered in any attempt to change this culture in Nigeria; however, this change is happening all over the world when women decide to claim equal rights with men in a culture that has been dominated by men.

Macrosystem (health services)

Except for the prenatal clinics, the girls received no support from the community, state, or nonprofit organizations related to reproductive health of adolescents in the community. This is another environmental factor contributing to unhealthy adolescent sexual health in the community. Policies are urgently needed regarding the design and implementation of a comprehensive government-sponsored sex education program, with accurate facts and resources for evaluation of their appropriateness and effectiveness. In addition, laws must protect girls from sexual predators, and provide for prosecution of men who ruin the futures of adolescent girls. This could be the best way to improve adolescent sexual health in the community. I understand that resistance to this would be expected, but that change is happening all over the world as the rights of women and girls are being claimed.

Limitations of the study

The main limitation of this study was my limited exploration of (a) the girls' emotions, (b) their general or personal reasons for not using contraceptives, (c) the effect of family structure on their sexual behavior, and (d) the specific types of information that girls received from peers, family, and TV or radio. More probing would have helped.

Smaller, methodological limitations were (a) the busy period of the year when I collected my data, which may have contributed to the initial low attendance by participants, until I followed up with phone calls, (b) sampling from only one clinic from

each location, which may have resulted in sampling bias, and (c) self-reporting, which may have resulted in reporting bias.

Recommendations for Additional Research

Based on the findings from this study, additional research is needed to explore the lack of contraception use among the girls in this study location and the factors that influence their attitude toward the use of protection for sexual activity. Additional research is also needed on the factors that contributed to the lack of a comprehensive sex education program in the community. Additional research is also needed on the cultural factors that may have influenced the lack of support or assistance by parents, the community, and the state. Further research is needed using a different study design with larger population (survey) to see if my findings are generalizable.

Implications

This study has generated insight that could be used to reduce the rate of early sexual initiation and pregnancy among unmarried adolescents in this community, and lessen the negative impact of any such pregnancy on the study population. Specifically, insight about the factors that influence adolescents' decisions to engage in early sexual activity—and more importantly, the context in which those factors operate—could be used to design educational programs focused on particular factors in particular contexts. Educating adolescents about the negative outcomes associated with early sexual initiation could help decrease the incidence of (a) negative health-related outcomes for those adolescents, (b) negative social and emotional consequences of adolescent motherhood; and (c) negative outcomes for infants of those adolescents who become mothers. The results from this study may motivate open discussion in the communities about traditional

attitudes toward sexuality that permits the abuse and impregnation of girls and failure to protect them from sexual predation. Ultimately, results from this study could promote positive social change by creating supportive environments that allow adolescent girls in Nigeria to lead healthy lives, and reach their full potential as adults.

Recommendations for Action

In view of the findings from this study, adolescent girls in Orlu are in serious need of programs that provide sex education to improve their sexual life styles and reduce pregnancies and other negative outcomes of risky sexual behaviors. In order to meet this need, I recommended the following.

1. An appropriate sex-education program should be developed in Orlu as a joint venture of the government and non-governmental organizations (including schools, churches, and community groups), with input from families and adolescents (boys and girls). Such a program should teach girls, especially those from the rural communities, about sexual risks, how to protect themselves and how to communicate with their sexual partners. In addition, such a program should provide information to especially the girls from the urban areas on how to use condoms effectively and consistently.

2. A reproductive health media campaign should be designed and implemented as a joint venture of the community, government and the media to stimulate the dissemination of truthful sex-related information in ways that are correct and appropriate for the target groups. This campaign should use every available communication channel in the community to advance discussion and dissemination of essential information about adolescent sexuality, including the message of the negative effect of adolescent sexuality

on the life of adolescent girls, and how these girls need to be protected from predatory sexual activity.

3. Policy makers, government and social-service organizations should work together to provide counseling and social services to unwed pregnant mothers and their children after birth, and create after-school employment to provide adolescents with some financial assistance.

Conclusion

The findings from this study show that the decision to initiate sexual activity among Nigerian girls is influenced by multiple factors that include age, the need for financial support and a socially condoned system of 'sugar daddies' who support girls in return for sex; peer pressure to have a sex partner; and a romantic knowledge of sexual behavior based primarily on the mass media. The pregnancies of these girls are further precipitated by inadequate education about risky sexual behaviors and barriers to safe sex such as poor access to contraceptives and poor communication with sex partners. All participants in this study experienced the normal physiological changes related to pregnancy, and most participated in some type of health care for baby and mother - a possible indication that they wanted to improve their health and that of their unborn babies - but they also all experienced negative emotions when they realized they were pregnant, and negative reactions from their families and community about their pregnancy. Their perceptions about impending motherhood focused on concerns about future financial and psychological support, and concerns about other future unknown challenges including their reduced prospects for marriage, the identity of their children, and how to find help raising their children.

No community support related to reproductive health was available to these girls and, although there were sources of sex education – mostly through the media, peers, and family members – these were unreliable sources. As a result, adolescent girls in Orlu are involved in risky sexual practices that make them vulnerable to most of the negative outcomes of risky sexual behaviors such as STDs, HIV/AIDs, and unintended pregnancies. To improve the reproductive health of the adolescents in Orlu, there is an urgent need for a comprehensive government-sponsored sex-education program, and policies that support the effectiveness of such a program.

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Appendix A: Data Collection and Analysis Schedule

- Days 1–2: Travel to research site.
- Days 3-9: Recruit participants, schedule both initial and follow-up interviews, and purchase snacks and thank-you gifts (diapers for participants).
- Days 10–13: Conduct interviews (10 total) and transcribe data. Stagger interviews in 2 hour increments to accommodate interviews that may run over the anticipated hour and to provide myself with breaks and time to jot down initial thoughts about the data after each interview as needed. On Day 10, I will conduct 3 interviews in the first urban clinic, and on Day 11, 2 interviews in the second urban clinic. On Day 12, I will conduct 3 interviews in the first rural clinic, and on Day 13, 2 interviews in the second rural clinic.
- Days 14–28: Analyze data and prepare summaries for follow-up interviews.
- Day: 18: Provide second coder with small sample of data for coding.
- Day 29: Meet with second coder to compare analysis outcomes.
- Day 30: Adjust coded data as appropriate based on feedback from second coder and prepare final summaries for follow-up interviews.
- Days 31 – 32: Conduct follow-up (member checking) interviews. Stagger interviews in 1 hour increments to accommodate interviews that may run over the anticipated 30 minutes and to provide myself with breaks to jot down initial thoughts about the participant feedback after each interview as needed and to travel between clinics.
- Days 33– 34: Return travel.

Appendix B: Inclusion and Exclusion Screener Questionnaire

Please I seek your truthful response to these questions. Also I want you to know that this exercise is only for the purpose of this research study, so your response to the questions will be treated with utmost confidentiality.

1. In what year were you born?

2. Which part of the city do you live?

3. What is your marital status?

4. Do you understand and speak English well?

5. Are you able to read and write in English?

6. Are you pregnant? If so how many months?

7. Did you become pregnant by a boyfriend or a sexual partner?

8. Are you aware that any of your relatives are acquainted with me from my years in Orlu?

Appendix C: Recruitment Flyer

You may be able to help make a difference in your community!

You can help if you:

- are between the ages of 13 and 19,
- live in Orlu,
- are pregnant, and
- are not married.
- have become pregnant by a boyfriend/a sexual partner.

You can help by:

- Sharing with a female researcher your experiences about being an unmarried pregnant teenager in Orlu.

How will this help?

- Sharing your experiences will help the researcher better understand how to help other teenagers develop and have a healthy sexual lifestyle

What are the details of the study?

- The study details are described on the consent forms available from nursing staff.

What consent forms do I need?

- If you are 18 or 19 years old: Adult consent form. If you are between 13&17 years old: Parent consent form signed and Child assent form

Who do I contact?

- Priscilla Asonye

- By e-mail between now and XXX-XXX-X XXX Priscilla.asonye@waldenu.edu
- By phone between: December 2013-end of January 2014 In Nigeria, XXX XXX XXXX• Girls who take part in the project will be reimbursed for travel expenses for meeting the researcher and will be provided with a snack during the meeting and a small thank you gift (package of diapers) after each meeting.

Appendix D: Permission

GOVERNMENT OF IMO STATE OF NIGERIA
ORLU LOCAL GOVERNMENT

Area Inspectorate Office
Ministry of Health
Orlu
Orlu L.G.A.

Your Ref:.....
Our Ref: AIO MOHO VOL.082

Date: 4th May 2012

Mrs. Priscilla Asonye
146 Tudor Drive.
North Wales PA. 19454

Dear Madam,
Ref: **Permission to Conduct Educational Research in Imo State Ministry of Health**

Based on my review of your research proposal, I grant you permission to conduct the study entitled "The experience and perceptions of pregnant adolescent mothers in Orlu Imo State, Nigeria" within the health centers on Orlu Local Government. As part of this study, I authorize you to identify appropriate candidates for audio taped interview and our staff will help to ensure proper selection of appropriate candidates as long as the result of the study will be shared with the participants and the local community health department and individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities will include: Provision of the health facilities and trained staff, interview rooms, participant's health records, research assistance and any other resources as the need arises. We reserve the right to withdraw from the study at any time if our circumstances change. I therefore consider the authorization to approve your research within our health center facilities.

I confirm that I am authorized to approve your research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Yours faithfully,
SIGN
Dr. Onyuneme B.C
(+2348065213873)

Appendix E: Community Partner Agreement Letter

Student researcher from Walden University
Priscilla Asonye
Community Partner Agreement Letter

This agreement, dated……....., is entered into between Priscilla Asonye student researcher from Walden University and the community health centers in Orlu Imo state Nigeria for the purpose of providing infrastructures and research participants for research study.

The research participants will be available to the researcher through the community health centers. The staff of the community health centers may be helpful in the provision of health intervention if the need be, but the student researcher will be responsible for the entire interview and data collection processes. The community health center staff has agreed that no monetary or material compensation is required from the student researcher.

The student researcher is expected to maintain confidentiality of information from research participants, but is expected to share the result of the research study with the local health departments at the end of the study to aide in the improvement of adolescent reproductive life in the community.

The student researcher involvement is mainly for interview and data collection only. The student researcher may not administer any medical intervention to the to the research participants, but may referred participants for mental or medical evaluation if there is need for that. The research participants may not receive any financial compensation for their participation in the research study.

This agreement is in force on…….., 20……,
by……

This agreement will be terminated following the completion of data collection.

The community health centers will be responsible for alerting potential study participants, and the provision of private exam rooms for interviews. The student researcher will be responsible for collecting data from the participants.

Community Partner Signature

Student researcher signature

Appendix F: Adult Participant Consent Form

Adult Consent Form

This form is for any participant who is 18 or 19 years old.

****

Participants must submit this signed Adult Consent Form at the time of the interview in order to participate in this study.

****

My name is Priscilla Asonye. I am a doctoral student at Walden University in the United States. Some members of the community may recognize me because before leaving Orlu in 1984 to pursue an advanced education, I served as a volunteer with a local organization that promoted academic education for girls in the community.

You are invited to take part in a research study of the experiences and perceptions of pregnant unmarried adolescent girls between the ages of 13 and 19 who live in Orlu, Imo State. To participate in this study, you must be between the ages of 13 and 19, live in Orlu, be unmarried and pregnant as the result of consensual sex, and be able to read and speak English. If any of your family members are acquainted with me from my years in Orlu, you will not be allowed to participate in this study.

This form is part of a process called *informed consent* to allow you to understand this study before deciding whether to take part.

Background Information: The IRB approval number of this study is 12-20-13-0055372 and expires 12/19/2014

The purpose of this study is to understand how girls in Orlu make decisions about having sex, what it means to them to be a pregnant unmarried teenager in Orlu, what they anticipate it will be like to be a mother, and what community support they think would be useful to help girls make decisions about sexual activity. Based on the information from this research study, local support could be developed to promote and improve healthy adolescent sexual lifestyles.

Procedures:

In order to participate in this study, you must provide a signed copy of this Adult Participant Consent Form. If you do not bring a signed copy with you, you may sing a copy when you arrive for your interview.

If you agree to be in this project, you will be asked to answer some questions about four general topics: your experiences and decisions regarding sexual activity, your experiences regarding your pregnancy, your experiences regarding impending motherhood, and your ideas about community support for adolescents with regard to healthy sexual lifestyles. Over a period of 4 weeks, you will be asked to meet with the researcher 2 times. The first meeting will last for about 1 hour. Your answers will be digitally recorded. To provide you privacy and comfort, the meetings will take place in the health clinic in a private interview room with closed doors. The second meeting will last for about 30 minutes and will take place in the same location as the first. During the second meeting, I will ask you to listen to my interpretations of the information I collected from you and the other participants and tell me if you think my understanding of the general perceptions of the experiences of pregnant adolescents in Orlu are correct. If you do not think my interpretations are correct, I will ask you to provide feedback so that I may make changes to my work.

Here are Some Sample Questions:

- How old were you the first time you had sexual intercourse?
- How did you feel when you first learned that you were pregnant?
- What concerns if any do you have about becoming an unwed mother?
- What types of support related to reproductive health did you receive from the community before getting pregnant?

Voluntary Nature of the Study:

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. Also, no one at the Orlu health centers will treat you differently if you decide not to be in the study. If you decide to join the study, you are free to change your mind during the study. You may stop at any time if you choose.

Risks and Benefits of Being in the Study:

Because the questions I ask you will be personal and about private experiences, there will be some risk of emotional discomfort during the interview process. However, you will be able to take breaks as needed. In addition, a trained counselor will be available for you to speak with if you need. Also, if you need additional counseling services, I will refer you to the department of social welfare services, who will identify a low-cost mental health provider from whom you may seek services. In any research, there is always a small risk of accidental or unintentional disclosure of sensitive information, and it is possible that

others may figure out that you are part of a study. One benefit of your participation in this study is that information you share about your experiences can be used to help other girls in the future.

Payment:

There is no monitory reward involved with the study. However, I will reimburse you for travel expenses. In addition, I will provide you with a snack and a thank-you gift of baby diapers each time you meet with me. If I exclude you from the study when we meet the first time, I will not ask you to meet with me a second time.

Privacy:

To ensure your privacy, I will not include your name or anything else that could identify you in the study reports. I will keep everything you say confidential. However, if you tell me something that indicates you are in physical danger, I will feel obligated to report the condition to social welfare authorities. Also, I will keep all hard-copy data and my recording equipment secure by locking them in a file cabinet in a secure office. I will keep digital data secure by storing it on a secure password-protected computer and flash drives. I will keep data for a period of at least 5 years as required by the university.

Contacts and Questions:

I will answer any questions you have about this project. I can answer them now, or you can call and ask later. I will be in Nigeria until 01/31/14. My number in Nigeria is XXX XXX XXXX. After 01/31/14, I will be in the United States. My number in the United States is XXX XXX XXXX You also can reach me by email at Priscilla.Asonye@waldenu.edu. You also can call my school if you have questions. You can call Dr. Leilani Endicott. Her phone number in the United States is 001-612-312-1210. You also may email her at irb@waldenu.edu.

The researcher will give you a copy of this form to keep.

If you wish to receive a copy of the research results, you may request one by contacting me at the above phone numbers or email address.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I am indicating my consent to participate in this study and understand that I am agreeing to the terms described above.

Printed name of participant _____

Participant's signature _____

Date _____

Researcher signature _____

Appendix G: Parent Consent Form

Parent Consent Form

This form is for parents of participants who are between 13 and 17 years old.

****

Teen participants must submit this signed Parent Consent Form along with a Teen Consent Form at the time of the interview in order to participate in this study.

****

My name is Priscilla Asonye. I am a doctoral student at Walden University in the United States. Some members of the community may recognize me because before leaving Orlu in 1984 to pursue an advanced education, I served as a volunteer with a local organization that promoted academic education for girls in the community.

I am inviting your child to take part in a research study of the experiences and perceptions of pregnant unmarried adolescent girls between the ages of 13 and 19 who live in Orlu, Imo State. To participate in this study, your child must be between the ages of 13 and 19, live in Orlu, be unmarried and pregnant a boyfriend/sexual partner, of and be able to read and speak English. If you or any of your child's family members are acquainted with me from my years in Orlu, your child will not be allowed to participate in this study.

This form is part of a process called *informed consent* to allow you to understand this study before deciding whether you want to allow your child to take part.

Background Information:

The purpose of this study is to understand how girls in Orlu make decisions about having sex, what it means to them to be a pregnant unmarried teenager in Orlu, what they anticipate it will be like to be a mother, and what community support they think would be useful to help girls make decisions about sexual activity. Based on the information from this research study, local support could be developed to promote and improve healthy adolescent sexual lifestyles.

Procedures:

In order for your child to participate in this study, she must provide a signed copy of this Parent Consent Form as well as sign a copy of the Teen Assent Form. Your child may bring a signed copy of the Teen Assent Form with her to the interview or sign one when she arrives.

If you agree to allow your child to participate in this project, I will ask your child to answer some questions about four general topics: her experiences and decisions regarding sexual activity, her experiences regarding her pregnancy, her experiences regarding impending motherhood, and her ideas about community support for adolescents with regard to healthy sexual lifestyles. Over a period of 4 weeks, I will ask your child to meet with me 2 times. The first meeting will last for about 1 hour. I will digitally record your child's answers. To provide your child privacy and comfort, the meetings will take place in the health clinic in a private interview room with closed doors. The second meeting will last for about 30 minutes and will take place in the same location as the first. During the second meeting, I will ask your child to listen to my interpretations of the information I collected from her and the other participants and tell me if she thinks my understanding of the general perceptions of the experiences of pregnant adolescents in Orlu are correct. If she does not think my interpretations are correct, I will ask her to provide feedback so that I may make changes to my work.

Here are Some Sample Questions:

- How old were you the first time you had sexual intercourse?
- How did you feel when you first learned that you were pregnant?
- What concerns if any do you have about becoming an unwed mother?
- What types of support related to reproductive health did you receive from the community before getting pregnant?

Voluntary Nature of the Study:

This study is voluntary. Everyone will respect your decision about whether or not you choose to allow your child to be in the study. Also, no one at the Orlu health centers will treat you differently if you decide not to be in the study. If you decide to allow your child to join the study, you will be free to change your mind during the study. You may stop allowing your child permission to participate in the study at any time if you choose.

Risks and Benefits of Being in the Study:

Because the questions I ask your child will be personal and about private experiences, there will be some risk of emotional discomfort during the interview process. However, your child will be able to take breaks as needed. In addition, a trained counselor will be

available to speak with your child if she needs. Also, if your child needs additional counseling services, I will refer her to the department of social welfare services, who will identify a low-cost mental health provider from whom she may seek services. In any research, there is always a small risk of accidental or unintentional disclosure of sensitive information, and it is possible that others may figure out that your child is part of a study. One benefit of your child's participation in this study is that information she shares about her experiences can be used to help other girls in the future.

Payment:

There is no monitory reward involved with the study. However, I will reimburse your child for travel expenses. In addition, I will provide your child with a snack each time she meets with me and a thank-you gift of baby diapers for her participation. If I exclude your child from the study when we meet the first time, I will not ask her to meet with me a second time.

Privacy:

To ensure your child's privacy, I will not include her name or anything else that could identify her in the study reports. I will keep everything your child says confidential. However, if your child tells me something that indicates she is in physical danger, I will feel obligated to report the condition to social welfare authorities. Also, I will keep all hard-copy data and my recording equipment secure by locking them in a file cabinet in a secure office. I will keep digital data secure by storing it on a secure password-protected computer and flash drives. I will keep data for a period of at least 5 years as required by the university.

Contacts and Questions:

I answered all questions about this project. I was in Nigeria from12/26/13 until 01/31/14. My number in Nigeria is XXX XXX XXXX. After 01/31/14, I will be in the United States. My number in the United States is XXX XXX XXXX. You also can reach me by email at Priscilla.Asonye@waldenu.edu. You also can call my school if you have questions. You can call Dr. Leilani Endicott. Her phone number in the United States is 001-612-312-1210. You also may email her at irb@waldenu.edu. Walden University's approval number for this study is 12-20-13-0055372 and it expires on 12/19/2014
The researcher will give your child a copy of this form for you to keep if you agree to allow her to participate in this study.

If you wish to receive a copy of the research results, you may request one by contacting me at the above phone numbers or email address.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my child's involvement. By signing below, I am indicating my consent to allow my child to participate in this study and understand that I am agreeing to the terms described above.

Name of child _____

Parent's name _____

Parent's signature _____

Date _____

Researcher signature _____

Appendix H: Child Assent Form

Child Assent Form

This form is for teens who are between 13 and 17 years old.

****

Teen participants must submit this signed Teen Consent Form along with a signed Parent Consent Form at the time of the interview in order to participate in this study.

****

My name is Priscilla Asonye and I am doing a research project to learn about pregnant teenagers in Orlu. I am going to read this letter with you. I want you to learn about the project before you decide if you want to be in it.

Who I am:
I am a student at Walden University in the United States. I am working on my doctoral degree. I used to live here in Orlu. I also used to volunteer in Orlu for a group that helped girls go to school, but right now, I am just here as a student.

About the project:
I want to know four things:

1. The reasons teenagers have sex
2. How being pregnant changes teenagers' lives.
3. What the teenagers think it will be like to be a mother.
4. What might help teenagers improve their sexual life style before they are married?

Why you are being asked to join the project:
I am asking you to join my project because you

1. are you between the ages of 13 and 19?
2. are not married,
3. are pregnant by a boyfriend or sexual partner?,
4. live in Orlu, and
5. understand and speak English.

What you will have to do if you decide to join the project:
When you come to your interview, you must bring with you the Parent Consent Form. It must be signed by at least one parent or your legal guardian. You will need to sign a Teen Assent Form. If you do not bring the signed form with you to the interview, I will provide you with one to sign.

If you agree to be in this project, I will ask you to meet with me 2 times in a private interview room at one of the local health clinics. The first meeting will take about 1 hour. The second meeting will take about 30 minutes. During the second meeting,), I will ask you to listen to what I found out from talking to you and other pregnant teenagers. Then I will ask you to tell me if you think my ideas are correct. If you do not think my ideas are correct, I will ask you to help me fix them so that they are correct. Both meetings will be digitally recorded. A parent or your legal guardian can come with you to the interview, but he/she will not be included in the actual interview.

Here are some sample questions:

- How old were you the first time you had sexual intercourse?
- How did you feel when you first learned that you were pregnant?
- What concerns if any do you have about becoming an unwed mother?
- What types of support related to reproductive health did you receive from the community before getting pregnant?

It's your choice:
You don't have to be in this project if you don't want to. You will not get in any trouble for not being in this project. You can stop being in this project whenever you want to.

You will not be paid any money for joining the project, but I will reimburse you for the cost of getting back and forth to the interviews. I also will provide you with a snack to eat during the interviews. Finally, to thank you for your time, I will give you a package of diapers after each meeting. If when we meet the first time, I decide that you don't meet the requirements to be in this study, you will not have to meet me a second time. Also, if any of your family members are acquainted with me from my years in Orlu, you will not be allowed to participate in this study.

Because the questions I ask you will be personal and about private experiences, being in this project may be upsetting to you. However, you can take as many breaks as you need during the interview, and you can stop at any time. A trained counselor will be available to speak with you if you get upset. Also, if you need additional counseling services, I will refer you to the department of social welfare services, who will identify a low-cost mental health provider from whom you may seek services. There is a small risk that others may figure out you are participating in this study.

Benefits of being in this project:
One benefit of your participation in this study is that information you share about your experiences can be used to help other girls in the future.

Privacy
Everything you tell me during this project will be kept private. That means that no one else will know your name or what answers you gave. The only time I have to tell someone is if I learn about something that could hurt you or someone else.

Asking questions
I answered all questions about this project. I was in Nigeria from 12/26/13 until 1/28/14. My number in Nigeria was XXX XXX XXXX. , I was back in the United States by 1/31/14. My number in the United States is XXX XXX XXX..I also can reach me by email at Priscilla.Asonye@waldenu.edu. You also can call my school if you have questions. You can call Dr. Leilani Endicott. Her phone number in the United States is 001-612-312-1210. You also may email her at irb@waldenu.edu. Walden University's approval number for this study is 12-20-12-0055372 and it expires on12/19/2014
All received a copy of this form to keep.

All participants are eligible to receive a copy of the research results. You may request one by contacting me at the above phone numbers or email address.

Write and then sign your name below if you want to join this project.

Name of child _____

Child's signature _____

Date _____

Researcher signature _____

Appendix I: Interview Protocol

Time of Interview: _____

Date: _____

Place: Local health clinic in Orlu

Interviewer: Priscilla Asonye

Interviewee (pseudonym): _____

Introduction: Thank you for agreeing to participate in my study. I appreciate your time. Let me briefly remind you about the purpose of the study. The purpose of this study is to explore and develop an in-depth understanding of the experiences and perceptions of pregnant adolescents in Orlu, Imo State about their decision to engage in sexual activity, their pregnancies, the risks of sexually transmitted diseases (STDs), and impending motherhood.

Ice-breaker questions: Do you know any adolescents in your community or family who have had sex before they were married? (Please do not tell me their names.) Have any of those girls become pregnant? What have their experiences been like?

RQ1: What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regard to their decision-making about past sexual activity?

1. How old were you the first time you had sexual intercourse?
2. Please explain what circumstance that made you decide to start having sex.
3. What was the relationship between you and the person you were having sex before you became pregnant?
4. Did you and your sex partner have any concern about pregnancy or STDs while having sex?

5. What type of protection if any did you use before sex?

RQ2: ***What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regard to their pregnancies and pregnancy related needs?***

6. How did you feel when you first learned that you were pregnant?

7 Describe the challenges related to pregnancy you have had since you become pregnant

8. Do you get healthcare for you and your unborn baby? If so tell me about it.

9. Describe for me how your parents, family members and the Orlu community feel about you being pregnant.

10. What type of support have you received from friends, family, the community or the state since you become pregnant?

RQ3: What are the experiences and perceptions of unmarried pregnant adolescents in Orlu with regard to their impending motherhood?

11. What concerns if any do you have about becoming an unwed mother?

12. Do you think being an unwed mother will affect you and your child's future? If so, how?

13. What challenges do you expect as an unwed mother raising a child?

14. Do you have help to raise your child after birth? Please explain.

RQ4: What types of community support might be most helpful to teaching adolescents safe and healthy reproductive life style?

15. What types of support related to reproductive health did you receive from the community before getting pregnant?

16. Do you know of any programs to educate adolescent girls about sex and sex related issues before getting pregnant?

17. Did you receive any reproductive education before getting pregnant? If yes, from who? Family members, peers or any community program?

18. Do you think there should be programs to help adolescent girls from getting pregnant or getting a disease? If so, what kind of program?

Curriculum Vitae

Priscilla N. Asonye MSN, CRRN, CRNP, NP-C

Education

Walden University Minneapolis, MN.
PhD Candidate in Public Health — August 2013

Temple University Philadelphia, PA.
MSN-Adult Nurse Practitioner — May 2000

Temple University Philadelphia, PA.
Bachelor of Science in Nursing — May 1991

Queen Elizabeth Specialist Hospital Nigeria
Registered midwife — 1987

Licenses and Certifications

Registered nurse (Pennsylvania)
Certified registered nurse practitioner (Pennsylvania)
Certified registered rehabilitation nurse (Pennsylvania)
Nurse practitioner prescription privileges (Drug Enforcement Agency certification)
Certified wound care nurse (Pennsylvania)
Basic cardiac life support certification (Pennsylvania)

Research Experience

Identification of the effect of age and significant other in the development of postpartum depression among teenage mothers ages 13–18.

Presentation

Care management needs of adults with physical disabilities in the community and their caregivers. University of Pennsylvania, Department of Nursing. 5/25/2005

Employment

Nurse Practitioner — January 2012–present
Genesis Healthcare Organization

Nurse Practitioner — April 2011–January 2012
Carriage House Medical Group: Philadelphia, PA

Nurse Practitioner — 2003–March 2011
Inglis House: Philadelphia, PA

Registered Nurse — 1991–2008
Temple University Hospital: Philadelphia, PA

Advance Practice Nurse — 2002–2003

Inglis Foundation: Philadelphia, PA

Nurse Practitioner 2001–2002
Crozer Medical Center: Chester, PA

Registered Nurse 1998–2000
PRN Consultants Inc.: Langhorne, PA

Registered Midwife 1987–1988
Queen Elizabeth Specialist Hospital: Nigeria

Honors and Awards
Sigma Theta Tau Sor, Kappa Chi chapter

Membership

Pennsylvania Coalition of Nurse Practitioners	2011–present
National Association of Nigerian Nurses in North America	2011–present
American Academy of Nurse Practitioners	2004–present
Association of Rehabilitation Nurses	2006–present
Pennsylvania Association for Long-Term Care Medicine	2006–present