SCHOOL-BASED SEXUALITY EDUCATION IN UGANDA: A GROUNDED THEORY APPROACH

by

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DECLARATION

I declare that the study on **SCHOOL-BASED SEXUALITY EDUCATION IN UGANDA: A GROUNDED THEORY APPROACH** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.

January 2015

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(Susan Achora)

SCHOOL-BASED SEXUALITY EDUCATION IN UGANDA:
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ABSTRACT

Today, 1.2 billion adolescents stand at the challenging crossroads between childhood and the adulthood. Driven by a combination of biological, psychological and social forces, adolescence is a period of "stress and storm" for many adolescents predisposing them to risky behaviours with long term consequences. Adolescence is not only a time of vulnerability; it is also an age of opportunity for investment in sustained health and wellbeing through education and preventive efforts to help them navigate risks and vulnerabilities.

Evidence-based sexuality education programmes are a cornerstone in reducing adolescent sexual risk behaviours and promoting sexual health. A qualitative, grounded theory study was undertaken to explore and describe experiences of adolescents, teachers and perceptions of parents of school-based sexuality education (SBSE). An in-depth literature review through concept analysis on the phenomenon was conducted to assist the researcher with theoretical sensitivity and theoretical saturation. In-depth Individual interviews and focus group interviews were conducted to generate data. Interviews were audio-taped and transcribed by the researcher verbatim. The direct quotes of participants were coded and arranged into meaning units for analysis. A constant comparison method of data analysis was applied by following a Strauss and Corbin (1998) analysis process of open, axial and selective coding to analyse textual qualitative data until themes, categories and sub-categories were identified and developed.

Data analysis revealed that adolescents benefitted from SBSE but the implementation of programme was undermined by challenges at national, institutional, community,

family and individual levels enshrined in the physical. There were also challenging contextual factors at various levels that influenced the benefits of the SBSE. It is recommended that there is need to review the teaching and learning resources and to fully integrate sexuality education into the formal curriculum. The ministry of education in Uganda should take a leadership role in fostering engagement and participation of major stakeholders, particularly teachers, parents and other community groups in delivering school-based sexuality education that addresses the needs of the school-going children.

Key terms

Adolescents; experiences; families; grounded theory; teachers; reproductive health; sex, sexuality education; sexual risk behaviours; school; Uganda.

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Dedication

I dedicate this dissertation to:

My Parents: Micheal Peters Oneka (1948-2011) and Doreen Oneka for your love, support and great investment in my education.

My love, best friend and husband: Jimmy Oruut.

My Children: Timothy, Racheal and Mathew, you are my best.

My siblings: Denis, Paul, Pamela, Julian, Martin and Mark.

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AIDS	Acquired Immunodeficiency Syndrome
CDC	Centre for Disease Control
FGI	Focus Group Interview
HIV	Human Immunodeficiency Virus
MOH	Ministry of Health
PMTCT	Prevention of Mother-to-Child Transmission
SBSE	School Based Sexuality Education
STI	Sexually Transmitted Infections
UAC	Uganda AIDS Commission
UBOS	Uganda Bureau of Statistics
UDHS	Uganda Demographic Health Survey
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

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CHAPTER 1

RESEARCH PROBLEM AND OVERVIEW

1.1   INTRODUCTION

Nearly two thirds of premature deaths and one third of the total disease burden in adults are associated with conditions or behaviours that began in adolescence (WHO 2014a: [online]). Adolescence is a time in life that is associated with many risks for poor sexual and reproductive health outcomes. Negative outcomes of early pregnancy and sexually transmitted infections (STIs), including HIV/AIDS, threaten the health of the people in the second decade of life more than any other age group (Abdulraheem & Fawole 2009:506; WHO 2009:410).

On the other hand, adolescence presents great opportunities for sustained health and wellbeing through education and preventive efforts. Evidence-based sexuality education programmes are a cornerstone in reducing adolescent sexual risk behaviours and promoting sexual health (UNESCO 2009:3). However, implementation of school-based sexuality education programmes in most countries is often weak or restricted to only one aspect of reproductive health like HIV information but not prevention of STIs or pregnancy.

1.2   BACKGROUND TO THE RESEARCH PROBLEM

The background discussions on the implementation of school-based sexuality education begins with a review of the vulnerabilities of adolescent period and the consequences on the individual, families and society. In addition, the importance of SBSE in promoting adolescent sexual health and the barriers to its implementation are presented.

The transition from childhood to adulthood is challenging to the adolescents as most of them will become sexually active and get exposed to early unprotected sexual encounters (Dixon-Mueller 2008:249). These behaviours may lead to devastating physical, social and emotional consequences which may include among others: early

unintended pregnancies and childbirth, STI/HIV, unsafe abortion, sexual abuse and exploitation.

1.2.1 Unintended pregnancies

Unintended pregnancies among adolescents are a major public health challenge in both developed and developing countries (Oringanje, Meremikwu, Eko, Esu, Meremikwu & Ehiri 2009:1). An estimated 11% of all births worldwide annually occur among adolescent girls between 15 and 19 years old. Majority of these births occur in developing countries (WHO 2012 [online]). Uganda has one of the highest adolescent pregnancy rates in Africa at 24 percent. Young people (10-24 years) constitute more than half of Uganda's population hence more are productive (Population Reference Bureau 2009:6). Therefore, the high fertility rate among the adolescents is a contributing factor to the country's rapid population growth rate of 3.3%, one of the highest in the world (Uganda Bureau of Statistics (UBOS) 2007:82).

Adolescents experience numerous health and psychosocial problems during pregnancy, childbirth and the period after which contribute to high mortality and morbidity among adolescent mothers and their children. Due to the under physical development, adolescents are at greater risk of dying from pregnancy and childbirth compared to older women (WHO 2012a:[online]). In developing countries, complications of pregnancy and childbirth are the leading cause of death in young women aged 15–19 years accounting for 15% of deaths (Patton, Coffey & Sawyer 2009:890). Stillbirths and new born deaths are 50% higher among infants of adolescent mothers than among infants of women aged 20-29 years (WHO 2012:[online]).

1.2.2 Unsafe abortion

In Sub-Saharan Africa, up to 50% of adolescent pregnancies are unwanted and may end in abortions. However, because in most countries abortion is illegal adolescents resort to unsafe abortions. Globally an estimated 3 million unsafe abortions occur every year among adolescent girls aged 15–19 years (WHO 2014b:[online]; Shah & Ahman 2012:169). Additionally, unmarried pregnant adolescents are often stigmatised and rejected by their families, their men/boyfriends, left without support and face domestic

violence. These factors contribute to unsafe abortion (Agunbiade,Titilayo & Opatola 2009:23).

Adolescent pregnancy is the primary reason for the 50% rate of school dropout among primary school girls mainly in the rural schools in Uganda (UBOS 2007:28; Tamusano 2011:123, 135; Kagolo 2012:[online]) a situation which thus undermines the goals of Universal Primary Education and Millennium Development Goals 2 and 3. The high school-dropout rate among female primary school children threatens Uganda's economic prospects, employment opportunities and overall well-being of the people of Uganda. Uneducated adolescent mothers may pass on to their children a legacy of poor health, substandard education and subsistence living, creating a cycle of poverty that is hard to break (WHO 2014b: [online]).

1.2.3 HIV/AIDS

Young people aged 15-24 accounted for an estimated 45% of new HIV infections worldwide in 2009, 70% of whom live in sub-Saharan Africa (UNICEF 2010:17). Despite its success story in curbing the HIV pandemic, in Uganda, HIV/AIDS is still recognised as a grave public health and social development concern. The Uganda Aids Indicator Survey of 2011 shows an overall 3.7% HIV prevalence among young women and men aged 15-24 years (UBOS 2011:2).Poverty, gender inequality and lack of information and prevention services, increase adolescents' risks of HIV infection and eventually AIDS (Wight, Plummer & Ross 2012:3-6).

Adolescent vulnerability to all the above sexual and reproductive health problems is attributable to: lack of awareness and lack of correct information about the risks of unwanted pregnancies and STIs, peer and other social pressures, lack of life skills to practice safe sexual behaviour, lack of youth friendly sexual health and counselling services, poverty, traditional cultural norms (Wight et al 2012:4-5; UNESCO 2009:2). In 2008, UNAIDS highlighted that sexuality education has a critical role in the context of HIV and AIDS and that 60% of young people between 15 and 24 years of age are unable to correctly identify ways of preventing HIV transmission. In many communities, young people are exposed to several sources of information and values (e.g. from parents, teachers, media and peers).This often creates confusion or even conflicting values about gender, gender equality and sexuality (UNESCO 2009:2-3).

1.2.4 Role of parents in Adolescent sexual health

Parents have a critical role in promoting adolescent sexual health as identified by adolescents as the preferred source of sexuality education by adolescents (Carolina, Mary, Schmitzerle, Cogelow & Brenda 2010:e93; Sekiwunga & Whyte 2009:119). However, overall sex communication between adolescents and parents is limited because of cultural norms, parents' ignorance or discomfort (Sekiwunga & Whyte 2009:119-120). The culture of silence among parents generally forces young people to turn to their friends and the media as their primary sources of sexuality education (Beckett, Elliott, Martino et al 2010:39). However, parents can influence the sexual and reproductive health of their adolescent children indirectly by creating a supportive environment for young people (Biddlecom, Awusabo-Asare & Bankole 2009:72). School-based sexuality education programmes have been challenged to make parents aware of their services and seek their support for program success (Biddlecom et al 2009:81).

1.3 SCHOOL-BASED SEXUALITY EDUCATION

School-based sexuality education (SBSE) has been described as an effective intervention to reduce risky sexual behaviours and vulnerabilities since most adolescents spend greater part of their lives in schools (Kirby & Laris 2009:23; UNESCO 2009:11). Equipping adolescents with knowledge and skills to make responsible choices on their sexual lives is critical to achieving national adolescent health and educational goals (UNESCO 2009:2). Schools provide an important opportunity to reach large numbers of young people about sexuality education before they become sexually active through a formal curriculum (Gordon 2007:16; UNESCO 2009:5). School-based sexuality education should be age appropriate, involve the adolescents by addressing the identified needs and building on the adolescents' knowledge, positive attitudes and skills (UNESCO 2009:18).

Furthermore, Kirby and Laris (2009:23) argued that sexuality education programmes can be more attractive to young people and more effective if young people are actively involved. Assessing adolescents' needs and assets and addressing the deficits is important for the programme success.

1.3.1 Barriers to implementation of school-based sexuality education

Despite the urgent need for effective school-based sexuality education, in most countries this is still not yet available. In 2002, Uganda's Ministry of Education introduced School-based Sexuality Education Policy in all primary schools. The coverage of sexuality education curriculum in Ugandan schools is at the moment unknown. However, Kibombo, Neema, Moore and Ahmed (2008:158) noted that the Uganda education system is inadequate in the provision of sexuality education curriculum in schools and that there are no programmes to train teachers on the same.

The delay and resistance to implement sexuality education stems primarily from a range of mistaken concerns and beliefs that either sexuality education leads to early sexual debut, deprives children of their innocence (Boonstra 2011:20), is against the culture or religion, or simply fear on the part of lawmakers and education professionals that parents will object to it being taught in schools (UNESCO 2009:8).

School teachers by reason of their early and constant presence in children's lives are the professionals best placed to deliver sexuality education. However, due to a number of reasons including teachers' personal or professional values could be in conflict with the issues they are being asked to address (Padmini & Aggleton 2014:126), lack of knowledge and skills on what to teach and how to teach which hinder effective implementation of the school-based sexuality education (Mukoma, Flisher, Ahmed, Jansen, Mathews, Klepp & Schaalma 2009:41; UNESCO 2009:8) such education is generally scarce, sporadic, reluctant and/or deficient (Goldman 2011:171). On the other hand, provision of teacher training; teacher manuals with detailed information and instructions about the lessons and activities; continued monitoring and support for teachers facilitated the implementation of the school-based sexuality programme (Helleve, Flisher, Onya, Mukoma & Klepp 2009:57; Byers, Sears & Foster 2013:214).

In Uganda, rural primary schools are faced with a unique challenge in its education system. Since the introduction of the Universal Primary Education in 1997 there has been a significant increase in enrolment and attendance in primary education (Tamusuza 2011:123). There has also been an increase in the enrolment of the older children who are above the traditionally recommended primary school age (6-12 years

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old). This means that late entrants may not have adequate access to age appropriate sex education because they fall out of the 'age-appropriate' bracket set by the Ministry of Education and Sports national guidelines on HIV/AIDS for primary schools. Currently primary school sexuality education teaches content regarded suitable for children aged between 6 and 12 years.

Not much is known about the implementation of sexuality education curriculum in a rural primary school in Uganda. The main aim of this study was to explore the experiences of adolescents, teachers and parents on the school-based sexuality education.

1.4   STATEMENT OF THE RESEARCH PROBLEM

A research problem is an "intellectual puzzle" intended to be investigated by a researcher (Blaike 2010:16). Adolescents face numerous challenges to their health and wellbeing, yet for long this age group has been assumed to be healthy and therefore their sexual and reproductive health (SRH) needs might have been largely ignored. Adolescent pregnancy remains a global public health concern with a negative impact on the health of adolescents and their infants; individual social and economic effects; and societal level impacts (WHO 2012:[online]).

Adolescents in Uganda continue to suffer poor sexual and reproductive health outcomes, placing substantial burdens on families and communities and on the scarce government resources, a burden which is preventable (UNESCO 2009:5). The poor reproductive health indicators among adolescents are attributed to inadequate preparation of adolescents for their sexual lives (UNESCO 2009:3). Interactions of the researcher with about twenty adolescents during a school-based community education programme in Gulu public primary school, ignorance was identified as a major contributing factor to early pregnancy.

Although school-based sexuality education is a key strategy in promoting adolescents' sexual and reproductive health (UNESCO 2009:3), many primary school teachers avoid teaching sexuality education (Goldman 2011:155). Various reasons have been suggested such as school principals and teachers, may not be convinced of the need to provide sexuality education, or because they lack the confidence and skills to do so (UNESCO 2009:18) or parents will object to it being taught.

The few studies available on adolescent reproductive health and sexuality education in Uganda have focused on secondary schools. The problem being investigated in the in the present study is the inadequacy of evidence-based information about the experiences of adolescents and teachers and the perceptions of parents about school-based sexuality education and poor adolescent reproductive health trends in Uganda.

The aim of the study therefore, is to explore the experiences of teachers and adolescents and the perceptions of parents about school-based sexuality education in rural primary schools in Uganda. Understanding the experiences and perceptions that teachers, adolescents and parents have on sexuality education will improve on the existing gaps on adolescent reproductive health in the country.

1.5   SIGNIFICANCE OF THE STUDY

This study is significant because it will explore and develop a substantive grounded theory that will describe an under-researched area of school-based sexuality education in rural primary schools in Uganda. The categories from the model will inform policy makers and increase public health attention on the gaps and opportunities for prevention of the poor adolescent reproductive health outcome.

Recommendations from this study will provide direction for further research in adolescent sexuality education.

The findings of the study will guide the development or revision of educational materials for sexuality education.

1.6   DEFINITION OF KEY CONCEPTS

Adolescents - is defined as a person between 10-19 years of age. In this study adolescents are children between 12 to 16 years of age attending rural primary schools in Gulu District (WHO/UNFPA/UNICEF 1999 as cited in UNESCO 2009:3).

Experience - is an actual observation of or a practical acquaintance with facts or events which could be regarded as eroding or gaining knowledge and skills resulting from this

(*Cambridge Advanced Learners Dictionary* 2008:491). In this study experience is knowledge or meanings that the adolescents and teachers have derived from the sexuality education classes.

Parents - mothers and fathers/guardians or caretakers (aunts, uncles, grandmothers) of the adolescents in selected

Perception - refers to how parents view and value school-based sexuality education.

Sexuality education - lessons provided to adolescents in primary schools during the adolescent period that are aimed at increasing knowledge and skills about sexuality in correlation with physical growth and development.

Teachers - teachers involved in teaching sex education classes in the primary school.

1.7 RESEARCH AIM

The aim of the study was to enhance and contribute towards understanding of implementation school-based sexuality education and its implications for practice, policy and research.

1.7.1 Research purpose

The purpose of this grounded theory study was to explore the experiences of adolescents and teachers and perceptions of parents regarding school-based sexuality education in rural primary schools and develop a substantive theory grounded in empirical data from interviews with adolescents, teachers and parents.

1.7.2 Research objectives

The main objective of the study is to systematically assess the experiences of adolescents and teachers' perceptions on sexuality education in rural primary school children in Uganda. The specific objectives of this study were to:

- Explore the experiences of adolescents and teachers regarding school-based sexuality education in rural primary schools.

- Investigate the perceptions of parents regarding school-based sexuality education in rural primary schools.

- Develop a substantive grounded theory on the processes school- based sexuality education in primary schools in Uganda grounded on the experiences of students and teachers and the perceptions of parents.

1.8   RESEARCH QUESTIONS

The key research question was "what are the living experiences of teachers and adolescents and the parent's perceptions regarding sexuality education in rural primary schools in Uganda?"

Specific research questions:

- What are the living experiences of rural primary schools adolescents and teachers regarding school-based sexuality education?

- What are the perceptions of parents regarding school-based sexuality education in rural primary schools?

- What theoretical framework or model can be developed to describe the experience teachers and Adolescents and the perceptions of parents regarding SBSE?

1.9   THEORETICAL FRAMEWORK

A theoretical framework is an organising structure or interpretive tool of the key concepts of the research traditions (Polit & Beck 2014:142). In the present section, focus is on brief description of Grounded theory with the constructivist interpretive framework and its main features.

This study, used grounded theory with constructivism as an interpretive framework. The essence of the constructivist paradigm, associated with qualitative approach is to gain understanding of the subjective nature of human experience as it is lived by those experiencing the phenomenon. The inductive nature of qualitative research allowed the

generation of description that helped to elucidate the phenomenon under study (Polit & Beck 2010:17-18). It assumes that reality is not fixed but a construction of the human mind. The experiences of adolescents and teachers and the perceptions of the parents regarding sexuality education is subjective and can best be understood by their multiple in-depth descriptions of interpretations of the phenomenon.

The constructivist framework posits that: individuals seek understanding and develop multiple, subjective meanings of their experiences through social interactions. The findings of this study are co-constructions of participants' experiences and perceptions of SBSE (Creswell 2013:24).

Grounded theory (GT) is defined as the discovery of theory from data that offers general explanation of a process, action or interactions (Oktay 2012:15; Urquhart 2013:16). GT originated with Glaser and Strauss in 1967 and has its roots in symbolic interactions that are aimed at understanding how people make sense of social interactions (Polit & Beck 2010:269). GT provided the interpretive framework used to address the specific objectives of the study. GT is the best suited approach when no theory exists or existing theories are inadequate to provide insights into the areas relatively unknown to the researcher (Jones & Alony 2011:95; Urquhart 2013:17).This allows the researcher or professional to intervene with confidence to help resolve the participant's main concerns' (Oktay 2012:17).

The features of grounded theory analysis are; simultaneous collection and data analysis, constant comparison, creation of analytic codes and categories developed from data, theoretical sensitivity, discovery of basic social processes in the data, inductive construction of abstract core categories, theoretical sampling to refine categories that develop into a substantive theory that provides explanations for the experiences of school-based sexuality education (Birks & Mills 2011:16). Details of grounded theory analysis are offered in Chapter 4.

1.10   ASSUMPTION

Assumptions are statements that are considered to be true without test or verification (Polit & Beck 2014:7). Assumptions are embedded into the interpretive framework to provide the groundwork that guides decision making during the research process.

Researchers make assumptions about knowledge along the following dimensions; Ontology, Epistemology and methodology (Creswell 2013:20). These dimensions as applied in this study are discussed below.

1.10.1   Ontology

This is a branch of philosophy concerned with articulating the nature and structure of the world (Wand & Weber 1993:220). It describes the nature of reality of knowledge that has been experienced in life. In this study it is assumed that:

(i)   The experiences of participants of sexuality education is socially constructed based on interactions their interactions.

(ii)   The nature of reality (experience) is rather local, thus, the knower is subjectively linked and part of what can be known (Kanyangale & Pearse 2012:193).

(iii)   Multiple and varied realities exist regarding school-based sexuality education leading the researcher to look for the complexity of views rather than narrowing meanings into a few categories or ideas.

In this study, ontological questions the reality of the assumptions that exist about the experiences those adolescents, teachers and parents have regarding school-based sexuality education in rural primary schools in Uganda.

1.10.2   Epistemology

This describes the nature of human knowledge and understanding that can be acquired through different types of inquiry and methods of investigations (Hirschheim, Klein & Lyytinen 1995:20). Similarly, epistemology in the naturalistic paradigm refers to how the social world can investigate natural science (Creswell 2009:6; Guba & Lincoln 1994:108). It is assumed here that:

(i)   Experience of sexuality education is subjective.

(ii)   The participants developed subjective meanings of their experiences-meanings directed toward school - based sexuality education.

(iii)   Experiences of school-based sexuality education is understood in discussions or interactions with participants in their natural settings. Thus the process of qualitative research is largely inductive (Crotty 1998 as cited in Creswell 2013:9).

In this study, epistemology was used to understand what experiences adolescents and teachers in rural primary schools have on the school-based sexuality education in Uganda.

1.10.3   Methodology

Methodology refers to the principles and ideas which guide researcher's choice of procedures and strategies to produce and assess knowledge. They are inductive, emerging and shaped by the researcher experience in collecting and analysing data (Creswell 2009:22). Methodological assumptions included:

(i)   Qualitative exploratory design is most suitable to study this topic that has never been addressed with this group of participants.

(ii)   Experiences and perceptions of adolescents, teachers and parents regarding school-based sexuality education can be studied by collecting information from them and interpreting or making meaning of that information.

(iii)   Use of broad questions ensures in-depth examination of the school-based sexuality education

(iv)   More personal and interactive methods of data collections such as interviews or participant observation are used for understanding the meaning of realities.

(v)   A systematic analysis of data regarding school-based sexuality education would generate a theory that is "grounded" in the data. Which makes this is an inductive − deductive approach, meaning that it moves from the specific to the more general (McGhee, Marland & Atkinson 2007:335).

The researcher engages in the activities and discerns meanings of actions as they are expressed within the specific social contexts. Thus the process of qualitative research is largely inductive (Crotty 1998 as cited in Creswell 2007:9).

In this study, qualitative data collection techniques involved use of in-depth interview and focused group discussions. To explore the experiences and perceptions of the

participants about school-based sexuality education, data was collected from the natural settings (rural primary schools and homes) of the participants. Data collection and analysis was simultaneous to enable refocusing of the emerging theory. The researcher moved back and forth between the data and the categories developed in order to inductively shape the abstraction of the categories. The theory that was developed did not pre-exist but rather was developed from the data.

1.11   RESEARCH DESIGN AND METHOD

The purpose of this section is to give brief account of the research design and methods used for this study and how they have guided data collection, analysis and development of theory.

Balaike (2008:15) describes a research design as the process of making all decisions related to the research project before of a piece of research is carried out. In this study, qualitative approach with grounded theory was used and constructivism provided the interpretive framework foundation for the work. This approach was chosen because it suited the research aim. It also allowed the findings to be based on the participants' realities and viewpoints in order to close the knowledge gap on experiences of the participants on sexuality education. Constructivist perspective enabled the researcher to interpret or make sense of the participants' subjective meanings of their experiences with SBSE through social interactions (Polit & Beck 2014:266). Additionally, the researcher used reflexivity to become aware that her standpoints and start points on the interpretations of participants' experiences flow from her own personal, historical and cultural experiences (Wertz, Charmaz, McMullen, Josselson, Anderson & McSpadden 2011:170; Creswell 2013:216).

Reflexivity, as used in the present study means the researcher's self-awareness of biases, values, past experiences that may influence the interpretation of the study findings and conclusions (Creswell 2013:216). In reflection the researcher acknowledged some of her underlying assumptions that was brought to the study. This study is informed by researcher's work with adolescents in a school health project for a couple of years. The researcher's experience in working with adolescents means she is familiar with the characteristics of adolescents and associated health risks, especially sexual risks and the role of schools in prevent such risks. The researcher also

understands the administrative set up and functioning of a primary school. This common experience with adolescents in schools, albeit in different aspects, assisted in the analytical process through an increased sensitivity to the data.

However, even with these knowledge, the researcher noted a high rate of pregnancy related school drop-out among the adolescents. In addition, discussions with the adolescents identified lack of information and as a contributing factor to the reproductive health challenges faced. The need to explore the complexities involved in implementation of school-based sexuality education to meet the information needs of adolescents was identified.

The researcher acknowledged the need to remain transparent and conscious of the various perspectives of the participants not to assume all the participants in the study will share the same perspectives. This helped in understanding the experiences from the participants' perspectives. Additionally, the researcher reflected on the extent to which a participant's perspective may be included, omitted with intent or unwittingly. This was to avoid the temptation to present data in a way that suited my intent.

The study sample consisted of teachers and adolescents involved in sexuality education classes in four rural primary schools in Uganda, and the parents whose adolescents attended these classes in order to describe their perceptions. Purposive sampling technique was employed to select the participants. In addition, theoretical sampling was used select participants who can best contribute to the emerging conceptualisation in order to fill any gaps.

Theoretical sampling is the process of data collection for generating theory whereby the researcher jointly collects, codes and analyses data and decides what data to collect next and where to find them, in order to develop a saturated emerging theory (Polit & Beck 2014:286). Theoretical sampling is an important component in the development of grounded theories. In this study, theoretical sampling was tied to the purpose of generating and developing theoretical ideas, rather than aiming either at producing findings that are representative of the population.

In grounded theory, the main aim of a sample is to enable thorough exploration of the phenomenon under investigation, hence the sample is not predetermined before the

research begins but will evolve during the process as determined by the emerging theory (Oktay 2012:17). The golden rule in a qualitative study is that further sampling stops once saturation has been achieved, in other words when there is consistency in the characteristics of instances that reveal an underlying theme/ category (Morse 2007 in Bryant & Charmaz 2010:241).

In this study, the use of broad questions allowed in-depth and extensive collection of details on sexuality education from a few participants. Furthermore, following the principle of simultaneous data collection and analysis, the categories and themes were developed and refined through further data collection which ended when the collection of new data did not shed any further light on the experiences and perceptions of the participants about sexuality education.

Data collection occurred by means of personal and interactive methods: in-depth individual and semi-structured focus group interviews for understanding the meaning of realities. Interviews were audio recorded and transcribed by the researcher verbatim. The researcher used interviews with broad questions (see Section 1.3) followed by several sub questions. This was to allow participants construct the meaning of their experiences while in their natural settings (Creswell 2013:25).

Grounded theory procedures for analysis according to Strauss & Corbin (1998 in Creswell 2013:86) was used, this involved systematic, yet flexible guidelines for collecting and analysing qualitative data to construct theories "grounded" in the data themselves (Oktay 2012:15-18). The steps in analysis include: three types of coding (open, axial and selective), constant comparison for similarities and differences in the data. Constant comparison means comparing information from new data with that from the emerging categories (Creswell 2013:86-89). Constant comparison method together with theoretical sampling constitute the core of qualitative analysis in the grounded theory approach developed by Glaser and Strauss in1967 (Gerrish & Lacey 2013:157).

Tesch (2013:96) adopts this view when she calls comparison as the main intellectual activity that underlies all analysis in grounded theory. In this study, the researcher used constant comparison and contrasting as an intellectual activity during analysis. It was applied to the data following a process of coding. Coding shapes the analytic frame and provides the skeleton for the analysis (Charmaz 2006:138). Coding highlights problems,

issues, concerns and matters of importance to those being studied. Coding is an important link between collecting data and developing theory but also as a connection between empirical reality and the researcher's view of it.

The researcher, engaged in a systematic coding and comparison process until themes, categories and sub-categories were identified and developed. The direct quotes of participants were coded and arranged into text units for analysis. Using selective coding developed the central or core category which is a distinctive category that sits at the heart of the developed theory and summarises what is happening emerged. All other major categories were related to the core category, which was appearing frequently in the data (Strauss & Corbin 1998:123).

The analysis ended in the development of a substantive theory of the experience and perception of SBSE "grounded" in the data. This was an inductive-deductive approach, meaning that it moved from the specific to the more general (McGhee, Marland & Atkinson 2007:335) as presented in Chapter 6. Substantive theories is a theoretical interpretation or explanation for a particular area, in other words this type of theory is used to explain and manage problems in a specific setting (Polit & Beck 2014:139).

1.12   ORGANISATION OF THE THESIS

The remainder of this thesis is divided into six chapters which are organised as follows:

Chapter 2 describes the design and research strategy study, the interpretive paradigm that underpins the study, the version of grounded theory deemed appropriate and the design considerations.

Chapter 3 presents discussion of the concepts of adolescence, adolescents sexual risks and role of sexuality education against literature.

Chapter 4 provides details of the research methods, setting, sampling approaches used, participant recruitment process, data collection methods and the methods used for analysis of the data. Trustworthiness, ethical considerations are also provided in this chapter.

Chapters 5 provides the findings and discussion of the interrelationships between the literature and the findings and the link between these and the literature.

Chapter 6 presents the substantive theory that emerged from the data, the contextual conditions which influence the basic social process.

The thesis concludes with Chapter Seven which presents study limitations, conclusions implications and recommendations.

1.13   CONCLUSION

This chapter provided an overview of the background information to the study title. The information focused on Adolescence, adolescents related sexual and reproductive health challenges. Discussions on the importance of school-based sexuality education in promoting sexual and reproductive health for the adolescents were also provided. The problem statement, significance, purpose, research question/s and objectives of the study were indicated. Conceptual and operational definitions of concepts were presented. The theoretical framework of the study based on the grounded theory design was introduced. Furthermore, a summary of the qualitative, grounded theory research design and methodology with regard to sampling, data collection and analysis methods of the study were discussed.

CHAPTER 2

RESEARCH DESIGN AND STRATEGY

2.1 INTRODUCTION

The focus of this chapter is on detailed discussion on features qualitative research, the constructivist as the interpretive paradigm used in the conduct of this study. explication of grounded theory in terms of its historical background, motivation for choosing grounded theory approach, the different schools and major concepts is presented as well as its application to this study is presented. Discussions on the choice of constructivist grounded theory as the research strategy are made.

2.2 RESEARCH DESIGN

Research design is the researcher's overall plan for answering the research questions by providing valid and reliable evidence (Polit & Beck 2010:244, 254). The design selected should enable the research to achieve its aim. The selection of an appropriate design depend on the researcher's philosophy, world view and research question (Polit & Beck 2010:19, 249).

In this study, the research design is thoroughly grounded in qualitative approach.

Streubert and Carpenter (2011:20), highlight common features of qualitative designs which the researcher considered important in data collection and analysis including that:

(i)   The researcher commit to discovery through use of multiple ways of understanding by using various data collection strategies interviews, participants observations.

(ii)   The researcher is the instrument for data collection in qualitative study because real-world phenomenon cannot be measured by external instruments, but only can be revealed by making inferences about the observed behaviours and by talking to people. Therefore the researcher while presenting this real world event,

does so from an external perspective influenced by issues like their value systems, predispositions, etc (Yin 2011:8).

(iii) Qualitative researcher believes that there is always multiple interpretations of the same event because individuals actively participate in social actions and through these interactions that occur based on previous experiences, individuals come to know and interpret phenomenon in different ways (Yin 2011:9, 11).

(iv) Qualitative research emphasises the understanding of the meaning of phenomenon from those involved by understanding how they interpret their experiences, how they construct their world and what meaning they attribute to their experiences (Merriam 2009:5). The participants perspectives or voices ought to be prominent in any qualitative report (Lincoln & Guba 1985 as cited in Hatch 2011:7).

(v) Qualitative research involves studying peoples' lives under real - world conditions in which social interactions will occur with minimal interference by artificial research procedures and people was saying what they want to say and not limited to responding to a researchers pre-established questionnaire. Similarly, people are inhibited by the confines of a controlled setting like a laboratory (Yin 2011:8). For researchers to understand participants' perspectives in a natural context, there is need for prolonged engagement with the participants (Hatch 2011:8).

(vi) The qualitative researcher believes that there is always multiple interpretations of the same event because individuals actively participate in social actions and through these interactions that occur based on previous experiences, individuals come to know and interpret phenomenon in different ways (Yin 2011:9, 11).

The use of qualitative approach in this study, allowed the researcher to attempt to interpret and make sense of the meanings of their experiences of sexuality education within the settings of the participants. In addition the researcher was cognisant and open to the multiple experiences of participants of sexuality education.

There are several approaches to qualitative research, Creswell (2013:69) identifies five major approaches as: Phenomenology, narrative research, grounded theory, ethnography and case study. This study used grounded theory approach with a constructivist interpretive paradigm.

2.3   CONSTRUCTIVIST-INTERPRETIVE PARADIGM

A research paradigm is the world-views with underlying assumptions about reality (Polit & Beck 2014:18). Interpretive paradigm guide the conduct of qualitative research based on the ontological, epistemological and methodological assumptions. According to Creswell (2013:33-35) there are four main interpretive paradigm that structure qualitative research, these are: postpositivism, social constructivism, transformative & pragmatism. The present study used constructivism worldview. The essence of the constructivist paradigm, associated with qualitative research is to gain understanding of the subjective nature of human experience as it is lived by those experiencing the phenomenon. The main assumptions of constructivist paradigm included in this study are:

- Individuals seek understanding of their world and develop meanings of their experiences through interactions with others.

- Meanings are multiple and layered.

- That reality is not fixed but a construction of the human mind. Reality is co-created by the researcher and the participants and the researcher is part of the world they study and findings presented.

The experiences of adolescents and teachers and the perceptions of the parents regarding sexuality education is subjective and can best be understood by their multiple in-depth descriptions of interpretations of sexuality education. The constructivist view shaped choice of research methodology, data collection, analysis, the context and the ways the findings were presented.

2.4   GROUNDED THEORY-METHODOLOGY

Grounded theory was first developed by two sociologists, Barney Glaser and Anselm Strauss in their publication *The Discovery of Grounded Theory* in 1967.They argued that there was need for a method that would allow a researcher to move from data to theory, so that new theories could emerge. Such theories would be specific to the context in which they had been developed and thus 'grounded' in the data (Dunne 2011:111). They thus defined grounded theory as "the discovery of theory from data systematically obtained from social research" (Glaser & Strauss 1967:2).

According to Glaser, grounded theory is "a general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area" (Glaser 1992:16). This points to the connectedness of data analysis and data collection which occur concurrently and the analysis guiding further data collection therefore allowing the emerging theory to be 'grounded' in the data. Thus the there is no clear distinction between the data collection and analysis phase, a feature that differentiates grounded theory from other traditional research phases.

From the constructivist's view point, however, grounded theory is defined as "the discovery of theory from data through a systematic, inductive and comparative approach of inquiry" (Charmaz & Henwood 2007 as cited in Bryant & Charmaz 2010:1).

2.4.1 Motivation for choosing grounded theory

Grounded theory is appropriate when the study of social interactions or experiences aims to explain a process, not to test or verify an existing theory (Lingard, Albert & Levinson 2008:459). The generative nature of grounded theory constantly opens up the mind of the analyst to a myriad of new possibilities (Glaser 1978:6). In this study, the emerging theory on sexuality education was not from preconceived concepts but was discovered from the data naturally (Glaser & Strauss 1967:65).

Creswell (2013:88) contends that grounded theory is a suitable methodology for studying a research problem that requires a theory to explain how people are experiencing a phenomenon of interest where there has been little exploration of the contextual factors or weakly connected. Grounded theory was the appropriate approach for this study due to the scanty documented evidence on school-based sexuality education in primary schools in Uganda.

In grounded theory, the specific approach to theory development through continuous interplay between data collection and data analysis enables conceptualisation of data by utilising the logic of constant comparison and frequent memo writing which increases the level of abstraction of the data (Glaser 1978:3). Blumer (1969:171) posits that conceptualization separates the relevant from the irrelevant by moving away from description of data. The researcher increasingly developed abstract concepts about the

participants' meanings, actions and words providing a solid foundation in the data (Charmaz 2006:xii).

While phenomenology describes the common experience for a number of individuals, grounded theory generates a unified general theoretical explanation of a process or an interaction shaped by the views of a number of participants (Creswell 2013:83). Therefore, in Grounded theory, the focus is on social experience and not individual experience. In addition, Grounded theory enables collection of rich data that affords view of human experience that other discourse may inhibit (Charmaz 2008:88). Grounded theory is concerned with the construction of meaning through human action and interaction within contextual structures and processes.

The research goal of this study is to generate a theoretical description of the experiences of adolescents and teachers and the perceptions of parents about school-based sexuality education that is derived from and grounded in the narratives of the participants.

2.4.2 The different schools of grounded theory

Grounded theory originators, Glaser and Strauss (1967) parted company following disagreement about the nature of the method and how it ought to be practised (Willig 2013:70). This created the Glaserian and Straussian versions of grounded theory methodology. There then emerged second generation grounded theorists who have adopted and adapted - the methodology to suit their own disciplinary knowledge generation by making interpretations of Glaser and Strauss Grounded theory methods. As a result, there are variations of grounded theory all of which exist on a methodological spiral and reflect the epistemological underpinnings of the researchers (Oktay 2012:21).

Fernandez (2012:27) identified three major different grounded theory models: Classical or the Glaserian Grounded Theory (Glaser 1978), the Strauss and Corbin (1990) Qualitative Data Analysis (QDA) sometimes referred to as the Straussian grounded theory, the constructivist grounded theory (Charmaz 2000).

2.4.2.1 Glaserian ground theory

The Glaserian version of grounded theory has its ontological roots in critical realism. Critical realism assumes that an objective world exists independently of our knowledge and belief and as such the researcher is considered to be independent of the research (Annells 1996 as cited in Birks & Mills 2011:5). This stance is in contrast to the Straussian version of grounded theory which has its ontological roots in relativism where it is argued that reality is interpreted. As such, Strauss and Corbin's (1998) encourage the researcher to be involved in the method (Pearse & Kanyangale 2009:71).

2.4.2.2 Straussian ground theory

Strauss' version of grounded theory focuses on the use of their new technical procedures rather than placing the emphasis on the comparative methods of the earlier grounded theory approaches (Charmaz 2006:16). One of Glaser's criticisms of the Straussian version is that Strauss and Corbin's procedures force data and analysis into preconceived categories to the extent that it may lose any emergent conceptualisations (Urquhart, Lehmann & Myers 2010:361).

2.4.2.3 Constructivist ground theory

Advocated by Kathy Charmaz in her book '*Constructing Grounded Theory*' (Charmaz 2006), the Constructivist version of grounded theory, like the Straussian version, has its ontological roots in relativism (Mills, Bonner & Francis 2006:9). This strand of grounded theory methodology emphasises the research participants' experience and how they construct their view of reality. Knowledge, and hence the grounded theory, are constructed by both researcher and research participant and aim at interpreting the empirical evidence within the research context. Varied views of school-based sexuality education were sought and presented under the different themes in the findings. However, the Constructivist grounded theorist takes a reflexive stance on the modes of knowing and representing studied life, in that they give close attention to the empirical realities and people's collective interpretations of reality and locate themselves within these realities (Bryant & Charmaz 2010:33) (see Chapter 1).

Constructivist theory is premised on the belief that concepts are constructed, not discovered (Crotty 1998 as cited in Breckenridge, Jones, Elliott & Nicol 2012:65). Constructivist grounded theory actively repositions the researcher as the author of a reconstruction of experience and meaning of the participants based on the interactions between the researcher and the data (Oktay 2012:21). The researcher's perspective is recognised as critical in shaping data and analysis (Charmaz 2006 as cited in Breckenridge et al 2012:66). In this study, the experiences of teachers, students and perceptions of parents of school-based sexuality education were reconstructed by the researcher from the data collected.

2.5   CONSTRUCTIVIST GROUNDED THEORY AS RESEARCH STRATEGY

This study adapted the constructivist grounded theory which first evolved from the work of Strauss and Corbin in 1994 when they assumed the relativist ontological position and stated that they do not believe in the existence of a "pre-existing reality 'out there.' To think otherwise is to take a positivistic position that … we reject … our position is that truth is enacted" (Strauss & Corbin 1994 as cited in Mills et al 2006:9). However, landmark work on constructivist grounded theory method was done by Charmaz (Mills et al 2006:7) who argues that grounded theory methodology are compatible with social constructivist and interpretive philosophy.

Howell (2013:14) argues it is important for the researcher to have a full understanding of the philosophy that the research theory puts forward and to select the one that best suits all aspect of the study. Similarly, Birks and Mills (2011:5) assert that a researcher's choice of a research approach is always guided by congruence of the philosophical foundations of the nature of reality. Three philosophical issues guided the choice of constructivist grounded theory: the kind of knowledge this theory is capable of producing (ontology), the relationship between the researcher and the participant (epistemology) and the assumptions it makes about the world it studies, and the way in which it conceptualises the role of the researcher in the process of knowledge production (methodology) (Willig 2013:79). The reasons for selecting CGT based on the philosophical issues in this study are described below.

Constructivist grounded theory does not focus on interpreting reality as a single basic process but emphasises the inclusion of multiple realities and the complexities

influenced by context (Oktay 2012:21). In this study, the researcher did not dismiss divergent or conflicting constructions of experiences of sexuality education instead included the multiple responses of participants' unearthed was detailed (Charmaz 2006 as cited in Breckenridge et al 2012:65).

Constructivist grounded theory asserts that realities are social constructions of the mind (Mills et al 2006:8). People construct meanings about the world through interactive experiences with others via a continual process of interpersonal communication and negotiation thus social reality exists as individuals' experience it and assign meaning to it (Jones & Alony 2011:98; Appleton & King 2002 as cited in Breckenridge et al 2012:65; Fedoruk & McCutcheon 2012:67). School-based sexuality education is a social process that involves interactions between the teachers and adolescents these generate meaning thus forming their experience of the programme.

In this study, following constructivist grounded theory allowed for co-construction of meanings of multiple realities by the researcher and participants (Mills et al 2006:8). This feature provided the researcher with the opportunity to make interpretation of realities constructed by participants during the processes of experiences of sexuality education.

As Mills et al (2006:9) explain, constructivist grounded theory will allow the researchers to reflect on their past and experiences, underlying assumptions, interactions with people. This fosters researcher's openness their awareness of the participants' stories.

In emphasising subjective meaning, constructivist grounded theorists use open-ended questions that provide insights into the meanings of participants experiences rather than its mere description research participants (Creswell 2013:25). Additionally, constructivist grounded theory allows the researcher to derive meaning from the data and analysis using creative, inductive processes; it allows for the emergence of original findings from the data. The constructivist grounded theory strategy also provided a directions for the procedures in the study design. These procedures are discussed in Chapter 4.

2.6   CONCLUSION

In this chapter, description of the qualitative research approach located within the constructivist paradigm and the appropriateness of a constructivist approach for this research project was presented was offered. A discussion of grounded theory approach and of the various 'schools' of grounded theory is presented with consideration given to the choice of the grounded theory method used in this study. Explanation for the choice of constructivist grounded theory as the research strategy was provided and is woven through the discussion that is presented.

CHAPTER 3

LITERATURE REVIEW

3.1   INTRODUCTION

This chapter has focused in reviewing the literature on the main subject of study for the purpose of establishing what is currently known and what is not known about the experiences of adolescents, teachers and the parents' perceptions on school-based sexuality education. The review covered literature available in Uganda, the region, Africa and beyond.

Literature review is an integral part of the research process and guides the entire research process. It has been defined as "the selection of available documents (both published and unpublished) which contains the data, ideas and evidence written from a particular stand point to fulfil certain aims or express certain views on the nature of the topic and how it should be investigated and the effective evaluation of these documents in relation to the research being proposed" (Hart 1998:13 as cited in Ridley 2012:3).

Literature review helps to lay foundation for a study, by providing a background for understanding current knowledge on a topic with a purpose of identifying what is known and unknown about the research subject (Boswell & Cannon 2011:118). This background knowledge helps to progressively narrow the research topic and making it practical. Literature review also helps to locate and position the research on the academic map of knowledge creation by providing its context background (Blaxter et al 2010:124 as cited in Ridley 2012:3) and highlights the significance of the new study (Polit & Beck 2010:170). Aveyard (2010:1-2) points out that the value of one individual research is greater when seen in the context of other literature on the same topic.

In this review, a systematic literature review approach was used because, when compared to the traditional or narrative literature review, the systematic review provides a more rigorous and well-defined approach to reviewing the literature in a specific subject area (Cronin et al 2008:38). The researcher reviewed articles published in the

last three decades, the period which coincides with the HIV pandemic in Uganda. Searches for the peer reviewed articles were conducted using PubMed, MEDLINE and Google Scholar Search Engines and the researcher included peer reviewed articles that specifically discussed school-based sexuality education, experiences, perceptions, adolescent reproductive health. For each article, a more systematic and critical review of the content in terms of the source of the data and when the article was published was analysed.

The preliminary use of literature has been contested between traditional and second generation grounded theorists. Traditional grounded theory emphasises that "there is no need to review any of the literature in the substantive area under study for fear of contaminating, constraining, inhibiting, stifling, or impeding the researcher's analysis of codes emergent from the data (Glaser 1992:31). However, grounded theorists Strauss and Corbin, have pointed out the importance of interweaving literature throughout the process of evolved grounded theory as another voice contributing to the researcher's theoretical reconstruction and theoretical sensitivity by providing examples of similar phenomena which stimulate the researcher's thinking about properties or dimensions that we can then use to examine the data (Strauss & Corbin 1998:45).

Literature review in grounded theory methodology falls along a spectrum ranging from not doing a literature review at all on one end, to doing minimal preliminary literature review supplemented by further literature as additional themes are discovered during field work and coding in the middle of the spectrum and to doing literature review only at the end of the research process at the other end of the spectrum (Blake 2012:18). Due to the constructivist nature of the grounded theory a preliminary literature review is usually not exhaustive or extensive and the goal is not to let the literature review guide the process but rather clarify emergent theories. In this research, a preliminary literature review will be conducted and great care will be taken in order to ensure that the preliminary literature review will not direct the course of this research.

This chapter presents literature on what is known on adolescents globally, prior research that has been conducted in the area, challenges and opportunities, the issue of sexuality among adolescents in Uganda, school-based sexuality education success and challenges.

3.2   ADOLESCENCE

This section defines adolescence, challenges of adolescent sexual reproductive health and describes the relationship between school-based sexuality education adolescent sexual reproductive health.

There is evidence in the literature that shows attempts to define adolescence.

Adolescence *(from Latin adolescere, meaning* "to grow up") is a transitional stage of physical and psychological human development that generally occurs after puberty (*Macmillan Dictionary for Students* 1981:14, 456).

Although often defined as an age range, chronological age is just one way of defining adolescence. Alternative definitions of adolescence consider such factors as physical, social, and cognitive development as well as age. Below are various definitions of adolescents**:**

Adolescents are defined by World Health Organisation (WHO) as persons between 10-19 years of age.

The *Medical Dictionary* (2007:[online]) defined Adolescence as the period of physical and psychological development from the onset of puberty to complete growth and maturity.

Child development psychologist Jean Piaget (1955 in Keating 2004:48) describes adolescence as the period from 11years to late teens characterised by cognitive processing that brings more awareness of their surroundings and ability to direct their own thinking, learning, and problem solving. This differentiates adolescence from children.

"It is a transitional period from childhood to adulthood marked by onset of puberty which includes the appearance of secondary sexual characteristics" (Fatusi & Hindin 2010:499).

The Uganda's National Adolescent Health Policy defines adolescents as people between the ages of 10 and 19 years (UBOS 2006:62).

The terms *adolescent, teenager* and *young people* have been used interchangeably by different authors.

According to WHO (2013:[online]), a teenager is person aged 13–19 years, and young people has been less formally defined as people aged 10–24 years.

For the purpose of this study, the WHO definition of adolescents will apply, however, where there is no specific information for adolescents, reference will be made to information on the young people as a composite of the adolescents.

Adolescence is one of the critical transitional stages in the life span and is characterised by a tremendous pace in growth and change that is second only to that of infancy in terms of physical and psychological changes (WHO 2013a:[online]). These interrelated changes occur in the physiological, cognitive, emotional, social, and behavioural aspects of development. The adolescence period is also subdivided into two phases: the early and late adolescence and each phase is defined by marked characteristics in the different aspects of development (UNICEF 2011b:6).

Early adolescence (10–14 years) might be broadly considered to stretch between the ages of 10 and 14. Key features of this phase include:

- Commencement of physical changes usually beginning with a growth spurt and soon followed by development of the sex organs and secondary sexual characteristics. The changes can be a source of anxiety as well as excitement or pride for the individual whose body is undergoing the transformation.
- Feeling of awkwardness about one's self and one's body; worrying about being normal.
- Becoming more keenly aware of their gender and may make adjustments to their behaviour or appearance in order to fit in with perceived norms.
- Falling victim to, or participate in bullying, and feeling confused about their own personal and sexual identity.

Early adolescence should be a time when children have a safe and clear space to come to terms with this cognitive, emotional, sexual and psychological transformation without engagement in adult roles and with the full support of nurturing adults at home, at school and in the community.

It is important to give early adolescents all the information they need to protect themselves against HIV, other sexually transmitted infections, early pregnancy, sexual violence and exploitation before they become sexually active (Bankole, Biddlecom, Guiella, Singh & Zulu 2007a:35) . For too many children, such knowledge becomes available too late, if at all, when the course of their lives has already been affected and their development and well-being undermined (UNESCO 2009:3).

Late adolescence (15–19 years) encompasses the latter part of the teenage years, broadly between the ages of 15 and 19.The characteristics of this phase include:

- Puberty is completed.
- Enhanced capacity for analytical and reflective thought.
- More clarity and confidence in their own identity and opinions.
- Risk-taking declines during as the ability to evaluate risk and make conscious decisions develops.
- Girls tend to be at greater risk of negative health outcomes, including depression, eating disorders such as anorexia and bulimia than boys. This vulnerability derives in part from profound anxieties over body image that is fuelled by cultural and media stereotypes of feminine beauty.
- Time of opportunity, idealism and promise as adolescents make their way into the world of work or further education, settle on their own identity and world view and start to engage actively in shaping the world around them.

During adolescence, the rapid brain maturation leads to new sets of behaviours and capacities that may hinder or enhance the transitions of adolescents in the family, peer groups, educational domains and in health behaviours. These transitions have an impact on the health and wellbeing during adulthood (Viner, Ozer, Denny, Marmot, Resnick, Fatusi & Currie 2012:1641).

Different societies define adolescence differently in terms of age and social roles. The social-role changes, the hopes and aspirations of adolescents across the world are widely affected by economic and sociocultural factors in their environment (Sawyer, Afifi, Bearinger, Blakemore, Dick, Ezeh & Patton 2012:1631).

The socio-economic determinants of adolescent health include policies and environments that support access to education, provide relevant resources for health (e.g. contraception), and create opportunities to enhance young people's autonomy, decision-making capacities, employment, and human rights to promote positive transition to adulthood (Viner et al 2012:1641).

Nearly one fifth (17.5%) of the world's inhabitants are adolescents and the majority live in the least developed nations (World Population Prospects 2010:2-3). Sub-Saharan Africa is the region where adolescents make up the greatest proportion of the population with about 23 per cent of the population in the region aged 10–19 (UNICEF 2012:6). In Uganda, adolescents comprise more than 24% of the population (UBOS 2006:62). The high population of adolescents especially in Africa is attributed to high fertility and improved child health that allows children to grow into adolescents. However, for African governments to benefit from this potential workforce, there is a need to provide adequate opportunities and skills to engage adolescents meaningfully in the social and economic sectors, and to encourage them to adopt healthy behaviours (Blum 2007 as cited in Kabiru, Izugbara & Beguy 2013:2).

3.3   ADOLESCENT SEXUAL REPRODUCTIVE HEALTH RISKS

The period of adolescence presents vulnerabilities and risks to adolescent reproductive health. The marked adolescence emotional, sexual, and psychological transformations increase experimentation with behaviours and practices that can have longstanding implications for their health and wellbeing (UNICEF 2004 as cited in UNICEF 2011b:6 Hellandendu 2012:150). The health of young people has been largely neglected in global public health because this age group is perceived as healthy (Gore, Bloem, Patton, Ferguson, Joseph, Coffey, Sawyer & Mathers 2011:2093). Sexually transmitted infections including HIV/AIDS, teenage pregnancy and unsafe abortions are among the major negative yet preventable effects of the risky behaviours during adolescence (Kabiru, Izugbara & Beguy 2013:4).

3.3.1 HIV/AIDS

Human Immunodeficiency Virus (HIV) is a retrovirus that invades and hides for many years in the cells of the human body. The virus attacks and destroys a key part of the immune system – T-cells or CD4 cells which are important in fighting infections and diseases. Sustained destruction of immune cells incapacitates the body's fight against infections and diseases (Ascher & Sheppard 1988:165). When that happens, HIV infection leads to Acquired Immunodeficiency Syndrome (AIDS), the final stage of HIV infection. At this stage of HIV disease the immune systems is badly damaged, putting the infected persons at risk for opportunistic infections (OIs). A person with AIDS, will need medical intervention and treatment to prevent death (CDC:[online]).

HIV lives and replicates in blood and other body fluids (CDC [online]); semen (cum), pre-seminal fluid, breast milk, vaginal fluids, rectal (anal) mucous. A person can therefore become infected with the virus through several routes including (a) sexual contact with HIV positive person, (b) babies become infected during pregnancy, childbirth, or breastfeeding, (c) drug injection, (d) occupational exposure for health workers and (e) blood transfusion and organ transplant from an infected donor. Since it was first clinically discovered in the US in the early 1980s HIV pandemic remains a global public health challenge with no cure in sight and has claimed 36 million lives so far (WHO 2013:[online]).

According to UNAIDS globally, an estimated 35.3 (32.2–38.8) million people were living with HIV in 2012. Nearly 68% of all the people living with HIV worldwide live in Sub-Saharan Africa and more than two thirds (70%) of all new infections globally occur in this region. South Africa's HIV epidemic remains the highest in the world with an estimated 5.6 million HIV-positive people in 2009. This exceeds the number of people living with HIV in the entire Asian region (UNAIDS 2013:4).

More than 1.1 million people in the United States are living with HIV infection, and in 2012 almost 1 in 5 (18.1%) are unaware of their infection (CDC 2013:1). In 2011, about 5 million people were living with HIV in Asia and nearly half (49%) of all the people living with HIV in Asia are in India (UNAIDS 2012b:1). Globally, new HIV infections have fallen by 19%. However, there is mixed progress in the reduction of HIV infection with Eastern

Europe and central Asia registering an increase in the new infections and the Caribbean and Oceania showing marked a decrease (UNAIDS 2012a:10). In Sub-Saharan Africa, recent evidence indicates a significant increase in risky sexual behaviours like the number of sexual partners in several countries including Uganda, as well as a decline in condom use (in Côte d'Ivoire, Niger, Senegal and Uganda) (UNAIDS 2013:14). Inadequate life skills and poorly designed and delivery challenges of school-based sexuality education are likely to continue hindering the progress in the campaign against HIV.

3.3.1.1 HIV treatment and school-based sexuality education

The mainstay HIV/AIDS treatment is the antiretroviral therapy which not only prevents AIDS-related illness and death but also has the potential to significantly reduce the risk of HIV transmission and the spread of tuberculosis. According to UNAIDS Global Report, from 1996 to 2012, antiretroviral therapy (ART) averted 6.6 million AIDS-related deaths worldwide, including 5.5 million deaths in low- and middle-income countries. However, ART coverage in low and middle-income countries remains low with only 34% (32-37%) of the 28.3 million people eligible in 2013 receiving the therapy. The low uptake rate is mainly due to limited funding by the local governments and dependence on international donors (UNAIDS 2013:6).

There is urgent need to further strengthen HIV prevention efforts that can be implemented with high levels of coverage in populations with high incidence of new infections. The use of combination HIV prevention initiatives that incorporate evidence-based structural, biomedical and behavioural interventions at individual, relationship, community, societal levels in ways appropriate and acceptable to specific populations may significantly reduce population-level HIV incidence (UNAIDS 2010:10; Tumwebaze, Tumwesigye, Baeten, Kurth, Revall, Murnane, Chang & Celum 2012: e51620).

The biomedical interventions are strategies to reduce exposure, transmission and/or infection and include male and female condom provision, drug treatment including opioid substitution therapy, needle and syringe provision, male circumcision, biomedical prophylaxis of ART in PMTCT services, post exposure prophylaxis. Additionally, having access to appropriate sexually transmitted infection services, blood safety and infection control standard precautions in health care setting (UNAIDS 2011:23). Communities

need to be empowered to understand the available preventive and treatment strategies used to combat HIV infection for the purpose of attaining an HIV free generation. Specifically, effective school-based education should not only provide accurate information to the adolescents on HIV prevention but link them HIV counselling, testing and treatment services as well.

Behavioural strategies have been defined as interventions to "motivate behavioural change in individuals and social units by use of a range of educational, motivational, peer-led, skills -building approaches as well as community normative approaches" Some of the behavioural strategies shown to cause reduction in HIV infections are; sexual debut delay, sexual partner reduction, consistent condom usage, HIV counselling and testing, sexual abstinence, monogamy, biomedical intervention uptake and consistent usage, adherence to harm reduction strategies, decreased substance use (Bekker, Beyrer, & Quinn 2012:3-4).

Structural interventions include physical, social, cultural, organisational, community, economic, legal, or policy features of the environment that affect HIV infection. These factors operate at different societal levels and different distances to influence individual risk and to shape social vulnerability to infection.

Overall there is no stand-alone HIV prevention strategy that is effective and therefore must be complemented by other prevention options and HIV treatment to achieve maximum reductions in HIV risk and vulnerability.

Sexuality education has been shown to play an important role in the campaign against HIV. Studies have shown that education can reach young people with HIV information and equip them with the skills they need to protect themselves before they become sexually active (Kirby et al 2006 in UNESCO 2009:17; Cheng, Lou, Mueller, Zhao, Yang, Tu & Gao 2008:184).

This section has summarised the burden of HIV, treatment and preventive measures and the challenges in the fight against HIV. It has been emphasised that there is no single strategy which is solely effective in the campaign but effective school-based sexuality education targeting adolescents is likely to result in behavioural change with a reduction in the HIV infection.

3.3.1.2   HIV in Uganda

This section briefly describes the epidemiology of HIV in Uganda and the strategies which the Government of Uganda has put in place in an attempt to fight against the epidemic. The section discusses the epidemiology of HIV among adolescents in Uganda and the sub-Saharan Africa, and the challenges in the prevention of transmission and treatment of HIV.

After its success in the fight against the epidemic in the 1990s by focusing around the idea of 'ABC' (Abstain, Be faithful or use Condoms), Uganda continues to experience an increasing number of new HIV infections every year estimated at 128,000 in 2010 (The Republic of Uganda 2012:3). The latest HIV indicator survey in Uganda paints a grim picture of an increase in prevalence to 7.3 from 6.4 per cent in the adult population15-49 years (Uganda Ministry of Health 2012:104). In Uganda, about 2.2 million people are living with HIV (UNAIDS 2012:7).The decline in protective sexual behaviour like use of condoms and increased risk-taking behaviour such as transactional, early & cross-generational sex, concurrent sexual relationships in the general population are responsible for the trend (Opio, Mishra, Hong, Musinguzi, Kirungi, Cross, Mermin & Bunnell 2008:320; Apondi, Bunnell, Ekwaru, Moore, Bechange, Khana, King, Campbell, Tappero & Mermin 2011:1371).

Furthermore, analysis of factors associated with HIV incidence and prevalence indicates that there is increased risk of HIV infection among married and cohabiting couples (Uganda Ministry of Health 2012:117). In response to this dynamics, the government of Uganda has developed the National HIV Prevention Strategy 2011–2015 based on the UNAIDS 2010 theme of 'Know your epidemic, Know your Response'. The main aim of the National Strategy is to increase the coverage and effectiveness of HIV prevention through a framework that is aligned through a set of priority and effective HIV prevention interventions to the known sources of new HIV infections and to population groups that are most at risk (The Republic of Uganda 2012:1).

3.3.1.3 Adolescents, young people and HIV/AIDS

Adolescence is the period when many young people begin sexual experimentation and the majority of the millions of those who become sexually active live in countries with a high HIV burden thus increasing their vulnerability. According to UNAIDS (2008) as cited in Jewkes, Dunkle, Nduna and Shai (2010:1) owing to its long latency period, the sexually transmitted epidemic starts among women and men in their teenage years before it manifests as AIDS in later life. The main causes of the transmission of HIV among young people are: unprotected sex with an HIV-positive person or contact with infected blood or other fluids through the sharing of non-sterile injecting equipment. In addition, many adolescents living with HIV were born with the virus (UNICEF 2011a:1, 7).

The rapid roll-out of anti-retroviral treatment programmes has made it possible for perinatally infected infants to live through adolescence and adulthood, thereby engaging in dating and sexual relationships (Edmonds, Yotebieng, Lusiama, Matumona, Kitetele, Napravnik, Cole, Van Rie & Behets 2011:6). However, the sexual and reproductive health needs of this unique and rapidly increasing population are largely unmet. In Uganda, the HIV/AIDS treatment, care and support programmes are still organised around either adult or paediatric care and therefore fail to adequately address the needs of this growing segment of the population that usually falls between these two groups (Birungi, Mugisha, Nyombi, Obare, Evelia & Nyinkavu 2008:1). Therefore, HIV remains a major threat to the reproductive health of young people globally. Yet due to their age, social or economic status the young people may have limited access to information and services (UNICEF 2012:23).

In 2012, it was estimated that 2.1 million (5.9%) of the people living with HIV are adolescents aged 10–19 years in middle and low income countries (UNAIDS 2013:18). HIV-related deaths among adolescents increased by 50%, while the global number of HIV-related deaths fell by 30 percent (WHO 2013c:1). Globally, around 2500 new cases of HIV infections occur among adolescents and youth ages 15–24 every day. Additionally, approximately 712 new cases of HIV are diagnosed each day in children under 15 years of age due to vertical transmission and sexual coercion (WHO 2013b:2) .In the US, 1 in 4 of people aged 13–24 years is living with HIV and is not aware of the infection. It is estimated that in 2009, about 2 million adolescents (aged 10–19) were

living with HIV. Although they are found in countries in all continents, 1.8 million live in sub-Saharan Africa and therefore, young people living with HIV/AIDS are a major African public health problem (UNICEF 2012:23).

Eastern and Southern Africa is home to 2.7 million people aged 15 to 24 years living with HIV, which is more than half of all HIV-positive young people globally. Uganda is one of the twenty Sub-Saharan African countries with the most new infections among young people aged 15-24 years old with an estimated 46,000 new infections annually (UNAIDS 2010 as cited in UNICEF 2011a:6). According to the recent AIDS indicator survey in Uganda 4 percent of the young people age 15–24 years are living with HIV. However, there is a gender gap; HIV prevalence among women age 15–24 years is 5 percent, while among men, it is only 2 percent (UNAIDS 2011:112).Globally, young women aged 15-24, have HIV infection rates twice as high as in young men, and account for 22% of all new HIV infections and 31% of new infections in Sub-Saharan Africa (Cowan & Pettifor 2009:290; UNAIDS 2011:1).

Persistent challenges to effective HIV prevention for adolescents and young people include biological susceptibility due to traumatic injury to the genitalia during sexual intercourse which is high in cases of experience of sexual violence as a child or adolescent and repeated violence (Kerrigan et al 2010 as cited in UNAIDS 2013:7), gender inequalities, gender based violence and forced sex against young women and girls (Jewkes et al 2010:46; UNAIDS 2013:17, 78; Reza, Breiding, Jama, Mercy, Blanton, Mthethwa, Bamrah, Dahlberg & Anderson 2009:1969) undermine their ability to protect themselves from HIV infection and/or to make smart decisions regarding sexual health.

Knowledge of HIV sero status is key to linkages to HIV care and prevention (Tumwebaze et al 2012:1). Access to and uptake of HIV testing and counselling by adolescents is lower than for many other groups leaving them disadvantaged in terms of seeking and being linked to HIV prevention, treatment and care services. In sub-Saharan Africa it is estimated that only 10% of young men and 15% of young women (15–24 years) were aware of their HIV status (WHO 2013b:viii). This is due to inaccessibility and underutilisation of health facilities. In many developing countries young people have limited access to high-quality, youth-friendly HIV and sexual and reproductive health services (WHO 2013b:34). Adolescent services must be confidential

because stigma, perceived and experienced, and inadvertent disclosure of HIV status hampered adolescents from utilising HIV services (Mutwa, VanNuil, Asiimwe-Kateera, Kestelyn, Vyankandondera, Pool Ruhirimbura, Kanakuze, Reiss, Geleen, Van de Wijgert & Boer 2013:3). Furthermore, limited protection for young people's confidentiality and right to medical privacy presents a barrier to access to service utilisation (Mutwa et al 2013:3; Mbeba, Mkuye, Magembe, Yotham, Mellah & Mkuwa 2012:2).

In many countries, health workers, even those experienced in caring for adults with HIV, are often ill-equipped to support the health-care needs of adolescents. There is little experience with understanding and providing services for the particular needs of adolescents, and judgemental attitudes toward sexually active adolescents which hamper rapport and subsequent care (WHO 2013b:5; Mbeba et al 2012:2). Health care seeking and utilisation by pregnant adolescent girls is often poor (Atuyambe 2008:5). Adolescent girls with HIV have less access to PMTCT interventions than adult women, leading a significant proportion of perinatally infected infants born to adolescents mothers missing early care (Horwood, Butler, Haskins, Phakathi & Rollins 2013:1; WHO 2013b:5).

Adequate information can change attitudes and behaviours related to HIV markedly. However, many young people in Africa still lack comprehensive and correct knowledge about HIV (Oljira, Berhane & Worku 2013:1738). According to UNAIDS, about 60 percent of young people in the age range 15-24 years, are not able to correctly identify the ways of preventing HIV transmission (UNAIDS 2008 as cited in UNICEF 2012:7).In Uganda, comprehensive knowledge about AIDS is generally lowest at 36% among those age 15–19 (UBOS 2011:191).There is an urgent need to address the knowledge gap about HIV. Therefore, there is a need to equip young people with the knowledge and skills which would empower them to make responsible choices on their lives.

All the above factors contribute to late diagnosis of HIV infection resulting in delayed initiation of antiretroviral therapy (ART) and poor adherence to therapy for both perinatally and horizontally infected adolescents (WHO 2013b:ix).

Policy and programmatic efforts to develop effective HIV prevention and treatment programs targeted towards youth living in resource-poor urban settings require

empirical evidence on the drivers of HIV-related behaviour including HIV testing and counselling. This section has demonstrated that HIV is still a growing public health problem in Uganda and the younger age-group (adolescents) is at more risk because of communication gaps and inadequate information on effective preventive measures in this age group. Therefore there is a need to explore the implementation of school-based sexuality education in rural primary schools in Uganda.

3.3.2 Adolescent pregnancy

Despite the decline in the overall birth rate in the developing world, adolescent birth rates remain high, especially in developing countries. Adolescent pregnancy remains a serious public health concern, pregnancy and childbirth related complications are the number one killer of 15–19 year old girls worldwide. Eleven per cent of births worldwide occur among adolescent girls and 95 per cent of the births occur in developing countries. About 19 % of young women in developing countries become pregnant before age 18, two million of them are under age 15 (UNFPA 2013:2). This trend is a reflection of a lack of correct information on the impact of pregnancy on adolescents and the strategies that can be put in place to reduce the high prevalence early childhood pregnancy. Similarly, the trend reflects gaps on the sources of correct information which effective school-based sexuality education is likely to contribute significantly to a reduction in the prevalence of adolescent pregnancy.

Each year, there are an estimated 2.2 million unintended pregnancies among adolescent women living in South, Central and Southeast Asia; 2.7 million in Sub-Saharan Africa and 1.2 million in Latin America and the Caribbean (Guttmacher 2010:2). In South and Southeast Asia, almost a quarter of girls give birth by the time they are 18 years. Adolescent childbearing is highest in Bangladesh at over 64 per cent, followed by Nepal (51 percent), and India (47 percent). Adolescent childbearing rates are also high in Latin America and the Caribbean ranging between 30 and 40 percent (UNFPA 2013:3).

In developed countries, there are 680,000 births to adolescent mothers annually. Nearly half of them occur in the United States (UNFPA 2013:1). However, the US teen birth rate declined by 9 percent from 2009 to 2010, reaching a historic low at 34.3 births per 1,000 women aged 15–19.   The decline has been attributed to an increase in

contraceptive use at first initiation of sex and use of dual methods of contraception (that is, condoms and hormonal methods) among sexually active female and male teenagers and strong pregnancy prevention messages directed to teenagers (Hamilton & Ventura 2012:1). Despite this decline, the US teen pregnancy rate continues to be one of the highest in the developed world. It is more than twice as high as rates in Canada (28 per 1,000 women aged 15–19 in 2006) and Sweden (31 per 1,000). Eighty-two percent of teen pregnancies are unplanned and teens account for about one-fifth of all unintended pregnancies annually (Finer & Zolna 2011:484). Fifty-nine percent of pregnancies among 15–19-year old in 2008 ended in birth, and 26% in abortion. The rest ended in miscarriage (Kosh, Henshaw & Calin 2010:4).

At 16% birth rate sub-Saharan Africa has the highest adolescent birth rate in the world (Guttmacher Institute 2010:1). In sub-Saharan Africa more than 50 per cent of adolescent girls give birth by age 20. In some sub-Saharan African countries including Uganda this figure is over 70 per cent. African countries constitute 20 of the 25 countries globally with highest adolescent fertility of between 123 per 1,000, & 199 per 1,000 births amongst young women aged 15-19 years. Uganda leads in the East African region at 8th position out of the 25 African countries with highest adolescent fertility followed by Tanzania, while Rwanda and Burundi have the lowest adolescent fertility rates at 43 and 48 per 1000 girls respectively (Africa Reproductive and Sexual Health Scorecard 2012:1, 2). Understanding the facts discussed under this section provides an understanding on the extent of the problem and the need for all stakeholders to engage fully in ensuring that adolescent pregnancies are reduced in the communities.

3.3.2.1 *Reasons for adolescent pregnancy*

Adolescent pregnancy is a result of interplay of various complex drivers that operate at different levels namely individual, family, community and national levels. At national-level policies may restrict adolescents' access to sexual and reproductive health services, including contraception or weak enforcement of laws against sexual violence (UNFPA 2013a:vii). Even where services exist, the providers' negative attitudes about adolescent sexuality and the rights of young people create serious barriers and prevent young people from accessing the services (Nalwadda, Mirembe, Byamugisha & Faxelid 2010:7). Furthermore, the community or families may oppose girls' from accessing

comprehensive sexuality education (UNFPA 2013:1) or other information about how to prevent a pregnancy (Nalwadda et al 2010:10).

Adolescent sexual activity occurs both within and outside of marriage, with young women much more likely than young men to be married (Boonstra 2007:2). Globally an estimated 39,000 girls are married every day (UNFPA 2013:1). The extent of early marriage varies among countries and regions from 2% in Algeria to 75% in Niger in West Africa, the highest rate of child marriage in the world (UNFPA 2013:10), followed by southern Asia, northern Africa, the Middle East and Latin America. However, given southern Asia's population size and rates of early marriage about half the girls in early marriage live there (WHO 2012a:2).

Early marriage and early childbearing are most common among poor women and those with little education (Guttmacher Institute 2010:1; UNFPA 2013:2). Married adolescents suffer significant risks due to their social vulnerability. Marriage brings many abrupt changes and an adolescent girl has no power to refuse, including frequent unprotected sex that results in frequent pregnancies, increased risk of HIV infection, a high burden of responsibilities in the new home, and isolation from family and friends (UNFPA 2013:10). Adolescent girls also have limited knowledge about reproductive health (WHO 2011a:11). Married girls often lack awareness of their rights and have little, if any, say over their health care and family planning (UNFPA 2013:ii). In Sub-Saharan Africa young women are still bound by cultural norms that equate marriage and motherhood with female status and value, thus women are commonly expected to have a child soon after marriage to prove their fertility (Nalwadda et al 2010:10). With little education and no opportunity to gain marketable skills, a married adolescent girl is backed into a corner.

Pregnancy presents a different challenge for the unmarried girls who are more likely than married girls to suffer unplanned, financially unsupported, and in many places premarital pregnancy is socially stigmatised (Atuyambe, Mirembe, Tumwesigye, Annika, Kirumira & Faxelid 2008:5). Just like the married girls, unmarried adolescent girls to older partners have little power to negotiate the timing and frequency of sex and use of condoms or other contraceptive methods, particularly when their partners provide them with financial and other means of support. Fears about losing her partner or inciting anger or abuse, may also lead an unmarried adolescent girl to consent to unprotected

sex (Zembe, Townsend, Thorson & Ekström 2013:11). Yet unlike the husbands of married girls, the partners of unmarried girls may not want or support a pregnancy. An unmarried adolescent mother may face the social stigma of single motherhood and lack means of survival (Atuyambe et al 2008:5).

Several reasons exist for why adolescents have unprotected sex; some adolescents have inadequate knowledge about contraceptives, or are unable to obtain contraceptives (Christiansen, Gibbs & Chandra-Mouli 2012:1). Each year adolescents' modern contraceptive use prevents 3.1 million unintended pregnancies (Guttmacher Institute 2010:4).However, even where contraceptives are widely available, sexually active adolescents are less likely to use contraceptives than adults (WHO 2012:[online]). Use of modern contraceptives, particularly among married youth in Sub-Saharan Africa, is very low at 21% because women who are married, even as adolescents, are expected to have children right away. In many developing countries settings, particularly Sub-Saharan Africa, women's gender identities and social status are tied to motherhood and childlessness is highly stigmatised (Dodoo & Frost 2008 as cited in Hindin & Fatusi 2009:59).

Among unmarried sexually active adolescents in Sub-Saharan Africa, contraceptive use ranges from a low of 3% in Rwanda to a high of 56% in Burkina Faso. Unmet need for contraception or non-use of methods despite the desire to limit births or delay them for at least two years is high among unmarried adolescents in Sub-Saharan Africa (more than 40% in most countries). In comparison, 10-31% of unmarried adolescents in Latin America are considered to have unmet need (Khan & Mishra 2008:27).

Adolescent girls may be unable to refuse unwanted sex. Sexual violence is widespread and particularly affects adolescent girls (Moore, Biddlecom & Zulu 2007b:45; WHO 2012a: [online]). Coerced sex was reported by 10% of girls who first had sex before age 15 years. More than one third of girls in some countries report that their first sexual encounter was coerced (WHO 2012:[online]).

Majority of sub-Saharan African youth are growing up in a context of widespread poverty, high rates of unemployment (Ezeh 2007 as cited in Kabiru 2010:1). Poverty is another factor that pushes girls into activities that expose them to sexual exploitation and having sex in exchange for money, gifts and food (Zembe et al 2013:7). In such

situations, young girls are not in a position to negotiate safer sex and are often at risk of pregnancy, sexually transmitted infections, including HIV, and violence such as rape (Luke 2008:392; Nobelius, Kalina, Pool, Whitworth, Chesters & Power 2010:491).

Inadequate knowledge remains a major barrier for adolescents: An in-depth study of four Sub-Saharan African countries found that 60% or more of adolescent men and women believed common misperceptions or had poor knowledge about the prevention of unintended pregnancy and HIV; one-third or more did not know of a source for contraceptives (Guttmacher Institute 2010:2; WHO 2012:[online]).

This information shows the need for implementation of comprehensive sexuality education programmes that specifically address not only pregnancy related risk factors but protective behaviours including contraception.

3.3.2.2   Consequences of adolescent pregnancy

In low and middle income countries, complications from pregnancy and childbirth are a leading cause of death among girls aged 15-19 years (WHO 2012:[online]).

Adolescent pregnancy constitutes a health hazard both to the mothers and the foetus. The younger the mothers the most likely they will experience complications of pregnancy and death due to pregnancy related causes (UNFPA 2013:17). The risk of maternal death is four times higher among adolescents aged less than 16 years compared to women in their twenties. An estimated 70,000 adolescents in developing countries die each year from complications during pregnancy and childbirth. Girls who become pregnant before age 15 in low and middle-income countries have double the risk for maternal death and obstetric fistula than older women, especially in sub-Saharan Africa and South Asia.

Pregnant adolescents are more likely than adults to have unsafe abortions. An estimated three million unsafe abortions occur globally every year among girls aged 15-19 years. Unsafe abortions contribute substantially to lasting health problems and maternal deaths (WHO 2012:[online]). A number of negative health outcomes are associated with adolescent pregnancies including anaemia, malaria, HIV and other sexually transmitted infections, postpartum haemorrhage and mental disorders such as

depression (WHO 2013:[online]). In addition, early childbirth reduces education and other opportunities for all adolescent girls (UNICEF 2012:23).

Biological and socio-economic factors, including physical immaturity, poverty, lack of education and lack of access to appropriate medical care, increase an adolescent's risk of pregnancy-related complications (Prakash, Singh, Pathak & Parasuraman 2011:143–144). Adequate pre-natal care and nutrition are of particular importance for young mothers. However, most adolescents are malnourished by the time they are pregnant and the rate of full utilisation of antenatal care and postnatal was very low among poor, uneducated married adolescents living in rural areas (Singh, Rai, Alagarajan & Singh 2012:6, 8; Atuyambe et al 2008:5; Prakashet al 2011:136). The child of a teenage mother faces greater risks than a child born to a mother in her twenties. The babies born to adolescent mothers are at higher risk for stillbirths, neonatal deaths, preterm births, low birth weight, asphyxia, and malnutrition than those born to older women (WHO 2013:[online]; Prakash 2011:136).

It is estimated that 44% of the 7,200 annual maternal deaths in Uganda occurs amongst females aged 15–24 years. Teenage pregnancy outcome is also associated with high prevalence (2%) and incidence (1,900 cases per year) of fistula in Uganda About 80% of the estimated 200,000 Ugandan women suffering from obstetric fistula are teenage girls who gave birth before the age of 18 years (Kayondo, Wasswa, Kabakyenga, Mukiibi Senkungu, Stenson and Mukasa 2011:2).

Multilevel approaches to prevention are required to reduce pregnancy among the adolescents group.

3.3.3 Unsafe abortion

In 1992, the World Health Organization (WHO) defined unsafe abortion as: "a procedure for terminating an unintended pregnancy that is carried out either by a person lacking the necessary skills or in an environment that does not conform to the minimal medical standards, or both". Although preventable, unsafe abortion continues annually to cause death and leave millions of women with permanent disability especially in countries where abortion laws are more restrictive, the unmet need for contraception is high and the status of women in society is low.

The latest estimates from the World Health Organization put the figure at 21.6 million unsafe abortions worldwide in 2008 and 99% of these took place in developing countries. Almost all abortions in nearly all developing countries mostly in sub-Saharan Africa, Latin America and South and Southeast Asia, are unsafe. (Shah & Ahman 2010:91). In the developing world, 56% of all abortions are unsafe, compared with 6% in the developed world (Wise 2012:2; Sedgh, Singh, Shah, Åhman, Henshaw & Bankole 2012:628). The highest regional rate of abortion is in Eastern Europe estimated to be 43 per 1,000 women in 2008. In Africa, South Africa where abortion was legalised in 1997, had the lowest unsafe abortion rate of all African countries at 9 per 1,000 women in 2008. East Africa & Middle Africa had the highest rate at 36 per 1000 women (WHO 2011:19).

The unsafe abortion rate in Uganda is worrisome. It is reported that nearly 300,000 clandestine abortions occur in Uganda annually (Singh, Prada, Mirembe & Kiggundu 2005:188). Reliable data on unsafe abortions are difficult to obtain, especially in countries where abortion is illegal. Estimates for most developing countries are based on limited and incomplete sources of data. The only available national study on abortion in Uganda estimated a considerably high incidence rate of 54 abortions per 1,000 women of reproductive age (Singh et al 2005:188) as compared to 36 per 1,000 women for the rest of East African countries (Sedgh et al 2012:627) . Unsafe abortion remains one of the leading causes of maternal mortality in Uganda. In 2008, the Ugandan Ministry of Health estimated that abortion related causes accounted for 26% of maternal mortality (CRR 2012 as cited in Hussain 2013:2). In Eastern Africa as a whole, 18% of maternal deaths are due to unsafe abortion (WHO 2011:28; Sedgh et al 2012:631).

3.3.3.1 Determinants for unsafe abortions

There are two main determinants of induced abortion: proximate and systemic determinants.

3.3.3.1.1 Proximate determinants

These relate directly to a woman's fertility behaviour such as contraceptive choice and practice, and are the factors that cause unintended pregnancy and termination of unwanted pregnancy (Mundigo 2006:53). Unintended pregnancy is described as

pregnancy that is mistimed .i.e. wanted later, unwanted or not wanted at all (UDHS 2011:72). Globally, it is estimated that 41 percent of the pregnancies are unintended. The proportion of unintended pregnancies that end in abortion has been estimated at 58% worldwide. The proportion of all pregnancies that are unintended was highest in the Latin America and Caribbean region (58 percent). Of those, 38 percent of unintended pregnancies in that region end in abortion. In Africa where the desired family size is still relatively high, 39 percent of pregnancies were unintended. One-third of unintended pregnancies in Africa ended in induced abortion (Singh, Sedgh & Hussain 2010:244).

In Uganda, premarital sex is common among the young women aged 15–24 years where nearly 6 in 10 of never-married young women had had sex before age 18 (UBOS 2011:212). However, premarital sexual activity and pregnancy are taboo in the Ugandan society with the former often resulting from reluctance to get contraceptive services and information while the latter often ends in unsafe abortions. It is estimated that in 2008 around 2.2 million pregnancies occurred in Uganda, of which more than half (56%) of the pregnancies were unintended (Hussain 2013:2). An estimated one third of the unintended pregnancies end in abortions (Uganda Bureau of Statistics (UBOS) 2011:69, 71).

Unwanted pregnancy can occur for numerous reasons. It may be the consequence of non-use of contraception, contraceptive failure, or misuse of the methods. In addition, difficulties in access to preferred methods of contraception, incorrect or inconsistent use of contraceptive methods and potential contraceptive method failure, fear of side or health effects and partner opposition to contraceptive use may lead to unintended pregnancies (WHO, Guttmacher Institute 2012:3; Sedgh, Bankole, Singh & Eliers 2011:143; Nalwadda et al 2010:7). An estimated 215 million women in the developing world have an unmet need for modern contraceptives (Guttmacher Institute 2012:3). In Uganda, contraceptive use remains low, nationally only 26% of married women use a modern contraceptive method. About one in three married women do not want a child soon or at all but are not using any method of contraception (UBOS 2011:76). Numerous myths like contraceptives interfered with fertility, the pills burn the woman's eggs, contraceptives accumulate in the body causing swellings such as fibroids, cancer, destruction of the fallopian tubes also contribute to the poor utilisation of contraceptives (Nalwadda et al 2010:4).

Other reasons for unwanted pregnancies include sexual violence e.g. sexual coercion which is defined as "an act of forcing (or attempting to force) another individual through violence, threats, verbal insistence, deception, cultural expectations or economic circumstance to engage in sexual behaviour against his or her will" (Heise, Moore, & Toubia, 1995 as cited in Wagman, Baumgartner, Waszak, Nakyanjo, Ddaaki, Serwadda, Gray, Nalugoda & Wawer 2009:2074). For a substantial proportion of young women, their first sexual intercourse is forced (WHO 2013 [online]). Studies have reported high prevalence of sexual coercion in Sub-Saharan Africa ranging from10% to 46% in some countries (Moore et al 2007a:48; Maharaj & Munthree 2007:231; Moore, Awusabo-Asare, Madise, Langba & Kumi-Kyereme 2007b:67). Young women are particularly vulnerable (Ybarra, Bull, Kiwanuka, Bangsberg & Korchmaros 2012:1397; Wagman, et al 2009:2074). In Uganda, the prevalence of sexual coercion to be at 20% among young women 15–19 years (Wagman et al 2009:2073; Agardh, Odberg-Pettersson & Östergren 2011:2; Ybarra et al 2012:1398).

The most common forms of sexual coercion as reported by young women in Sub-Saharan Africa are forced sex, unwanted sexual touching, verbal harassment, pressure through money or gifts, transactional sex, threatening to have sex with other girls, and passive acceptance (Wagman et al 2009:2073; Reza et al 2009:1969). Common predisposing factors cited include; age difference between the two people in the relationship; being younger generally (under 25-years-old), as well as at first sex specifically being 15 years or younger (Moore et al 2007b:45) and the use of alcohol or drugs in the sex act (Zablotska, Gray, Koenig, Serwadda, Nalugoda, Kigozi & Wawer 2009:227); family structure; living with single mother or both parents living was protective (Pilgrim, Ahmed, Gray, Sekasanvu, Lutalo, Nalugoda, Serwadda & Wawer 2013:1300).

Gender inequality is another common reason. Cultural norms in many Sub-Saharan Africa settings pressure girls against being in charge of their sexuality or assertively communicating their sexual interest (Nobelius et al 2010:494; Hayer 2010:498; Moore et al 2007b:65).In addition, the sexual socialisation of males to think that a man is expected to lead and control sexual relations and his woman partner to comply; that men cannot control their 'sexual urges', and that he is entitled to have sex with other women, but expect his woman to remain faithful are important factors for the prevalence

of sexual violence (Nobelius et al 2010:500; Wagman et al 2009:2082; Moore et al 2007a:66; Jewkes & Morrell 2010:2).

Sexual coercion was perceived to be a normal part of intimate relationships; in particular, among the married women who felt that choices about sex or reproduction were perceived as being in the domain of male authority, and sex and pregnancy are implicit to marriage (Wagman et al 2009:2088). Young women and girls are less likely to negotiate contraceptive use in these situations. Such lack of women's empowerment over sexual and reproductive matters increases their vulnerability.

Sexual coercion is reported to have significant reproductive health, as well as emotional and psychological consequences on the victims. Those who had been coerced at first sex were also more likely to report having had STI and had experienced unintended pregnancy than those who had not been coerced at first sex (Maharaj & Munthree 2007:231). Sexual coercion is subsequently associated with risky sexual behaviour like early sexual debut, many sexual partners, and inconsistent condom use (Agardh et al 2011:4; Reza et al 2009:1969); furthermore, Polis, Lutalo, Wawer, Serwadda, Kigozi, Nalugoda, Kiwanuka and Gray (2009:107) reported that women who experienced coercive sexual debut were twice more likely to attempt an abortion compared to those who had consensual sexual debut. It also increased the risk of HIV infection risk in young women (Zablotska et al 2009:230).

3.3.3.1.2   Systemic determinants of induced abortion

They are less directly related to the cause of unwanted pregnancy but influence the decision-making process leading to pregnancy termination. A woman's decision to terminate an unwanted pregnancy is influenced by her personal circumstances and by dynamic systemic forces that ultimately determine the outcome: how, when and where to go for the procedure (Mundigo 2006:54).The factors include societal norms, economic conditions, legal obstacles and other systemic factors.

Economic factors like income level, employment status, living children, inability to feed or bring up another child affect the decision process and often overrule the cost of the procedure itself (Harb & Habil 2013:161; Hussain 2013:1).

Poverty is an important determinant in the decision to seek an abortion when women consider the financial consequences of an unintended pregnancy. Unsafe abortions are significantly associated with lower economic status, rural women and low years of education. Poor women and rural women are therefore more likely to receive poor quality abortion care than urban and wealthier women (Souza, Lozano & Gakidou 2010:307; Fusco, Silva Rde & Andreoni 2012:716). Poor, young and rural women, whose access to skilled providers is limited by financial constraints and geographic distance often resort to abortions performed by untrained providers using unsafe methods or attempt to self-induce an abortion (Hussain 2013:1). The differential in access to safe abortion care places a disproportionate burden on poor women who are seeking abortion services and also on the public health services which divert the scarce health care resources to care for their complications (Henshaw, Adewole, Singh, Bankole, Oye-Adeniran, Hussain 2008:48; Vlassoff et al 2012:8).

Social factors like partner opposition to a pregnancy, union stability, and other household and community circumstances often influence the decision to terminate an unintended pregnancy. Men are involved in abortion decision making directly, through "orders" to abort, or indirectly, through denying responsibility for the pregnancy especially if the couple is unmarried since premarital pregnancy is usually socially sanctioned (Schwandt, Creanga, Adanu, Danso, Agbenyega & Hindin 2013:509). Whereas, within the marriage context a man expects his wife to carry any pregnancy to term and continue childbearing.

A study by Font-Ribera, Pérez, Salvador and Borrell (2007:132) found that among pregnant women who live with their partners the lower their educational level and especially when they had limited resources the more likely they will end pregnancies in unsafe abortion. On the other hand it was reported that in some instances men do not want women to have abortions. Therefore, in order to minimise conflicts that might arise from disclosure about the abortion some women arrange abortion secretly (Moore, Jagwe-Wadda & Bankole 2011:38). In Uganda most men perceive that women who have had or are having abortions do so because they had become pregnant by other than their husbands therefore, they would not provide support (financial or otherwise) to a woman in such a situation to help the woman to have an abortion or receive proper post-abortion care (Moore et al 2010 as cited in Singh 2010:855).

Societal norms that define the acceptability or rejection of an abortion influence the outcomes of unwanted pregnancy. In some contexts, notably Asia, sex-selective abortion as the result of societal values that favour male offspring had significant effect on the propensity to terminate a pregnancy (Abrejo, Shaikh & Rizvi 2009:11). Unsafe abortion in Ugandan society is highly stigmatised, anti-abortion stigma has even been reported among the highly-educated and health workers (Hussain 2013:1).

Induced abortion has *moral and religious dimensions*. The degree of religiosity and adherence to religious views affect fertility and abortion behaviour. Women with no religious affiliations are more likely to terminate unintended pregnancy compared to those who belong to a religious group (Finer & Zolna 2011:484). A study in Brazil showed that people frequently attending Pentecostals services demonstrated the strongest opposition to the practice of abortion (Ogland & Verona 2011:819).Similar findings were reported in South Korea where Christian women were much less likely than Confucian women to have an induced abortion (Chung 2007:707). In Uganda, the Catholic Church, is the largest single religion in Uganda to which 42% of the population belong (UBOS 2008:11), and the rapidly-growing evangelical movement strictly prohibit abortion.

Reliable data on abortion are difficult to obtain especially in countries where abortion is illegal due to under-reporting and misreporting of induced abortions (Souza, Lozano & Gakidou 2010:300,302; Harb & Habil 2013:161). In countries where abortion is highly restricted, morbidity and mortality resulting from unsafe abortion tend to be high, attesting to the fact that women seek abortions regardless of laws prohibiting abortion services (WHO 2011:4). Women of all socioeconomic levels seek abortions (Sedgh et al 2012:631), however, in these settings where abortion is prohibited by law, access to safe abortion services is primarily a function of the ability to pay and having access to networks of safe, clandestine abortion providers (Hussain 2013:1). In developing countries, poor women, rural women and young women have limited resources to pay for safe abortion procedures; therefore, they either resort to seek abortion under unsafe conditions from traditional providers who have no formal training or self-induce the abortion using a variety of substances. Such women are thus most likely to experience complications related to unsafe abortion. Urban women and wealthier women have better access to safe abortion services (WHO 2012:1) making wealthier women less susceptible to abortion related complications.

Uganda's Penal Code derived from the British law permitted abortions on grounds of saving the woman's life and preserving her physical and mental health (Uganda Penal Code Act 1950:cap142). According to the 2006 National Policy Guidelines and Service Standards for Sexual and Reproductive Health and Rights, pregnancy termination is permissible in cases of foetal anomaly, rape and incest, or if the woman has HIV. However, the law and the policies are not clearly described in the legislation; and because of the ambiguity in the interpretations of the law medical providers, even though the penalties do not apply to the provision of legal abortions may be reluctant to perform abortion for fear of legal consequences (Hussain 2013:2; WHO 2011b:7). Abortion in Uganda remains highly restricted for medical purpose only; therefore, many women seek abortions in unsafe conditions often from unskilled providers. As a consequence, unsafe abortion has continued to be a major contributor to the case load of maternal and gynaecological services in the Ugandan health system (Vlassoff et al 2012:2).

Policy and Service factors, the provision, availability and access to abortion services are determined by the legal status of abortion. Access to safe abortion services may be hindered by lack of correct information and knowledge among many women and health-care providers on what the law allows with regard to abortion. The fear of violating a law produces a 'chilling effect' in which Health-care professionals tend to be overly cautious when deciding whether the legal grounds for abortion are met or not thereby denying women services to which they are lawfully entitled. Women are deterred from seeking abortion services within the formal health sector (WHO 2012b:94).

3.3.3.1.3   Quality of services

Quality of services is still poor in many of the health facilities and official abortion services are too costly requiring a fee that many cannot afford (WHO 2011b:7; Sundaram, Vlassoff, Mugisha, Bankole, Singh, Amanya & Onda 2013:180). Training of providers is an important element influencing the decision to terminate a pregnancy. All these factors act as barriers and increases exposure to the risk of morbidity and mortality outcomes due to unsafe abortion (WHO 2011b:7).

3.3.3.1.4   Health system barriers

Health system barriers to accessing safe abortion services exist even in settings where the laws on abortion are more liberal. The barriers include among others, provider opposition, stigma because abortion is a moral choice and therefore it influences health-care providers' degree of involvement in services, poor knowledge of abortion legislation, a lack of providers trained to perform abortions and lack of facilities designated to provide abortion services particularly in the rural areas(WHO 2008:7, 8). The dearth of abortion health-care providers undermines the availability of safe, legal abortion, and has serious implications for women's access to abortion services and for health-service planning (UNDP/UNFPA/WHO/World Bank Special Programme ... 2010:4, 5).

3.3.3.2   Consequences of unsafe abortions

Complications from unsafe abortion accounted for an estimated 13% of all maternal deaths worldwide (WHO 2011b:27; Guttmacher Institute 2012:2). Almost all abortion-related deaths occur in developing countries with the highest number occurring in Africa. Unsafe abortion is a significant cause of ill-health among women in the developing world. Estimates indicate that 8.5 million women annually experience complications from unsafe abortion that require medical attention and three million do not receive the care they need (Singh 2010:851; Singh, Darroch & Vlassoff 2009:4). It is also estimated that approximately 1.7 million women have become infertile as a result of unsafe abortions, and an estimated 3 million women suffer from reproductive tract infections (Singh 2010:858). Unsafe abortion has significant negative consequences beyond its immediate effects on women's health. Complications from unsafe abortion may reduce women's productivity, increasing the economic burden on poor families; cause maternal deaths that leave children motherless and result in considerable costs to already struggling public health systems (Vlassoff et al 2012:8; Babigumira, Stergachis, Veenstra, Gardner, Ngonzi, Mukasa-Kivunike & Garrison 2011:1).

Treating medical complications from unsafe abortion places a significant financial burden on public health care systems in the developing world. The minimum annual estimated cost of providing post abortion care in the developing world is $341 million (Vlassoff, Walker, Shearer, Newlands & Singh 2009:114). Post abortion care services

for women with complications of unsafe abortion often require expensive treatment in terms of skilled personnel, surgical procedures, expensive drugs and supplies and prolonged hospital stays (Henshaw et al 2008:48).

Studies conducted in Uganda reported a substantial cost of unsafe abortion to the already struggling health system. Vlassoff et al (2012:8) indicated that the cost of treating post-abortion complications from unsafe abortion procedures may be around 4.0% of total spending on maternal and newborn health and equivalent to 4.1% of total government spending on health. Another study that used a decision-analysis model to estimate both societal costs and health-system costs of induced abortion in Uganda reported that each induced abortion incurs a total cost of $177, of which $85 is the direct medical and non-medical cost to the health system and $92 is the indirect cost due to lost productivity (Babigumira et al 2011:1).

Complications from unsafe abortion accounted for an estimated 13% of all maternal deaths worldwide in 2003 and 2008. Virtually all of these deaths occur in developing countries (WHO 2011:1; Shah & Ahman 2010:93). Of the women who survive abortion related death, 8.5 million experience complications that require medical attention each year. Three million of these, however, do not get the needed care. The risks of unsafe abortion are not just to the woman involved, unsafe abortions also impose costs on families and health care systems and the whole society (Singh 2010:849).

3.3.3.3 *Adolescents and unsafe abortion*

Pregnancy among unmarried adolescents is often a result of coercion, forced sex and therefore is unintended, outside marriage and usually ends up in unsafe abortion (Aderibigbe, Araoye, Akande, Musa, Monehin & Babatunde 2011:124). In many countries, adolescents comprise a significant proportion of abortion-seekers. Eighteen percent of U. women obtaining abortions are teenagers (Jones, Finer & Singh 2010:5). About 2.5 million adolescents have unsafe abortions every year, and they are more seriously affected by complications of abortion than older women. Forty-one per cent of unsafe abortions in the developing regions are among young women aged 15–24 years and fourteen percent are among women aged 15–19 years. In the Sub-Saharan Africa the proportion of unsafe abortion among women adolescents (age 15–19 years) is 25% (WHO 2013a:[online]; Guttmacher Institute 2010:2; Shah & Åhman 2012:169).

In Uganda, premarital pregnancy especially among adolescents is highly stigmatised, as a result attempts are made to terminate the pregnancy (Uganda Bureau of Statistics 2012 as cited in Hussain 2013:2). In Uganda 140,000 of the 297,000 cases of unsafe abortion that take place every year occur among young girls aged 15-24 years of age (Singh et al 2005:189). Adolescents frequently make up a large proportion of patients who are hospitalised for complications from such procedures (Sundaram, Vlassoff, Mugisha, Bankole, Singh, Amanya & Onda 2013:181). Hospital-based studies in Malawi, Uganda and Zambia, showed that adolescent women represent one-fourth to one-third of patients suffering from complications of unsafe abortion, and in Kenya and Nigeria, more than half of women with the most severe abortion complications are adolescents (Boontra 2007:2).

Mortality is frequently highest among adolescents since they are slow to recognise the pregnancy, are least able to afford appropriate care and most vulnerable to receiving poor quality care offered by unqualified people and using ineffective methods (Aderibigbe et al 2011:122). The longer it takes for an adolescent to identify and access an abortion provider and the later the gestational age of the pregnancy, the greater the likelihood of complications (Harris & Grossman 2011:77; Sedgh et al 2012:630).

A recent study in Uganda reported that beyond the health consequences of unsafe abortion negative economic consequences was highest (92%) among the teenagers. On average, Ugandan women paid 59,600 (US$23) shillings for their abortion procedure. However, those who received treatment at a health facility for post abortion complications spent an average of 128,000 shillings (US$49) for both the procedure and the treatment of resulting complications (Sundaram et al 2013:179-180). This fees are beyond the reach of many women considering that poverty is widespread in Uganda and more than 25% of the people live below the poverty line (World Bank:[online]).

3.4 OPPORTUNITIES FOR IMPROVING ADOLESCENTS' SEXUAL REPRODUCTIVE HEALTH

Inadequate knowledge remains a major barrier among adolescents mainly because few young people receive adequate preparation for their sexual lives. This leaves them potentially vulnerable to coercion, abuse and exploitation, unintended pregnancy and

sexually transmitted infections (STIs), including HIV. Many young people approach adulthood faced with conflicting and confusing messages about sexuality and gender (UNICEF 2012:2).

An in-depth study of four Sub-Saharan African countries found that 60% or more of adolescent men and women believed in the common misperceptions or had poor knowledge about the prevention of unintended pregnancy and HIV; and one-third or more did not know any source of contraceptives (Guttmacher Institute 2010:2). Other studies have also revealed that many in -school adolescents lacked the basic knowledge on various aspects of reproductive and sexual health and have concluded that there is a need to develop well-structured intervention programmes on reproductive and sexual health education for adolescents (Nair, Mini, Leena, Thankachi, Babu, Russell & Pillai 2012:S68; AbRahman, AbRahman, Ibrahim, Salleh, Ismail, Ali, Ahmad 2011:720; Shahid, Nasim, Memon & Mustafa 2012:50).

Adolescence and young adulthood offer opportunities for health gains both through prevention and early clinical intervention (Patton, Coffey, Cappa, Currie, Riley, Gore, Degenhardt, Richardson, Astone, Sangowawa, Mokdad & Ferguson 2012:1665). However, opportunities for prevention of disease and injury in this age group are not fully exploited (Gore et al 2011:2093).Targeting adolescents with sexuality education programmes could be rewarding, both in terms of understanding their needs and introducing targeted interventions (Nair et al 2012:S64).

3.4.1 School-based sexuality education

Sexuality education is a lifelong process of acquiring information and forming attitudes, beliefs, and values. It encompasses sexual development, sexual and reproductive health, interpersonal relationships, and affection, intimacy, body image, and gender roles (Sexuality Information and Education Council of the United States (SIECUS):[online]). Sexuality education is therefore a requirement for making informed and responsible sexual decision making by an individual.

UNESCO (2009:3) states that the primary goal of sexuality education is to equip children and young people with the knowledge, skills and values to make responsible choices about their sexual and social relationships in a world affected by HIV. In most

societies schools are regularly attended mostly by young people. Of those young people who attend school, most do so before they initiate sex and some are enrolled in school when they do initiate sex. Therefore schools provide a practical means of reaching large numbers of young people from diverse backgrounds in ways that are replicable and sustainable (Gordon 2008:9).

School-based sexuality education has been identified as one of the primary preventive approach for adolescent sexual risk taking behaviours because it provides young people with age-appropriate, culturally relevant and scientifically accurate information adolescents need to be able to make informed choices about their sexual lives (Nair et al 2011:S68).Sexuality education programmes have been shown to have the following impact on young people (UNESCO 2009:2–3):

- Reduce misinformation; increase correct knowledge; clarify and strengthen positive values and attitudes; increase skills to make informed decisions and act upon them; improve perceptions about peer groups and social norms; and increase communication with parents and other trusted adults
- Abstain from and/or delay the debut of sexual relations; reduce the frequency of unprotected sexual activity; reduce the number of sexual partners; and increase the use of protection against unintended pregnancy and STIs during sexual intercourse.

Sexuality education also has a potentially critical role in the context of HIV and AIDS because young people are at heightened risk of acquiring HIV and yet 60% of young people between 15 and 24 years of age are unable to correctly identify ways of preventing HIV transmission (Piot, Bartos, Larson, Zewdie & Mane 2008:853; UNAIDS 2008 as cited in UNESCO 2009:4). Sexuality education therefore, has the potential to contribute significantly to improving young people's knowledge base, thereby also supporting HIV prevention efforts (UNESCO 2014:24).

Worldwide there is no agreement on the most suitable type, strategy, content and process of school-based sexuality education (UNESCO 2009:5). There are two main types of sexuality education; Abstinence-only education which teaches abstinence as the only morally correct option of sexual expression for teenagers. It usually censors information about contraception and condoms to emphasise only their failures and risks

(Advocates for Youth 2009:3). Abstinence only education is based on the more morally conservative approaches led by the conservative Christian crusaders in the US in the 1960s (Kantor, Santelli, Teitler & Balmer 2008:7).

In the US, since 1997 the federal government invested more than $1.5 billion dollars in abstinence-only programs and until 2010 adolescent reproductive health programs which met a strict abstinence-only definition were the only type of sexuality education eligible for federal funding. No funding existed for comprehensive sexuality education which stresses abstinence but also provides information about contraception and condoms (Lindberg 2011:332).

This condition for funding applied as well for US funded International Aid programs especially the Presidential Emergency Plan on AIDS Relief (PEPFAR) in selected developing countries (Njoroge, Pia, Pertet & Ahlberg 2010:143-144). The PEPFAR's HIV prevention strategy was stated as follows: will promote the proper application of the ABC approach, through population specific interventions that emphasise abstinence for youth, including the delay of sexual debut and abstinence until marriage; HIV/AIDS testing and fidelity in marriage and monogamous relationships; and correct and consistent use of condoms for those who practice high-risk behaviours. (Office of the United States Global AIDS Coordinator 2004 as cited in Parkhurst 2011:241).

Proponents of the abstinence only education argue that abstinence allows youth to avoid the risks of unwanted pregnancy and sexually transmitted diseases (STDs); using condoms or other forms of contraception merely reduces these risks. Thus, they refer to abstinence sexuality education curricula as risk-avoidance or risk-elimination programs (Kirby 2008:18). However, studies have reported that abstinence only education is ineffective in delaying sexual debut or risky sexual behaviours (age at initiation of sex, return to abstinence, number of sexual partners, or condom or contraceptive use) (Lindberg et al 2012:335; Kohler, Manhart & Lafftery 2008:344; Kirby 2008:24). Abstinence-only programs show little evidence of sustained (long-term) impact on attitudes and intentions. Worse, they show some negative impacts on youth's willingness to use contraception, including condoms, to prevent negative sexual health outcomes related to sexual intercourse (Clark, Trenholm, Devaney, Wheeler & Quay 2007:xvi).

Comprehensive sexuality education teaches about abstinence as the best method for avoiding STDs and unintended pregnancy, but also teaches about condoms and contraception to reduce the risk of unintended pregnancy and of infection with STDs, including HIV (Advocate for Youth 2009:1; Kirby 2008:18). Evaluations of comprehensive sexuality education programs reported that these programmes can help youth delay onset of sexual activity, reduce the frequency of sexual activity, reduce number of sexual partners, and increase condom and contraceptive use (Erkut, Grossman, Frye, Ceder, Charmaraman & Tracy 2013:494; Lindberg et al 2012:337; Kirby 2008:24).

Importantly, the evidence shows youth who receive comprehensive sexuality education are not more likely to become sexually active, increase sexual activity, or experience negative sexual health outcomes in other words comprehensive sexuality education programs are not confusing but are effective and realistic (Kirby 2008:23). Whatever the approach, evidence suggests that effective sexuality education curricula include consideration of facts and information, interpersonal skills, as well as values and exploration of perceptions of peer norms, attitudes and intentions (Gordon 2007:7–8).

3.4.1.1 *Sexuality education in Uganda*

Sexuality education has not been part of the national curriculum until 2003. However, during this time sexuality education especially HIV/AIDS education was taught in Ugandan schools through a variety of extracurricular means including the media, youth groups, drama, music, and Parent-Teacher Associations (Jacob, Mosman, Hite, Morisky & Nsubuga 2007:121). Identifying this gap, President Museveni launched a national initiative in 2003, seeking to make HIV/AIDS an integrated part of primary and secondary education throughout the country. Instruction was to begin at the primary level and later was to be integrated into five examinable subjects at secondary level.

The Uganda's sexuality education policy is said to be influenced by 1994 ICPD Programme of Action and morally conservative approaches such as PEPFAR thus the focus on abstinence is 'consistent with Uganda's religious, cultural, moral and spiritual values (Padmini & Aggleton 2013:42).

3.4.2 Implementation of sexuality based education

The benefits of SBSE are evident and global campaigns promoting the introduction and scale up of school-based sexuality education has gained momentum over the recent years (UNESCO 2009:1). Unfortunately the implementation of SBSE has remained weak in most countries (Polat, Atici, Karakas, Culha & Erdogˇan 2012:100). In Uganda, recent studies, however, have reported that on the whole implementation of sexuality of education in Uganda is still weak (Bankole et al 2007a:40; Bankole, Ahmed, Neema, Ouedraogo & Konyani 2007b:218; Jacob et al 2007:121). Key SBSE stakeholders including education ministry staff, school principal teachers and parents are reluctant in its implementation because they lack the confidence (AbRahman et al 2011:723; Shahid et al 2012:51; UNESCO 2009:8).

3.4.2.1 Teachers' experiences

Teachers have been identified as key authorities in the delivery of sexuality education. Several studies have reported teachers' overall support for the provision of sexuality education in schools as well as the inclusion of a wide range of sexuality education topics in the school curricula (Isaiah 2009:113; Mkumbo 2012:157). It has been reported that in most countries of the world, many primary school teachers do not deliver effective education about puberty and sexuality (Carman, Mitchell, Schlichthorst & Smith 2011:269).

A complex mix of internal and external factors influence teacher's capacity to teach effectively. The factors include teacher pre-service education, teaching background, confidence, practical experience, values, level of professional development, and access to classroom resources, and support in delivery, timetabling and financial resources (Woo, Soon, Thomas & Kaneshiro 2011:144-145; Mkumbo 2012:157-158). In addition, teachers do not feel comfortable discussing sexual reproductive health issues with students due to a fear of parents' reactions (Kibombo et al 2008:16-18; Mkumbo 2012:157-158; UNESCO 2009:8). Discussing sexual matters openly is regarded taboo in many societies thus creating a significant barrier to effective sexuality education in addition to religious incompatibility (Kibombo et al 2008:15; Musiimenta 2013:5-6).

Teachers have reported that teaching sexuality education was a challenge because of cultural barriers. As an example given, it is culturally a taboo to mention the sexual organs by their names in public which makes it problematic to teach certain content areas (Helleve et al 2009). Studies by Smith and Harrison (2013:68) and Padmini and Aggleton (2013:40) identified teachers' attitudes, values, beliefs and often superstitions in relation to young people's sexual activity to inevitably affect the content and nature of school-based sexuality education.

3.4.2.2 *The role of parents*

Sexuality education should begin at home and parents are generally acknowledged as the initial sexuality educators of their children. However, most parents have maintained a culture of silence when it comes to discussing sexual and reproductive health issues with their children (UNESCO 2009:2; Njoroge et al 2010:143). A number of barriers to communication including the need to protect childhood 'innocence', suitable timing and age appropriateness for explanations, personal discomfort, and fear of criticism and judgement have been identified to hinder parents' involvement in sexuality education (Stone, Ingham & Gibbins 2013:288).

On the other hand several studies have demonstrated that diverse populations of parents are supportive of comprehensive sexuality education (Constantine, Jerman & Huang 2007:167; Tortolero, Johnson, Peskin, Melissa, Cuccaro, Markham, Hernandez, Addy, Robert, Ross & Li 2011:8). Rather than being fearful of negative parental attitudes towards sexuality education, school administrators should consider that parents may want schools to intervene and teach material content that parents themselves may not feel capable of or comfortable doing at home. In Tanzania, parents/guardians of adolescents expressed willingness toward introduction of sexuality education in schools. However, they requested to be involved in designing and teaching the programme (Mbonile & Kayombo 2008:26). Parent to child communication is reported as an important factor in improving utilisation of reproductive health services by adolescents (Feleke, Koye, Demssie & Mengesha 2013:294).

3.4.2.3 Adolescents' experiences

Accurate knowledge is important for healthy sexual development and the adolescents who have adequate high level knowledge are less likely to be involved in risky sexual behaviours. While most young people point schools as a primary useful and/or preferred source of sexuality information (Coleman &Tesa 2007:299) they have reported that the lack of their confidence and knowledge results from receiving inadequate SBSE at schools (Shahid et al 2012:50). Students' perceptions of the effectiveness and quality of SBSE are influenced by the adequacy of coverage of topics on health.

Adolescents are therefore looking for comprehensive sexual health curricula that fit with their interests, provides a variety of information on specific topics including sociocultural issues and is delivered by comfortable, competence and creative teachers (Byers et al 2012:226; Tanner, Reece, Legocki & Murray 2007:91). Sexuality education programmes would be more attractive and more effective to young people if they will be engaged in developing curricula that meet their needs (UNFPA 2010:16; Fisher & McTaggart 2008:3).

3.4.2 Strategies to improve Sexuality education interventions

Sexuality is a sensitive issue in many African settings. Tactical communication of the goals of a sexuality education intervention cautiously avoiding areas or terms that may lead to unending debates are crucial in the smooth delivery of interventions and making SBSE more acceptable. This can be achieved through involvement of stakeholders particularly parents and teachers very early in the design of the intervention, and exhibiting cultural sensitivity in a community where it had hitherto been a taboo for adults and pupils to discuss sexual issues (Paul-Ebhohimhen, Poobalan & Teijlingen 2008:4).

For sexuality education interventions to be more successful and have impact on behavioural change the interventions should be extensively integrated in community-wide risk reduction programmes and should be closely monitored and evaluated (Doyle, Ross, Maganja, Baisley, Masesa, Andreasen, Plummer, Obasi, Weiss, Kapiga, Watson-Jones, Changalucha & Hayes 2010:1). Jewkes et al (2010:2) highlighted that the secret to a successful school-based intervention seems to be a participatory, gender-

transformative intervention that emphasises skills building, both critical reflection rather than focusing on knowledge only.

School-based ASRH programmes have potential if adapted to the realities of the local educational system through simplification of the subject matter, in-service training on alternative teaching methods, improvement of teacher–pupil and teacher–community relationships and close supervision and appropriate responses to abusive or exploitative practices (Plummer, Wight, Wamoyi, Nyalali, Ingall, Mshana, Shigongo, Obasi & Ross 2007:483).

3.5   CONCLUSION

In this chapter, literature review of the concept of adolescence was discussed, including the major consequences of risky sexual behaviours during adolescents. The factors contributing to the adolescents' susceptibility to some of the risks are also highlighted. The role of school-based sexuality education in preventing adolescents falling vulnerable to risky behaviours are described. Description is made of the role of some of the key stakeholders like adolescents, parents and teachers in the implementation of sexuality education and the barriers to implementation of school-based sexuality.

CHAPTER 4

DATA COLLECTION AND ANALYSIS

4.1   INTRODUCTION

The purpose of this chapter is to describe the overall structural plan of the research and the processes that were used to carry out the study.

Prior to applying the empirical phase of a study, the researcher is required to make a series of decision about the research design that would be appropriate for the study, methods of data collection to be used and how data should be analysed (Babbie 2007:378). The decisions taken in this study included determining the research context, research design and the research methods. The research methodology considered from which decision was to be made included qualitative paradigm, research population, sampling and sampling techniques.

Data collection methods and data collection procedures are also discussed along with the data analysis methods data analysis. Although the discussion separates data collection and data analysis, data collection and data analysis were actually conducted simultaneously. Data analysis commenced immediately following the completion of the first focus group discussion and continued until completion of the study; again following the Grounded Theory design. Finally, the principles of ethics applied to the study and the procedures taken to ensure the study results are trustworthy are set out.

4.2   RESEARCH DESIGN

Research design refers to the basic plan of the research designed to answer research questions (Polit & Beck 2010:244,254; Vaus 2001:143). According to Peffers et al (2008:45), a properly designed research should include the planning of research procedures as well as the procedure for data collection and analysis. The research design further describes whether the research is descriptive or experimental in nature, specifying the target population to be studied (Vaus 2001:143).

In this study a qualitative research design was selected to explore the experiences of adolescents and teachers in selected rural primary schools; and the perceptions of parents regarding school-based sexuality education in Gulu district, northern Uganda. The choice of the design was made because of its attributes such as: use of multiple ways of understanding by using various data collection strategies interviews, participants observations, there are multiple interpretations of the same event, understanding of the meaning of phenomenon from those involved. Therefore, would provide an insight into the questions raised on the subject.

4.2.1 Grounded theory

Grounded theory enables the researcher to generate general explanations (theory) of a process, an action or an interaction shaped by the views of a large number of a large number of participants (Creswell 2013:83). In this study, this methodology was applied to generate information that explains the living experiences of adolescents and teachers and the perception of the parents of school-going children in the selected primary schools on school-based sexuality education due to its focus on social processes and interactions and inherently involves others.

4.3 RESEARCH METHODS

This section describes the research setting, study population, sampling procedures, research procedures and how data was handled and analysed.

Research method refers to the logical process which is followed during the application of scientific methods and techniques when a particular phenomenon is investigated (Polit & Beck 2010:222). In other words, they are the practical procedures used to generate and analyse data (Birks & Mills 2011:4).

The research methods in this study focused on the description of the population, sampling and sampling technique, data collection and data analysis. In order to understand the experiences and perception of the studied population on school-based sexuality education individual and focus group interviews were conducted. The researcher applied the research procedures to identify themes, categories and sub-categories which helped in the theory development.

4.3.1 Setting

According to Polit and Beck (2010:568), setting is the physical location and conditions under which data collection takes place. In qualitative research, setting for the study is the field; a natural setting where the individuals of interest experience life. The choice of the natural setting is to maintain occurrence of the phenomenon of inquiry (Streubert & Carpenter 2011:27, 28). In the natural setting the researcher does not control the environment or the informants (Polit & Beck 2010:261), this requires good interpersonal skills to enable mutual trust between the participant and researcher in order to access personal information and private spaces (Streubert & Carpenter 2011:28).

In this study, the setting was the selected primary schools in Gulu district, northern Uganda and selected homes of the parents of the adolescents in these primary schools. The selection of the setting was because the primary education system in Uganda runs for seven i.e. from primary one to primary seven, and the approved age for entry into primary school at primary one is 6 years (Kavuma 2010:[online]). While under normal circumstances primary school education lasts seven years, many pupils however, especially in the rural areas primary education lasts longer because some drop out on the way through and re-join from where they had left at a later stage. Therefore, it is not unusual to find older teenagers in primary schools. It is the mixture of younger and older school pupils with sexual encounters at early ages thereby risks adolescent reproductive health.

Permission to gain access to these setting was obtained as follows; certificate of ethical approval form UNISA was used to apply for ethical clearance from the local and national (Mildmay Uganda and Uganda National Council for Science and Technology) institutional review boards respectively. A letter of application for permission to conduct the study in the primary schools within the district was submitted to the District Education officer (DEO). The approval from the DEO together with ethical clearance from UNISA and the local authorities were then used to obtain verbal permission from the school head teachers (see Annexures C, D, E).

4.3.2 Research population

A research population also referred to as accessible population is the entire set of elements i.e. individuals, objects, events, experiences that have common characteristics to which the researcher has access and meet the criteria for inclusion in a given universe. In this study the accessible population was all the adolescents in rural primary schools and their teachers and the parents of these adolescents. Within the accessible population there is the target population (Polit & Beck 2010:306). The target population for this current study were adolescents and teachers in primary schools and parents in Gulu district from whom the sample was selected.

4.3.3 Sample

Polit and Beck (2010:75) define a sample as a subset of the population that is selected for a particular study, members of which become research participants. Grounded theory studies, like many other qualitative studies tend to have small information rich samples that are not pre-determined. Large sample size is unnecessary and might result in less depth and richness (Holloway & Wheeler 2013:145, 146). In this study, the sample was adolescents, the teachers and parents of these adolescents in the four primary schools involved in sexuality education. The sample was considered appropriate for the study because of the exposure the sexuality education curriculum, met the age criteria and being in a rural environment.

4.3.3.1 *Sampling technique and sample selection*

Sampling technique defines the process for selecting a group of people, events, behaviours or other elements with which to conduct a study where the research population cannot be managed because of its size (Polit & Beck 2010:307). In qualitative studies, individuals are selected to participate in a study based on their first-hand experience with the phenomenon; a process defined as purposive sampling (Merriman 2009:94; Streubert & Carpenter 2011:28). This is because the main aim of qualitative study is to generate a rich and dense description of the phenomenon rather than use techniques that support generalisability of findings (Streubert & Carpenter 2011:29). In addition, to being experts in the experience or phenomenon under investigation, participants must be willing to participate and have the time to share the necessary information (Morse 2007 in Bryant & Charmaz 2010:231). The main goal in a

grounded theory study is to select participants who can best contribute to the evolving theory (Polit & Beck 2010:322).

In this study purposive sampling was used to select the participants according to their knowledge about the topic being researched, or the type of information that is needed to complete the researcher's understanding of the phenomenon (Morse 2007 in Bryant & Charmaz 2010:234). The purposive method of sampling assisted the researcher to include only those who met the sampling criteria, and were able to provide the best optimal rather than the average experience. Early analysis of data indicated some issues that needed further exploration; hence the theoretical sampling process guided the on-going theory development as explained later in this chapter. Data were collected until theoretical saturation was reached, in other words until no new or relevant data emerges regarding a category and relationships between categories are established (Strauss & Corbin 1998:123, 143).

The selection criteria for the participants

Inclusion criteria also terms eligibility criteria refer to the characteristics that the study participants will have in common and that must be considered in selecting the study sample (Boswell & Cannon 2011:149). The inclusion criteria for this study include:

(i)   Adolescents aged 12-16 years who have attended sex education at the rural primary school.
(ii)   The parents of the adolescents who have attended school-based sexuality education.
(iii)   Teachers who have been engaged in teaching sexuality education in rural primary school for at least a year.
(iv)   Have to be willing to participate in the study and give a written consent.
(v)   Either male or female.

Exclusion criteria

Those who were excluded are adolescents who are less than 12 years, who have not attended sexuality education and their parents and teachers are not involved in teaching

sexuality education as well as all participants who did not consent to participate in the study was excluded.

4.3.3.2 *Sample size*

Qualitative studies consist of small sample size studied in depth and a large sample size is unnecessary as it might result in less depth and richness (Holloway & Wheeler 2013:146). In studies applying grounded theory it is difficult to predict sample size at the beginning of the study because it is not possible to determine what issues will emerge as problematic and how it was resolved. One of the criteria for guiding sample size in qualitative research is saturation. According to Holloway and Wheeler (2013:146), saturation is when everything of importance to the agenda of a research project will emerge in the data and concepts obtained. For grounded theory theoretical saturation occurs when there are just more instances of the existing categories (Urqhuart 2013:8). For this study, sampling continued until the categories were saturated and a core category emerged that integrates most of the categories as recommended by Artinian, Giske and Cone (2011:9).

4.4 DATA COLLECTION

Data collection is a series of interrelated activities aimed at gathering good information to answer emerging research (Creswell 2013:146). It is a process that goes well beyond the actual interviews and making observations. The common data collection methods in qualitative research are focus group discussions, individual interviews, participant observations, document reviews and audio-visual materials (Creswell 2013:159).

In this study, face-to-face individual interviews and focus group interviews were used. The main data collection instrument was semi structured interview guide, all the data was recorded as field notes or verbatim transcript. The selection of the approach on data collection was because by using an unstructured interview where the participant gives the actual verbal grand tour, the researcher was able to identify the atypical events and other phenomenon in the narrating.

4.4.1 The data collection instruments

4.4.1.1 Semi structured interview guide

Semi structured interview guide contains a set of fixed questions but does not require fixed responses to the questions. The interview guide is used to ensure that all question areas are covered and the interviewer encourages participants to talk freely about all the topics on the guide (Polit & Beck 2010:341).

Data were collected through audio-recorded interviews using an interview guide. The guide contains a list of broad questions that must be addressed in the interviews (Polit & Beck 2010:341). Tape recording interviews is useful so that the interviews can be listened to several times to detect themes and nuances missed during the interviews (Artinian et al 2009:10).

In this study, semi structured interview guides containing similar questions was used for FGIs with the adolescents and individual interviews for the teachers. A different interview guide was used for interviews for the parents.

4.4.1.2 The researcher as a data collection instrument

In qualitative research, researcher collect data by using their mind and body when examining documents, observing behaviour and interviewing participants. Hence the researcher is part of the study who contributes to the subjective nature of the study. To ensure rigor in qualitative study the researcher has to remain true to the expressions of the participants' experiences, a view corroborated by Streubert and Carpenter (2011:22).

The grounded theory approach encompasses acknowledgement of researcher's bias. Glaser and Strauss (1967) as cited in Jones and Alony (2011:102) recommend that researchers enter the field without preconceived ideas of the subject area of what might be discovered or where it may lead and remain true to the data. In this study, the researcher went into the research study with little prior knowledge of school-based sexuality education in primary schools. In order to gain some initial knowledge of the

experiences of school-based sexuality education and develop theoretical sensitivity, a pre-test was done.

4.4.1.3   Pre-testing the interview guide

A pre- test serves as an initial step to facilitate a research study, its aim is to try out the research approach on a small population of the participants to identify potential problems that may affect quality and validity of the results (Blessing & Chakrabarti 2009:114). Pre-testing the interview guide helped in refining the questions further, collect background information, and adapt research procedures. The participants for the pre- test were selected on the basis of convenience, access and geographical proximity and are not part of the main study (Polit & Beck 2010:165).

In this study, a pre-test of the study was conducted with a FGI of five adolescents and individual interviews for three teachers and two parents to pre- test the interview guides, interview skills and duration, use of the audiotaping equipment. The participants in the pre-test were selected based on the inclusion criteria, however, they were not be included in main study.

4.4.2   Data collection methods

4.4.2.1   Interviews

Interviews are interactions between the participants and the researchers that produce data as words (Burns & Grove 2010:271). Kvale (1996) as cited in Packer (2010:47) states that interview is a conversation that has a structure and purpose. The aim of qualitative research is to capture the social world of the participants from a broad and holistic approach (King & Horrock 2010:6). 'If you want to know how people understand their world and their life, why not talk to them?' (Kvale 1996 as cited in King & Horrock 2010:7). Qualitative interviews provide the means to collect data that show how people live and exist in their world in order to understand a phenomenon of interest.

At the root of in-depth interview is an interest in understanding the lived experience of other people and the meaning they make of that experience. For this to happen researchers have to keep their egos at bay and put the interviewee at the centre

because their stories are important (Seidman 2012:29). Reflexivity helps the researcher to consciously consider their biases, values and experiences that may shape the researcher's role in the interview process (Polit & Beck 2010:216).

The researcher's aim was to create the conditions under which the participants felt able to talk freely about what was important to them. Planning the choice of interview location is very important: steps were taken to ensure that interview rooms are private, convenient, quiet, adequately lit and safe. Similarly, accessibility and confidentiality was considered (Martin & Gynnild 2011:88).

In this grounded theory study on experience and perceptions of school-based sexuality education, the researcher used semi structured interview guides to conduct interviews for data collection with individual participants (parents and teachers) and focus groups with the adolescents. An audio-recording was used after obtaining permission for its use to capture all information during interviews. The researcher made field notes during and after the interviews. Field notes help the researcher to record information, synthesize and interpret data (Polit & Beck 2010:354). In this study, field notes included key points to follow up and full description of nonverbal behaviour during the interaction essential for full and accurate interpretation of the data. A reflexive journal was kept to provide an account and record of own perspectives, thoughts, feelings and knowledge about the topic as the data emerge. Reflexive journal and field notes are records that enhanced credibility by creating an audit trail (Polit & Beck 2010:498).

4.4.2.2 Individual interviews

In-depth interviewing is a particular kind of conversation between a researcher and participant that requires active asking and listening. Data collection at an individual level is aimed at discovering main themes and range of variation in experiences, beliefs, norms and practices of individuals. Individual interviews provide greater depth from individual participants and yield large volume of data in form of transcripts (Hesse-Biber & Leavy 2010:94, 177).

In this study, an individual interview was conducted with teachers and parents. Purposeful sampling was used to recruit the participants who had the knowledge needed to contribute to the understanding of school-based sexuality education. A semi-

structured interview guide was used to guide the discussions. Semi structured interviews is an open ended interview which has a list of topics to cover, they are used to collect similar information (Polit & Beck 2010:568).

4.3.2.3 Focus groups interviews

A focus group interview (FGI) is an interview of a group of people gathered to discuss a focused issue of concern. The aim is to describe and understand the meanings and interpretations of a select group of people to gain understanding of a specific issue from the perspectives of the participants of the group (Liamputtong 2011:3, 31).

FGI methodology is based on the symbolic interactionism theory (Liamputtong 2011:16) with three premises; (a) individuals behave toward things based on meanings the things have for them, (b) the meaning of things is acquired through social interactions they have with others and (c) these meanings are managed and changed through an interpretive process that individuals employ in dealing with the things they experienced (Blumer 1969 as cited in Liamputtong 2011:16). Therefore, FGI provides an avenue for direct contact, interaction and inductive analysis and reconstruction of reality (Liamputtong 2011:17). This constructivist grounded theory study seeks to understand the interaction between participants during the sexuality education programme from their perspectives through the focus group discussions.

The basic tenets for FGI according to Merton, Fiske and Kendall (1990) in Martin and Gynnild (2011:119) are; homogenous groups to promote greater productivity, adopt a nondirective approach allowing participants to respond regarding what is significant to them, create an informal atmosphere much like a conversation, circular sitting arrangement to promote group interactions, give introductory remarks to acknowledge diversity of the participants with no correct or incorrect answers, prepare interview guide with general topics but not fixed questions to which one rigidly adheres and remain on a topic area until participants have exhausted all relevant responses.

FGI has several advantages that make it suitable as method to solicit participants' views, experiences, opinions and meanings of an event.

- It offers the researcher a means to obtain understanding of a wide range of views that people have about a specific issues as well as how they interact and discuss the issue (Klenke 2008:132).

- For grounded theorist researchers, FGI provides the benefit of quick emergence of the core category (Martin & Gynnild 2011:129).

- It has the ability to cultivate people responses to the discussions as they evolve (Barbour 2007 in Liamputtong 2011:7).

- The group processes allow participants to explore their views, generate questions and express freely their points of view than individual interviews. This encourages other members to speak up (Liamputtong 2011:21).

- FGI is suitable for discussions on sensitive topics like sexuality because the multiple lines of communication generate a 'safe space' for discussions for others who share lived experiences (Liamputtong 2011:21).

In this study, FGI was used to solicit views, thereby gaining understanding of experiences of school-based sexuality education from the perspective of the adolescents in primary schools.

4.4.3 Data collection process

Data processing refers to the procedures leading to the actual data collection using the selected data methods.

4.4.3.1 Pre-interview arrangements

Creswell (2013:163) describes interviewing as a series of steps that involves among others:

(i)   Deciding on the research questions to be answered by the interviews.
(ii)   Identifying interviewees determining what type of interview is practical and useful to answer the research questions.
(iii)   Use of adequate recording procedures.
(iv)   Designing and use of interview guide.
(v)   Pilot testing the interview questions and procedures.
(vi)   Determining the place for conducting the interviews.

(vii)   Gaining access to participants and obtaining consent from participants to participate in the study.

(viii) Using good interview procedure.

In this study, the researcher designed the questions to be asked and decided on the data collection methods. Documents such as consent form, interview guide, and journal for taking notes were prepared. Entry and access into the research setting was negotiated with the appropriate authorities with permission granted in writing. Details for recruitment of each the three groups of participants were as follows:

For adolescents

The procedures followed for recruiting the adolescents into this study included:

- The head teachers of the schools where the potential participants (teachers and adolescents) are, was approached in person and requested to identify one teacher in the school would assist in recruiting the teachers and adolescents who met the inclusion criteria.
- The researcher met with the teacher recommended by the school principal and asked him/her to identify and recruit upper primary school students. The students required were both male and female aged between 12–16 years.
- A consent form was given to each student for his/her parents to review and determine whether or not to allow their children to participate in the study.
- Upon receiving written permission from students' parents, the researcher contacted the students to schedule a time for the focus group interview.
- The focus group interview was conducted with students on the date, time, and place determined in the previous step.

Parents

The procedures followed for recruiting the parents of the adolescents in the selected schools into this study included:

- The researcher met with the teacher recommended by the head teacher and requested him/her to contact parents of the students. These parents were either

parents of students who participated in the focus group interview or other parents.

- Parents were contacted either phonetically, by written invitation letters or approached in person for those near the school by the assigned teacher to inform them about this study and asked for voluntary participation.

- For parents who agreed to be involved in the study, a time to conduct an in-depth interview was scheduled by the researcher.

- The researcher asked each parent to sign a consent form before conducting an in-depth interview on the scheduled date, time, and place.

Teachers

The procedures followed for recruiting the teachers from the selected schools into this study included:

- The researcher met the head teacher of each school and asked him/her to recommend health education teachers for further contact.

- The researcher contacted the recommended teachers to inform them about this study and asked for voluntary participation.

- For teachers who agreed to be involved in the study, a time to conduct an in-depth interview was scheduled**.**

- The researcher asked each teacher to sign a consent form before conducting an in-depth interview on the pre-agreed date, time, and place.

4.4.3.2   Interview process

Beginning the interview

In the introductory stage of the interview sessions, the researcher introduced the research goals, objectives and explained the ethical issues as stated in the informed consent form. Each participant was then given a consent form to complete. The estimated duration of the sessions was confirmed with the participants. Permission to record the interviews was sought from the participants.

- The researcher conducted individual interviews with the participants (teachers and parents).

- Participants were encouraged to express and deliberate on their ideas freely and fully; including expression of feelings, events, meaning and thoughts connected to the experiences.

- An open-ended question was used to begin the conversation in order to create a relaxing, non- threatening environment.

- The initial questions was open ended with associated prompts, probes and follow-up questions and remarks designed to elicit narratives that demonstrated the participant's conception of the identified concepts.

- During the interview, the researcher remained attentive, avoided asking questions unnecessarily, and treated participants with respect and sincere interest.

- At the close of the interviews the researcher invited questions from the participants and thanked them.

4.3.3.3   Focus group interviews (FGI)

Participant selection for FGI is important in order to facilitate interactive discussions and sharing understanding and views while at the same time meeting the research aims. Additionally, the extent to which participants are different or similar will determine the interactions that take place in the FGI (King & Horrock 2010:66). In this study, an attempt was made to ensure that the group composition was homogeneous with respect to gender and age with similar experiences of school-based sexuality education for the groups subjected to focus group interview. To facilitate free and dynamic discussions among the participants, measures were taken to ensure that the setting was comfortable, quiet, and private and ensures confidentiality. Similarly, Hennick (2007) as cited in Liamputtong (2011:6) states that creating a permissive, non -threatening environment within the group for comfortable discussions ensures successful FGI. Ground rules for the FGI were emphasised on confidentiality, value of others.

In order to give participants sufficient time to discuss the aspects of their experience that they feel are important and relevant, in this study, between 4–6 participants were recruited for the interviews that lasted between 90 and 120 minutes. The focus group discussions were facilitated by the researcher who also monitored the group dynamics

to facilitate participation from all members and took notes of participants' behaviours. The interviews were audiotaped to prevent loss of essential data.

In FGI, participants are recruited up front before any substantive codes/categories have been found and therefore, participants cannot be chosen on the basis of theoretical sampling. However, these strategies were employed to promote theoretical sampling; a) Key points were noted on flip charts to allow subsequent speakers to add to the key points to reflect their experiences, b) each focus group interview was analysed prior to the next one and using pertinent topic areas that emerged from the previous FGI.

In order to ensure a conducive environment for the interviews, the following procedures were employed:

- A quiet place was sought for the purpose with a table and chairs around it for the convenience of the conversation and possible eye contact with one another.
- A 'do not disturb' notice was placed on the door to avoid distractions or interruptions.
- The sessions were held during break times as agreed upon with the Head teachers and the participants so as not to interrupt class activities.
- Cell phones were switched off to avoid interruptions.
- The audio-recorder was placed at the centre of the table after the methods of how information was recorded was explained, and permission to audiotape the interview was obtained from the participants.
- Although the participants knew one another from class attendance, introductions were done as an ice breaking mechanism.
- The letter of permission to conduct the study was read to the participants and each participant was requested to sign an assent consent form.
- To commence the interview in each group, the researcher asked an open ended question, designed to introduce the topic and to encourage the participants to be free and open.
- All the participants were encouraged to join in the discussions as the interviewer listened attentively, showing interest in the group discussions.

- The interview was terminated when all the major areas were covered. Participants were given an opportunity to ask questions. The researcher thanked the participants for sharing the valuable information and for their time.

4.5 DATA ANALYSIS

In this section, details of the data analysis according to the grounded theory methodology was provided. Grounded theory approach is concurrent, iterative and integrative as data collection, analysis and conceptual theorising occur simultaneously and from the beginning of the research process. This process continues throughout until the theory is developed.

The process of data analysis began before transcriptions of the tapes; the interviews were listened to immediately until salient ideas were embedded in memory so that the researcher mentally worked on the process of analysis while tapes are being transcribed.

The audio-recorded interviews were transcribed verbatim, the transcripts of interviews conducted in Luo were translated into English.

4.5.1 Coding and constant comparative method

Coding is the core process in the classical grounded theory methodology. It is the first step in the analysis of data in grounded theory data analysis. Coding helps conceptualise data into patterns and then reintegrate it as a theory (Holton 2007:265). There are three stages of coding; open, axial, and selective coding (Glaser 1978 as cited in Jones & Alony 2011:104). The coding stages are consecutive and sequential and the product of each stage guides the following stage.

4.5.1.1 Open coding

Open coding was used as transcripts were re-read whilst listening to the audio recording of the interviews. The researcher worked with the initially generated data fracturing and analysing for the emergence of a core category and related concepts (Holton 2007:265). Line-by-line coding was used to code everything and coding was done quickly without thinking too deeply to avoid forcing concepts yet at the same time

being cautious about theoretical codes (Oktay 2012:56). The following tips for open coding by Oktay (2012:56) were used:

- Coding for words and phrases that described or evoked strong emotions.
- Coded words and segments that described actions in other words gerunds ending with *"–ing".*
- Coded materials that reflected symbolic interactions such as sense of self, expectations of social roles, assessment of the judgment of others and justification of actions.
- Separation of different types of codes (vivo, substantive, theoretical) by underlining in vivo (participant's actual words), placing substantive codes in the right margin and theoretical codes in the left margin.

Open coding assisted in analysis of the data from the ground up, based on the participants actions and statements, and reduced the likelihood of superimposing my own preconceived notions on the data (Charmaz 2006:51).

Keeping the research question in mind, guided the interpretations that were made of the data (Strauss & Corbin 1998:143). Initially, this was done by asking, *What does this mean?* or *What is going on here?*

An example of line-by-line coding in open coding:

Examples of codes	Participants narrative data
Delaying sex	"We always talk about delaying sex because they are still young."
Promoting life skills Becoming assertive-adolescents	"The sex education being provided in the school is important. It has created a kind of life skills in the pupils and among which are they have become assertive."

As stated by Charmaz, grounded theory relies on the researcher's grappling with and interpretation of the data. Therefore, other researchers might have developed similar or different codes from the data depending on the content and direction of their coding (Wertz et al 2011:172).

Impressions and questions about codes were documented in memos throughout the analysis process. Constant comparison began during open coding as codes were compared and grouped into concepts and categories. These concepts were analysed for common themes. They were then grouped together according to these themes and assigned a higher order label marked the commencement of category development (Strauss & Corbin 1998:143). This led to axial coding phase.

4.5.1.2   Axial coding

Axial coding, defined by Strauss and Corbin as "the act of relating categories to sub-categories along the lines of their properties and dimensions" (Strauss & Corbin 1998:123). It examines the relationship between categories of the phenomenon in the data according to: "who, when, where, why, how, and with what consequences?" (Strauss & Corbin 1998:127). This helps to investigate conditions of situations described in the interview, their actions and consequences. Charmaz (2006:130) explains that axial coding re-assembles data that has been broken up into separate codes by line-by-line coding.

Axial coding conditional matrix enables the researcher to determine the relationships between the categories by examining the conditions that give rise to it; the context (its specific set of properties) in which it is embedded; the action/interactional strategies by which it was handled, managed, carried out; and the consequences of those strategies" (Strauss & Corbin 1990:97). Axial coding played the following role in this study. When examining the experiences and perceptions of the participants of sexuality education, the researcher considered contexts and settings of sexuality education; who were involved and why, responses to sexuality education. This assisted in the process of clarifying the components or "properties" of the categories in this study.

An example, axial coding framework was used to brighten the clarity of the links between the categories and their sub-categories as presented below in relation to the "consequences of" sexuality education. The categories "*preventing early marriages"* and *"emphasising abstinence"* with evidence from the data were identified.

Participant A indicated that the sexuality education led to abstinence:

"It also help adolescents to delay getting sexual relationship and it helps us to abstain from sex."

Participant S explained that sexuality education prevented early marriages:

"Other children who may have made up their minds to go and get married when they are still in school so it can change other people minds."

The excerpts above provides the evidence of the consequences of sexuality education.

Then the concepts/sub-categories that shared the same or similar characteristics were pulled together into more abstract categories "keeping adolescents in school."

4.5.1.3   Selective coding

Selective coding is the last step in which similar categories are grouped together to form more broad abstract /core categories that will form the heart of the theory. Core category is a category that is developed through densification and is represents the participants' major concern (Jones & Alony 2011:10, 107).

Selective coding is used to interlink the categories from axial coding to form emerging theory. Strauss and Corbin (1998:144, 145) explain that clues to how concepts are linked can be found in the data and until relationships are recognised that the theory evolves. The researcher interprets the data as a narrative storyline that explains the data as the stories of many people "reduced into and represented by several highly conceptual terms." The data are no longer understood as coming from individual participants but are abstractions by the participants collectively.

In this study, the core category was abstracted from various categories in axial coding to form one core. Charmaz (2006:174) states that analysis during coding is underpinned by the interpretive rendering of key point in the data rather than an objective report. The selection criterion of the core category was based on the categories which the researcher considered most significant and most frequent in bringing the other

categories together in a coherent manner. In this case the most significant category was "empowering adolescents." To validate that the core category is saturated, a second source of data from sexuality education literature was coded to fill gaps in the emerging theory.

The result of the analysis was a substantive theory describing the experiences of participants with sexuality education. They may be an end to themselves, or they may be further developed into a formal theory through higher levels of abstraction and conceptual integration in a wider range of contexts and groups (Lempert 2007:247). The nature of the theory which emerges is not necessarily generalisable to other contexts or settings.

4.5.2 Memoing

Memoing is a core step in the process of generating theory (Glaser 1978 as cited in Jones & Alony 2011:106). In this study, memoing was started as soon as concepts and categories had been developed. Memos record ideas, ask questions, describe cases, incidents and settings (Oktay 2012:68). Memos will guide the researcher to develop theoretical codes by revealing the relationships among the various categories and their properties.

During this study, throughout coding and analysis ideas about the data, codes, the emerging conceptual model was recorded in memos. Questions on the emerging data were asked in order to determine further data collection (theoretical sampling).

4.5.3 Theoretical sampling

Theoretical sampling is the decision about what data to collect next and where to find those data to develop an emerging theory optimally. The main objective of theoretical sampling is to discover categories and their properties and offer new insights about interrelationships that occur in the substantive theory (Polit & Beck 2010:320). The needs of the concepts and emerging theory dictated the participants' selection.

In this study, participants were asked to narrate their story, adding to the existing data set on a particular category, or asked targeted questions to generate data that were used to verify the theory in its entirety. The participants were also asked to supplement

information and relationships between two categories thus contributing to the emerging theory (Morse 2007:240). Theoretical sampling helped the researcher to follow a storyline as suggested by the data and built justification for a concept in the theory by finding many more instances of the concept (Urquhart 2013:8). In one instance of theoretical sampling in this study, participants (teachers) were theoretically selected based on in-service training experience in an effort to develop an understanding of the experiences of this particular group.

Two-three interviews were first coded before deciding on theoretical sampling (Oktay 2012:65).

4.6   ETHICAL CONSIDERATIONS

Research dealing with human beings is at times subject to harm in the physical and psychological sense. As such, research involving human subject is guided by a set of ethical principles that have been developed to protect the rights of the human beings. There are three primary ethical principles on which the ethical standards of ethical conduct of research are based; Beneficence, Respect for human dignity and Justice (Polit & Beck 2010:121) and are discussed below.

4.6.1 Beneficence

Beneficence is an ethical principle that emphasises on minimising harm and maximising benefits for the participants. A research study should contribute to social value and improve the wellbeing of society. Participants must not be subjected to any form physical or psychological risk for harm or discomfort. Dealing with psychological harm in qualitative research require sensitivity on the part of researchers, due to in-depth exploration of inquiry into personal issues that may unearth deep seated fears, guilt and anxieties (Polit & Beck 2010:121). Public discussion on topic of sexuality is sensitive in Uganda, interviewing people on this topic may bring about discomfort and emotional distress, especially in a group interview context during which individuals may be confronted with differing views (Burns & Grove 2007:531). In this study, the researcher ensured an emotionally safe environment, emphasised confidentiality and ensured that all those involved respect the views of others and that all issues discussed were not be taken outside the group.

4.6.2 Respect for human rights of the participants

This involves the right to self- determination and the right to full closure which are the major elements of an informed consent.

Right to self-determination

Participants are autonomous, capable of controlling their own activities, thus participants have the right to decide their participation in a study voluntarily without coercion or penalty for refusal (Polit & Beck 2010:122).

From the onset of this study, participants were informed that their participation is voluntary and they were free to withdraw or refuse to respond to any questions without any penalty.

The right to full disclosure

Participants have the right to make informed voluntary decision concerning their participation in a study, this required full disclosure by the researcher. In this study, full description of the nature of the study including the methods participants rights to refusal participation and/or withdraw from the study at any time during the study, responsibilities, potential risks and benefits were fully explained to the participants (Polit & Beck 2010:123).

4.6.3 Informed consent

Informed consent is the right of the subjects to decide free from pressure or constraint and in a fully informed manner whether to take part in a research endeavour (Faden & Beauchamp 1986 as cited in Hesse-Biber & Leavy 2011:66). It is a measure to safeguard participants and protect their right to self-determination (Polit & Beck 2010:127).

In this study, the researcher ensured that participants were informed, to the extent possible, about the nature of the study and a written consent obtained (Annexure A).

For the minors, consent was obtained from their parents in addition, the adolescents were requested to assent (Annexure B). The participants also had the right to decide voluntarily whether to participate in the study, ask questions, refuse to give information and to withdraw from the study without any penalty.

4.6.4 Justice

The principle of justice involves participants' rights to fair treatment and their right to privacy.

Rights to fair treatment

The selection of participants should be based on the research requirements and not the vulnerability or compromised position of certain persons for knowledge advancement. Those who decline from participating even after agreeing should be treated in a non-prejudicial manner. All promises made to the participants must be honoured. Participants must be afforded courteous and tactful treatment at all times (Polit & Beck 2010:124-125). In this study, participants were purposefully selected on the basis of their knowledge and experience of the study topic. The participation of most of the adolescents may be compromised because they are minors, however, consent was obtained from their parents/guardians.

Right to privacy

All research with humans involve intruding into personal lives, researcher have to ensure that the research is not more intrusive that it ought to be (Poilt & Beck 2010:125). In this study, the interviews were conducted in rooms away from public hearing or view, information provided by the participants was kept confidential.

4.6.5 Protecting the rights of the research institutions involved

The rights of the research institution were protected by obtaining an informed consent and permission from the district education office and head teachers (Annexure C). The researcher kept the name of the institution anonymous. Additionally, ethical clearance certificate was obtained from the ethics committee of the Department of Health Studies

of the University of South Africa (Annexure D) and Uganda national council for science and technology (Annexure E).

4.6.6 Enhancing the scientific integrity of the study

Good science requires integrity, freedom of inquiry and preservation of life, absence of these principles result in research misconduct (Smith 2012:55). Research misconduct is fabrication, falsification, or plagiarism in proposing, conducting, or reviewing research or in reporting the results (Polit & Beck 2010:134).

Scientific integrity is the intellectual honesty accepted within the scientific community for proposing, conducting or reporting research (Gallin & Ognibene 2012:44). Plagiarism was avoided by acknowledging all sources and references utilised in the study. The research findings and presentation was done without falsification and/or fabrication of information obtained from the participants. Those persons who contributed towards the successful completion of the study were duly acknowledged. The measures which the researcher applied to enhance the trustworthiness of the study also served to ensure its scientific integrity.

4.7   MEASURES TO ENSURE TRUSTWORTHINESS

Trustworthiness is the honesty of the data collected from or about the participant (Lincoln & Guba 1985 in Macnee & McCabe 2008:170). It includes a number of criteria employed to ensure the quality of the research as discussed below.

4.7.1 Credibility

Lincoln and Guba (1985) as cited in Polit and Beck (2010:492) describes it as the confidence in the data and the interpretation of them. It is achieved by;

Prolonged engagement involves staying in the field until data saturation occurs. This helps to counter distortions from researcher's impact on the context (Polit & Beck 2010:495). The researcher gets to understand what's going on in the field. In this study, the researcher spent an extended period of time with the participants while conducting the individual and focus group interviews. The interviews continued until no new categories emerged. Sufficient time was invested in the data analysis, tape recordings

were listened to over and over again, and transcripts were read and re-read to fully understand the data.

Use of multiple data sources (triangulation), in this study, person triangulation was achieved by interviewing adolescents, teachers and parents (Polit & Beck 2010:500).

Peer debriefing involves sessions with another person periodically throughout the study to reflect on any biases or omission (Lapan, Quartaroli & Riemer 2012:np). In this study, the researcher presented the different phases of this investigation into experiences and perception of school-based sexuality education to colleagues and supervisors. These persons gave constructive inputs on how to enhance the scientific quality of the investigation.

Member checking: Artinian et al (2009:13) posit that the best criterion for validity in Grounded theory study is affirmation of participants when the researcher provides categories that reveal the underlying patterns of their world of experience. To assess whether researcher's interpretations are true representation of the participants' realities, participants should be given an opportunity to validate them. Member checking can be carried out both informally in an on-going way as the data are being collected or more formally after data have been collected and analysed (Polit & Beck 2010:499). In this study, the researcher used deliberate probes during interviews to ensure that the researcher understood the participants' meanings.

4.7.2 Dependability

Dependability is the stability of the data over time and conditions (Polit & Beck 2010:511). It is achieved by performing dependability audit which shows points at which changes occurred in the research process (Lapan et al 2012:np]). Glaser (2001) asserts that Grounded theory meets the criteria of dependability through constant comparison of all categories and properties during the process of core category generation.

In this study, this was done by providing a full description of the research design and its implementation, describing what was planned and executed on a strategic level and the operational details of data gathering.

4.7.3 Conformability

It is a measure of the extent to which our findings are affected by personal interest and biases (Polit & Beck 2010:492). The researcher provides evidence that shows source of data and examples from the data. In this study, an adequate trail was provided to enable the auditor to determine if the conclusions, interpretations, and recommendations can be traced to their sources and if they are supported by the inquiry.

4.7.4 Transferability

Transferability is the extent to which findings can be applied to another setting or group (Polit & Beck 2010:511). Grounded theory transcends description of what happens in particular situation to conceptualisation of the process by which it happens. Similarly, it is abstract of time, place and people so study can be can be applied to a new situation with emergent fit. This was achieved by; providing a detailed description of participants and context in which the data was collected so that the readers could evaluate the applicability of data to other settings. Using purposive, constant comparison and theoretical sampling enabled the researcher to maximise the range of specific information that could be obtained from and about that context (Glaser 2001:123–124).

In addition, Charmaz (2006:182) recommends employing these four criteria of what constitutes a useful grounded theory: "credibility", "originality", "resonance", and "usefulness." These criteria are useful for assessing the theory particularly as to how: "the constructed grounded theory renders the data". Details on how this was applied are in Chapter 7.

4.8   CONCLUSION

In this chapter, the research methods used in carrying out the study following the qualitative research with constructivist grounded theory strategy were described in detail. All aspects of the data collection methods and process and administration were described. The mechanisms for ensuring the reliability and validity of the research and the ways in which the basic principles of research involving human subject were applied were also discussed. The detailed data findings that led to the emergence of the theory are presented in the Chapter 5.

CHAPTER 5

DATA INTERPRETATION AND DISCUSSION OF FINDINGS

5.1   INTRODUCTION

The preceding four chapters described the back information on the subject focusing on the extend of the problem and statement of the problem, the literature reviewed for the purpose of identifying what is known and what remains not known in order to bridge the gap. Similarly, the research design and methodology used for collecting data and analysis, ethical considerations were discussed. This study used qualitative methods and this chapter presents the major findings that led to the emergence of theory discussed in Chapter 6. Analysis of the study focusing on the experiences and perception of school-based sexuality education. The findings are triangulation of findings from the adolescents, teachers and parents.

5.2   STATISTICS OF THE DEMOGRAPHICS

Four primary schools were selected for the study. A total of 42 Adolescents between the ages of 12-16 were in involved in eight (8) same sex FGIs, while 6 Teachers and 5 Parents participated in in-depth individual interviews.

5.3   QUALITATIVE DATA ANALYSIS

In qualitative research, data analysis is described as a constructionist or inductive process that involves putting units of data together into a pattern that convey meaning (Polit & Beck 2014:304).

Qualitative data analysis involves organising and managing the mass of narrative data. It begins with data management, a reductionist process of breaking down data into smaller, more manageable units of concepts (Polit & Beck 2014:301). The conceptualised data is then used to construct themes through coding and then condensing the codes (Creswell 2013:180). In this study, data analysis commenced

after the second interview and continued with subsequent data collection. Gathering data involved interpretation of the data and therefore during the interpretation the analysis of the data took place (Streubert & Carpenter 2011:44; Creswell 2009:183; Liamputtong 2011:278). The early commencement of the data analysis allowed the researcher to repeatedly think about gathering data, and generated new strategies for the new data being coded. According to Charmaz (2006:43) as cited in Liampttong (2011:278) is "the process of finding what the data are about". Coding is important and has been described under chapter four.

5.3.1 Findings from the data

In this section our discussion centres on describing the research findings and interpretation of the results. During the data analysis the researcher focused on the processes, actions or interactions that constituted the participants' experiences and perception of school-based sexuality education. The process of sorting, coding and categorising of data led to the intuitive process of identification of themes that logically organised all data.

5.3.1.1   *Themes*

A total of six (6) themes and 30 categories were identified from the data analysed. Each theme was composed of a varied number of categories. The themes were titled based on common factors within each cluster of theme. The pattern of arrangement of data is from general (themes) to specific (sub-categories). The researcher used the following steps to analyse the data to generate the themes and categories:

The researcher listened carefully to the audiotapes with the purpose of understanding and interpreting the interviews. This process was done repeatedly in order to capture any missed words and phrases. The words and the phrases were then documented for analysis. The researcher also checked the quality of the transcribed data by ensuring trustworthiness through credibility, transferability, dependability and conformability. The inductively coded data assisted the researcher in developing the themes of the data; which were then divided into categories.

Table 5.1   A summary of themes, categories and sub-categories describing the experiences and perception of school-based sexuality education

Themes	Categories	Sub-categories
1 Meanings assigned to SBSE	1.1 Physical maturity	1.1.1 Bodily changes 1.1.2 Sexual and physical maturation
	1.2 Sex related information	1.2.1 Sexual needs 1.2.2 Responsible sexual desires 1.2.3 Age appropriate sexual information
2 Dominant concepts about the relevance of content taught	2.1 Raising awareness	2.1.1 Limited detail taught in sex education 2.1.2 Promoting personal hygiene
	2.2 Protection against sexually transmitted diseases	2.2.1 HIV/STDs prevention 2.2.2 Emphasising abstinence only
3 Benefits of SBSE	3.1 Empowering adolescents with correct information	3.1.1 Keeping adolescents in school 3.1.2 Helping to prevent early marriages 3.1.3 Creating STIs/HIV awareness 3.1.4 Creating safe school environment for female adolescents 3.1.5 Becoming assertive 3.1.6 Reducing stigma among HIV positive children 3.1.7 Training adolescents 3.1.6 Creating life skills
4 Provision of information on SBSE	4.1 Adolescents as participants	4.1.1 Adolescent involvement 4.1.2 Using various teaching strategies.
	4.2 Age specific information	4.2.1 Integrated in the science subjects

Themes	Categories	Sub-categories
		4.2.2 Providing information based on class level
5 Challenges faced during provision of SBSE	5.1 Extra burden	5.1.1 Perceived as increasing current workload for teachers 5.1.2 Inability to meet individual needs (Big class sizes). 5.1.3 Perception that it is not the role of teachers
	5.2 Lack of trained teachers	5.2.1 Training for few selected teachers. 5.2.2 Teaching without training
	5.3 Difficulty understanding the Teacher's guide	5.3.1 Confusing 'second hand' information
	5.4 Ineffective teaching strategies	5.4.1 Inadequate strategies 5.4.2 Some strategies are entertaining not educative
	5.5 Limited teaching resources	5.5.1 Few textbooks 5.5.2 Lack of funds
	5.6 Poor treatment of teachers	5.6.1 Lacking incentives /Poor remuneration 5.6.2 Lacking motivation Lack of interest 5.6.3 School/Teachers lack voice 5.6.4 Teachers not respected
	5.7 Fear	5.7.1 Fear of raising sensitive issues/political interference 5.7.2 Shy teachers 5.7.3 Fear/shame
	5.8 Lacking role models	5.8.1 Teachers not exemplary 5.8.2 Poor parenting styles
	5.9 Lacking government commitment	5.9.1 On and off programme 5.9.2 Lacking support supervision

Themes	Categories	Sub-categories
	5.10 Challenges related to adolescents	5.10.1 Adolescents experimenting with the information
		5.10.2 Adolescents maturing early
		5.10.3 Adolescents challenging teachers
		5.10.4 Young teachers vulnerable
	5.11 HIV positive adolescents affected	5.11.1 Difficulty in talking to HIV positive adolescents
		5.11.2 Lack of support for orphaned HIV positive adolescents
	5.12 Inappropriate information	5.12.1 Some topics not appropriate
	5.13 Cultural barriers	5.13.1 Against cultural norms
		5.13.2 Fear of teaching own child
		5.13.3 Parents shying away from certain topics
	5.14 Religious barriers	5.14.1 Negative religious influence
	5.15 Environmental/social barriers	5.15.1 Influenced by the location of school
		5.15.2 Social media influencing adolescents
		5.15.3 Negative peer influence
6 Suggestions for needed change	6.1 Need to keep up with the trends	6.1.1 Retraining to meet the needs
		6.1.2 Updating the teaching materials/ books to match demand
	6.2 Involve all stakeholders	6.2.1 Need participation of all
		6.2.2 Involve/Encourage parents
	6.3 Seek external support	6.3.1 Involve health personnel
		6.3.2 Need to share external experiences
	6.4 Need more	6.4.1 More time and Frequent sessions
		6.4.2 Include more topics (HIV, contraceptive).

Themes	Categories	Sub-categories
		6.4.3 Emphasis on abstinence only
	6.5 Support teachers	6.5.1 Support from administrators 6.5.2 Motivate teachers
	6.6 Needs integration	6.6.1 Incorporate culture into Teaching SBSE 6.6.2 Integrate into the syllabus
	6.7 Adjust according to school location	6.7.1 Start in lower classes in rural schools

Table 5.1 presents the views of all the themes, categories and sub-categories generated from the data and constitute the broader scheme and structure that directed the analysis and interpretation of data.

Following the principles of constructivist grounded theory (Charmaz 2006) the major categories identified in this study are drawn from participants‟ responses. Each quotation is labelled with the participant's code number as follows: P1 – first parent interviewed, FGI-B1 – first boys' focus group interviews, FGI-G2 – second girls' focus group interviews, T3 – third teacher interviewed. At the end of each section is a discussion of the key issues.

THEME 1: MEANING ASSIGNED TO SEXUALITY EDUCATION

This theme describes what the participants understood and expressed as the meaning of sexuality education. As derived from the participants' description of the concept of sexuality education as the information provided to the adolescents on physical changes and sex related issues. Four teachers and all the focus group defined the term 'sexuality education', themselves during the interview and their definitions will be shared later. Not defining terms and letting participants come to their own conclusions about the meaning is in keeping with the social constructionist view of grounded theory.

Category 1.1: Physical maturity

The participants understood sexuality education as information on physical development that is provided to adolescents in order to create awareness and help them cope with the changes as described below:

Sub-category 1.1.1: Bodily changes

Physical developments may be scary for the unprepared adolescents as illustrated by the statement:

> "Sex education is the study that explains to children to know themselves as being either female or male." (T2)

> "I think it is to bring both girls and boys together to understand the bodily changes they will undergo." (FGI-G2)

The beginning of the adolescence period is characterised by physical, cognitive and social changes in an individual (Breinbauer & Maddaleno 2005:262–264). It would therefore seem that adolescents need support to understand the physical changes and what they mean in real life. This would entail providing adolescents with correct information about the changes during this period of development in their lives.

Sub-category 1.1.2: Sexual maturity

The surge in hormone levels during puberty leads to awareness of sexual development, gender identity and desire. Adolescents need to be informed that this changes are normal. This is illustrated by the participants that:

> "It's creating awareness that as they grow they may get involved in relationships with the opposite sex." (T4)

With this changes, adolescents make adjustments to their behaviour or appearance in order to fit in with perceived norms and may fall victim to early pregnancy, HIV, other sexually transmitted infections, sexual violence and exploitation (UNFPA 2011:8). It is

therefore important to give early adolescents all the information they need to protect themselves against such risky behaviours with the full support of nurturing adults at home, at school and in the community; and sexuality education provides opportunity to offer relevant information to equip the adolescents to cope with the changes appropriately.

The home is the best place to initiate parent-child communication on sexuality and the school then complements this conversation. However, given the social taboos often surrounding puberty that only few parents discussed sex-related topics with their children (Somers, Tolia & Anagurthi 2012:66; Kibombo et al 2008:15; Crichton, Ibisomi, & Gyimah 2012:21; Wamoyi, Fenwick, Urassa, Zaba & Stones 2010:6). Therefore, from the interviews, all the adolescents and teachers in this study have been exposed to information on physical growth which is one of the introductory topics in Student and Teacher's Handbook on school-based sexuality education in Uganda (Uganda Ministry of Education & Sports 2006:23).

The findings above indicated that the teachers and adolescents in this study derived the meaning of sexuality education based on the content covered during the sessions.

They also expressed sexuality education as information on sexual matters as expressed in the next category.

Category 1.2: Sex-related information

This category is derived from the data pieces describing the participants' understanding of sexuality education as information provided on sex matters

Sub-category 1.2:1: Responsible sexual desires

> "It is to create awareness of the negative and positive aspects of sex and when to engage in sexual activities." (T3)

> "Is the information we give to children about sex." (T5)

These responses are supported by UNESCO (2009:1, 3) that the objective of sexuality education is to facilitate communication on sexual matters and enable adolescents to make informed choices about their sexual lives. Discussions on sex related matters is often embarrassing and remains a taboo in many cultures (Nambambi & Mufune 2011:122; Turnbull 2008:187; Kibombo et al 2008:15), consequently, adolescents are left to use other sources such as peers, the media and the Internet to educate themselves about sexual related issues (UNESCO 2009:2; Turnbull 2008:182). However, these sources may contain partial and misinformation making adolescents less prepared for their sexual lives.

Conclusion on Theme 1

This theme captured data that described the participants' understanding of sexuality education as information on physical maturity and sex related matters. From the responses, the participants' meaning of school-based sexuality education is based on the content or topics covered during the sessions in the classroom. The ontological assumptions in constructivist grounded theory are that there are multiple realities (meanings) and participants view their experiences differently (Creswell 2013:20). People construct meanings about the world through interactive experiences with others (Jones & Alony 2011:98). School-based sexuality education is a social process that involves interactions between the teachers and adolescents. These interactions generated meaning of sexuality education thus forming their experience of the programme.

THEME 2: DOMINANT CONCEPTS ABOUT THE RELEVANCE OF CONTENT TAUGHT

This theme brings out what adolescents and teachers described as important content taught and the way it was taught. There were two categories under this theme: (i) raising awareness and (ii) protecting against sexually transmitted infection.

Category 2.1: Raising awareness

Sexuality education was interpreted as mainly for raising awareness about various topics based on the depth of the content delivered as generated from the sub categories.

Sub-category 2.1.1: Limited details taught in SBSE

The teachers expressed that sexuality education in primary school level aims to create awareness of human sexuality without going into details with the emphasis being on disease prevention as demonstrated in the excerpt below:

> "You see at primary level sexuality education is not taught in details." (T6)

> "Mainly it concerns the way to prevent spread of HIV/AIDS so we always create awareness about that only, we don't go into details." (T3)

The views of the participant indicated that the depth of content and topics covered is limited which may be a barrier as discussed later. The selective approach in teaching sexuality in this study could be attributed to the conservative approach to teachers' personal discomfort and feelings of moral obligations to limit adolescents' sexual knowledge and activity (Padmini & Aggleton 2014:435). Most experts believe that children and young people want and need sexuality and sexual health information as early and comprehensively as possible (WHO 2011a:11). For sexuality education to be effective it should provide young people with age-appropriate, culturally relevant and scientifically accurate information and incorporating increasingly advanced messages about human rights, health and sexuality, and gender equality (UNESCO 2009b:6). Therefore learning objectives should be adjusted to needs of adolescents based on evidence.

Sub-category 2.1.2: Promoting personal hygiene

Personal hygiene was one of the main content areas covered during the session as reported by adolescents and teachers:

"We also talk about how to keep themselves properly, I mean hygienically especially the girls." (T1)

"We learn about personal hygiene as a boy growing up so when you wake up in the morning we should also take bath." FGI (B3)

Personal hygiene is cleanliness of the body and proper maintenance of personal appearance (Singh & Gupta 2014:66). The increased production of body oils, perspiration and the start of the menstruation cycle during adolescence create the need for emphasis on personal hygiene practices among adolescents. Poor hygiene and health practices undermine the socio-economic, psychological and health wellbeing of adolescents, especially girls (Van Werven 2012:34). Health and hygiene education is important to promote the physical and psychological wellbeing of adolescents.

Category 2.2: Protecting against sexually transmitted infection

This category captured the pieces of data that emphasised the content on protection against STIs/HIV. The content was covered in two sub-categories (i) STDs/HIV prevention and (ii) emphasising abstinence.

Sub-category 2.2.1: HIV/STIs prevention

Sub-Saharan Africa is home to almost two-thirds of all youth living with HIV (3.28 million) (UNAIDS 2012a:2). Limited knowledge of HIV transmission and methods of prevention remain challenges. Young people therefore, are at the centre of the HIV epidemic. The teachers identified the information provided by SBSE on HIV prevention as protective by stating that:

"We create awareness that HIV/AIDS is even found among the children." (T1)

Therefore, provision of age-appropriate sexuality education can increase the knowledge and contribute to more responsible sexual behaviour thus preventing future transmission of HIV among this population would be in line with the UN recommendations (UNICEF 2011b:10).

Sub-category 2.2.2: Emphasising abstinence only

This study has shown that adolescents received an abstinence-only information as a method to protect themselves against STIs/HIV and to continue with education. This is supported as illustrated by the teachers who narrated that:

> "We always talk about delaying sex because they are still young, and stay in school at least finish or complete Primary 7 because at the end of that time they will have matured to go to the other level."(T3)

> "We teach them how to stay safe by abstaining from sex not to use condoms because at their age they are not supposed to use it but stay away from sex." (T4)

> "It also helps adolescents to delay getting sexual relationship." (FGI- G2)

In 2003, with financial support from the US government through the President's Emergency Plan for AIDS Relief (PEPFAR) campaign for 'abstinence-until-marriage programmes' the Ugandan School-based Sexuality Education curriculum adopted the abstinence-only sex education as the only option to avoid pregnancy and sexually transmitted infections at the primary level (Cohen 2005:21; Parkhurst 2011:241). This study shows that some of the national policies that restrict access to comprehensive information remain challenges to adolescent sexual and reproductive health goals (WHO 2014 ix).

Conclusion on Theme 2

The findings demonstrated that sexuality education was not taught in details since it was considered not to be relevant for primary level. Age-appropriate sexuality education is important for all children and young people (UNESCO 2009:2). However, the morally conservative approach of teaching sexually education inherent in the abstinence only model, and the perception of teachers and parents that adolescents were sexually innocent coupled with fear that school-based sex education may encourage sexual

experimentation and risk-taking among young people limited access to information available to adolescents in this study.

THEME 3: BENEFITS OF SCHOOL-BASED SEXUALITY EDUCATION

This theme describes what all the participants viewed as the benefits of SBSE. The participants expressed the benefits of sexuality education under two (2) categories.

Category 3.1: Empowering adolescents with correct information

This category was generated from data that described how the adolescents benefitted from sexuality education by becoming more powerful, agents of change by utilising the knowledge and skills gained in advancing sexual and reproductive health. The participants explained that adolescents are exposed to various sources of information that may be misleading, providing accurate information during sexuality education will counteract the myths and misinformation;

In this information technology era many adolescents have greater exposure to sexually explicit material through the Internet and other media. These sources of information may be insufficient or flawed (Nobelius et al 2010:491) leaving adolescents with conflicting and confusing messages about sexuality and gender. This is often exacerbated by embarrassment, silence and disapproval of open discussion on sexual matters (UNESCO 2009:2). Information needed by adolescents fall into three broad categories: sexual and reproductive health issues, the negotiation of sex and sexual relationships, and making the transition to adulthood. In this study, participants felt that sexuality education was filling the information gap.

Sub-category 3.1.1: Keeping adolescents in school

Accurate and comprehensive sexuality education provide opportunities for young people to explore their attitudes and values, and to practise the decision-making and other life skills they will need to be able to make informed choices about their sexual lives. Keeping adolescents in school creates a ripple effect with long term benefits for the adolescent, family, government and society (WHO 2011b:12).

"As children we are benefitting a lot otherwise a lot of our fellow children would have already left the school." (FGI-B2)

Sub-category 3.1.2: Preventing early marriages

The adolescents viewed early marriage as one of the reasons adolescents fail to complete their education and sexuality education was helping adolescents stay in school.

"It can change other peoples' decision because others may have made up their minds to go and get married when they are still in school so it can change other people minds." (FGI-G1)

Early marriages though diminishing is still prevalent particularly in South Asia and Sub-Saharan Africa where up to 50–70% of the girls in some countries are married prior to age 18 years. Uganda is one of the countries with highest early marriages at 46 per cent (UNFPA 2012:11, 23). In addition, pregnancy is another major cause of school dropout for girls in many countries (UNFPA 2013:v; UBOS 2011:24). From this study it was reported that sexuality education enabled adolescents to stay enrolled longer in school. This is corroborated with other reports that sex and relationships education can reduce girls' chances of an unwanted pregnancy or sexually transmitted infection, including HIV and may thereby increase their chances of staying in school (UNESCO 2009:3; Kirby & Laris 2009:27; UNFPA 2013:ix). Girls are empowered when and if they are able to learn skills that help them to develop a livelihood, help them to better communicate, to negotiate and make decisions that directly affect their lives (UNFPA 2012:51).

Sub-category 3.1.3: Creating STIs/HIV awareness

Knowledge and awareness on STDs/HIV was seen as protective thus important for adolescent sexual and reproductive health.

"… it is also creating awareness about HIV/AIDS." (FGI-G3)

> "Yes, it is very important, creating the awareness and pupils know how the deadly disease HIVLAIDS is spread and how we can prevent it." (T6)

Knowledge is an important factor in prevention STIs/HIV by influencing behaviour change. However, there exists gaps in knowledge about HIV among young people aged 15-24, with 60 per cent in this age range not able to correctly identify the ways of preventing HIV transmission (UNAIDS 2011:10). Effective sexuality education is a vital part of HIV prevention (Cheng et al 2008:185; UNESCO 2009:3). Research shows that learning about sex and HIV before young people start sexual activity reduces their risk of contracting HIV. Sexuality education in schools focusing on STIs prevention education improves adolescent's awareness (Anwar, Sulaiman, Ahmadi & Khan 2010:2).

Sub-category 3.1.4: Creating safe school environment for female adolescents

The onset of menstruation is a stressful time for most adolescent girls and resulted into school absenteeism as demonstrated in the statements below:

> "And encourage them to stay in school during their period before the girls would spend the whole week at home due to fear of menstruation but now we teach them and are able to take care. We have also told them that menstruation is not sickness but a normal process." (T5)

> "In addition some girls because of menstruation end up leaving the school due to fear of embarrassment from fellow pupils so it is important if adolescent get to understand then they will stop teasing their friends." (T3)

A girl's menstruation in many African societies is a condition to be concealed because it is shameful and embarrassing (Crichton, Ibisomi & Gyimah 2012:24; McMahon, Winch, Caruso, Obure, Ogutu, Ochari & Rheingans 2011:4). In Sub-Saharan African more specifically, girls have low levels of knowledge about both the biological process of menstruation and menstrual hygiene management compared to knowledge about the taboos surrounding menstruation (McMahon et al 2011: 4). This is due the discomfort among parents and teachers in discussing menstruation that resulted in it being 'ignored in families, schools and communities' (McMahon et al 2011:6; Tesso, Fantahun & Enquselassie 2012:1; Mason, Nyothach, Alexander, Odhiambo, Eleveld, Vulule,

Rheingans, Laserson, Mohammed & Phillips-Howard 2013:1). Traditionally, in many parts of SSA, young girls were educated about menstruation and sexual maturity by their grandmothers (rather than by their parents), a practice that has been eroded by the loss of many grandmothers to HIV/AIDS, leaving behind a wide knowledge gap that is only partially filled in school (Mason et al 2013:7).

In addition, constraints such as lack of access to private toilets with water supplies at schools, sanitary products, painkillers for menstrual cramps, spare clothes if leaks occur are all too common (Mason et al 2013:6, 7; Sommer 2010:527). Long school days that increase the risk of menstrual leaks coupled with frequent harassment by boys in and around school toilet areas add to the shame and embarrassment experienced by many girls (Mason et al 2013:5). Therefore, menstruation restricts the girls mobility and is a barrier to schooling' (McMahon et al 2011:2; Sommer 2010:525) as they will prefer to manage their menses at home.

Sub-category 3.1.5: Becoming assertive

The teachers and parents revealed that adolescents were able to act on the information being provided.

> "The sex education being provided in the school is important. They have become assertive if there is any act which they see that it can get them into problems in relation to their sex they sometimes are able to speak their mind out." (P3)

> "The girls have become more assertive in their response to boys who make advance toward them, without anger and abusive language." (T2)

One of the learning objectives of school-based sexuality education is interpersonal and relationship skills. Sexuality education promotes the acquisition of skills in relation to decision-making; assertiveness; communication; negotiation; and refusal. Such skills can contribute to better and more productive relationships with family members, peers, friends and romantic or sexual partners (UNESCO 2009:5).

Effective sexuality education programmes are likely to increase adolescents' communication with parents or other trusted adults. Communication is important in

helping adolescents to avoid unwanted or unprotected sexual intercourse, by using the following skills: ability to refuse unwanted, unintended or unprotected sexual intercourse; the ability to insist on using condoms or contraception with a partner; and the ability to obtain and use these correctly (UNESCO 2009:17).

Sub-category 3.1.6: Reducing stigma among HIV positive children

The participants explained that sexuality education created a safe and enabling environment for HIV infected adolescents.

> "Even the children who are HIV positive they are also gaining; the stigmatisation
> is not there anymore and they stay with others freely because of the PIASCY that
> we have." (T1)

Although HIV has been around for almost two decades, stigma and discrimination remains one of the unmet needs of young people living with HIV, including those infected perinatally (Birungi, Obare, Mugisha, Evelia & Nyombi 2009:725; Baryamutuma & Baingana 2011:211). This may mean dropping out of school for most adolescents and failure to disclose. Sexuality education enabled students to assume responsibility for their own behaviour as well as their behaviour towards other people through respect; acceptance; tolerance and empathy for all people regardless of their health status or sexual orientation (UNESCO 2009:5). Furthermore, schools can play a major role in effective HIV response in the education sector by providing among other things care and support to young people living with and affected by HIV. This study has shown that there is evidence that sexuality education has positive outcomes in reducing stigma and discrimination towards school-based adolescents who engaged in risky practices as well as people living with HIV.

Sub-category 3.1.7: Training adolescents/community

Female adolescents not only received knowledge but acquired skills for menstruation hygiene management and made locally sanitary ware as described by this teacher.

> "Sex education has helped our school so much, we realised that the personal
> hygiene supplies that we have been getting are not sustainable, so we have

started making our own locally made pads to support the physical development and we have even trained their mothers on how to make the pads." (T5)

School dropout rates increased for girls at the time of menarche, possibly related to problems of managing menstruation (Desjardins, Moran & Smolowitz 2014:77). A lack of sanitary towels is one amongst many reasons why girls may miss school during menstruation (McMahon et al 2011:3, Mason et al 2013:6; Sommer 2010:528; Desjardins et al 2014:78). Poverty makes menstruation management difficult for most adolescent girls in Africa. The cost of sanitary ware and towels is beyond the reach of most young women and girls, who in Africa are the majority of the unemployed and those living in poverty. Most girls end up not going to school, because they cannot afford to buy sanitary ware (Chebii 2012:28; Mason et al 2013:5) or even engage in 'transactional sex' to obtain money to buy sanitary towels so that they can continue to attend school (Mason et al 2013:9; Nobelius et al 2010:490).

This study has demonstrated that provision of sanitary towels coupled with menstrual hygiene education reduced girls' absence from school. The finding is in line with what was previously reported where girls' absence from school reduced by more than half (Chebii 2012:29; Montgomery, Ryus, Dolan, Dopson & Scot 2012:1).

Sub-category 3.1.8: Creating life skills

Sexuality education promotes the acquisition of skills in relation to: decision-making; assertiveness; communication; negotiation; and refusal. Such skills can contribute to better and more productive relationships with family members, peers, friends and romantic or sexual partners. This was observed in this study by the statement that:

"It has created a kind of life skills in the pupils."

Such positive results should be taken up and developed further so as to develop a more effective sexuality education in Uganda.

Conclusion on Theme 3

This study has highlighted the benefits of sexuality education to the adolescents. According to behavioural theorists, behaviour is influenced by an individual's learning ability and the values and beliefs that are transferred from a source of information to target groups. Sexuality education that is offered in schools does have an impact on adolescents' knowledge, skills and behaviours in relation to sex related issues; hence the importance of ensuring that sexuality education is accurate and helpful in promoting adolescent sexual and reproductive health. Participants from all three groups believed that early sexuality education was important to prepare youths to protect them from premature or unwanted sexual activity. Physical and emotional transitions, and potentially heightened risk-taking behaviour, inherent to the adolescence period contribute to adolescents' vulnerability to sexually transmitted infections, HIV, unintended pregnancy, sexual abuse and coercion (UNESCO 2009:5). Sexuality education is a key strategy for reducing these risks and thus promoting sexual and reproductive health among adolescents and young people (Kirkby et al 2006. Equipping adolescents with knowledge and skills needed to protect themselves before they become sexually active is critical (Bankole et al 2007:29–30).

THEME 4: PROVISION OF INFORMATION ON SBSE

Under this theme data captured the participants' expression of methods used in teaching SBSE.

Participants revealed that sexuality education was taught in different ways as described in the following categories (i) adolescent involvement (ii) using various strategies and (ii) providing information based on class level.

Category 4.1: Adolescent involvement

To be effective sexuality education programmes should not only provide accurate information about the risks of unprotected intercourse and methods of avoiding unprotected sex but should involve adolescents in experiential activities. These activities aim to personalise the information provided while reinforcing clear and appropriate values to strengthen individual values and group norms against unprotected

sex. In this study adolescents were involved in the sexuality education sessions in different ways.

Sub category 4.1.1: Adolescents as participants

Social learning theory suggested that new behaviours are learned either by modelling the behaviour of others, or by direct experience (Padmini et al 2014:119). Participatory teaching methods that actively involve students and help them internalise and integrate information were employed as described below:

> "In our school PIASCY is still going on well and the children like to participate in it a lot. There is a club, a PIASCY club for the children and they are the ones who mobilise their friends when it is time for them, but the teacher just give them instructions that the theme for this week is like this and they formulate the play or role play or recite a poem. So it's healthy and sometimes the peers teach one another." (T1)

Sexuality education needs to engage more with young people in a task or activity, conducted in the classroom or community, followed by a period of discussion or reflection to help them personalise the information (Kirby 2009 in UNESCO 2009:22), with respect to their needs and consideration of the potential influences on their values and behaviour (Yu 2010:195). Sexuality education programmes can be more attractive to young people and more effective if young people play a role in developing the curriculum (UNESCO 2009:8). Teaching styles that used didactic methods of teaching and rote learning in sexuality education is not effective in delivering knowledge and creating change in behaviour. According to Allen (2001) in Beyers (2012:369) youth obtained sexual knowledge from sexuality education and personal experience. Beyers (2012:370) added that there is a need for a shift in the way information is disseminated as well as for reconsidering the content taught by not only providing information but also exploring feelings, values and attitudes; and developing communication, decision-making and critical thinking skills to influence behaviour.

Category 4.2: Using various strategies

Including a variety of activities in sexuality education sessions appeal to different types of learners. Adolescents prefer activities that they would enjoy while learning.

> "Apart from role playing they may recite a poem, a song …" (T3)

> "Normally in the school we use the assembly to give the information, posters, use some writings on the wall, on the trees to make them know and help us pass on the information." (T1)

The findings in this study showed that sexuality education utilised various strategies to pass on information. This is supported by other studies which found that multiple activities are usually necessary to address each risk and protective factor; thus, many activities or strategies are needed. In addition, the activities need to include instructional strategies that encourage adolescents to feel confident in their choice to change the associated risk or protective factors, e.g. role-playing increases self-efficacy and skills to refuse unwanted sexual activity or avoid possible situations that might lead to unwanted sexual activity (UNESCO 2009:21; Ponzetti, Selman, Munro, Esmail & Adams 2009:95).

Participants also explained that sometimes experts on certain information were invited to hold discussions with the adolescents:

> "We may invite other stakeholders to come and talk to the children for example police people who come and talk to the children." (T5)

Studies have demonstrated that sexuality education programmes can be effectively delivered by both the general classroom teachers and experts on specific content of the curriculum who may be specially trained to cover this sensitive topic and to implement participatory activities; they can be provided with regularly updated information (Kirby & Laris 2009 as in UNESCO 2009:24). This suggests that schools should consolidate the efforts to identify other experienced stakeholders with interest and the time to participate in the knowledge, information and experiences to adolescents on the subject.

Category 4.3: Age specific information

Specific topics were covered at each level based on the age or educational level of the adolescents.

Sub-category 4.3.1: Integrated in the science subjects

In most settings, school-based sexuality education takes place within curriculum subjects such as science, biology, home economics and health education. The participants reported that sexuality education was also taught in science subjects like biology in the upper classes:

> "The sex education is sometimes taught as a lesson in classroom as part of the topics in Science class." (FGI-B6)

> "Because it is integrated science sometimes as they go to P6 where we talk about menstruation period and other reproductive parts of the body." (T4)

In countries where, HIV and AIDS is contained within a subject area such as science, biology and life skills, the links between HIV/AIDS and sexuality, sexual behaviour or social aspects may be ignored (Fazli Khalaf et al 2014:362; Naz 2014:673). The findings from this study showed that sexuality education was not only taught in science subjects but also as an extracurricular activity in the different schools.

Sub-category 4.3.2: Providing information based on class

In teaching sexuality education, learning objectives should be logically staged, with concepts for younger students typically including more basic information, less advanced cognitive tasks, and less complex activities. This was the case as expressed by one teacher below:

> "The content of the PIASCY topics are mainly according to the guidelines provided to the schools and they have been categorised for lower and upper primary" (T3)

To maximise learning, different topics need to be covered in an age-appropriate manner over several years (Kirby and Laris 2009:26). When giving young people clear messages about behaviour, it is also important to reinforce those messages over time. Based on needs and country/region-specific characteristics, such as social and cultural norms and epidemiological context, the contents of the learning objectives could be adjusted to be included within earlier or later age levels. UNESCO 2009:6).

However, one teacher stated that sexuality education lessons were not provided at all to adolescents at the lower class level.

> "For the lower primary we still do not have information to give them." (T6)

From this finding sexuality education is only taught in the upper classes in some schools, therefore, some of the older adolescents in lower primary could be missing the much needed sexuality education. The most effective approaches to sexuality education begin with educating young people before the onset of sexual activity (UNICEF 2011b:10). It is critical that sexuality education be started early, particularly in developing countries, because girls in the first classes of secondary school face the greatest risk of the consequences of sexual activity, and beginning sexuality education in primary school also reaches students who are unable to attend secondary school (Boonstra 2011:22). In Uganda about 14 percent of young women and 16 percent of young men in the age group 15-24 had their first sex early in life, before the age of 15 (UBOS 2011:212).

Conclusion of Theme 4

In this study, sexuality education was taught in classrooms in the subjects like science and also outside the classroom using some participatory methodologies to encourage experiential learning. However, some adolescents in the lower levels were left out thereby school-leavers end up with different experiences and behavioural patterns.

THEME 5: CHALLENGES FACED DURING PROVISION OF SBSE

Despite the many benefits of sexuality education, participants also expressed experiencing challenges that undermined the effectiveness of the programme. The

challenges ranged from individual, family, school, community and national levels enshrined in the sociocultural, physical and spiritual spheres.

Category 5.1: Extra burden

Teaching sexuality education was perceived as an extra burden for the teachers because it is mainly an extracurricular activity which most teachers reported competes with the already crowded formal school curriculum. In addition, they questioned why only teachers were expected to talk about sex and while there were other adults considered to be well placed to do so.

Sub-category 5.1.1: perceived as increasing current workload for teachers

Teachers felt sexuality education was an additional work for them.

> "I think it will give a lot of work to the teachers, teachers have a lot of work to do in classes … (T2)

> "If it's incorporated into the curriculum still it will be additional burden to teachers". (T5)

When sexuality education is not integrated into the formal curriculum, teachers will give priority to teaching examinable subjects. Therefore, integrating it in the formal curriculum will make it mandatory for teachers to teach (Kiragu 2007:13). UNESCO (2009:23) argued that training teachers helped them to distinguish between their personal values and the health needs of learners and encouraged educators to teach the curriculum in full, not selectively.

Sub-category 5.1.2: inability to meet individual needs/big class sizes

The teachers were overwhelmed by the big class sizes.

> "I personally was given 150 children to handle during the sexuality education class on top of the work load I already have for teaching the other subjects, it is so difficult." (T3)

Sexuality education requires utilisation of participatory instruction methodologies with adolescents' involvement that is difficult to achieve in big classes. Thus, the quality of sexuality education delivered is compromised by big class size.

Sub-category 5.1.3: Perception that it is not the role of teachers

In this study, some teachers viewed teaching sexuality as a responsibility of the Health care personnel.

> "That work to us we see like it should be done by the health people now they are directing it to the teacher" (T4)

Teacher-delivered sex education has been recognised as a promising approach. The claimed advantage of teacher-led programmes over non-teacher-led interventions is that teachers can convey information to the target group in a more credible and appealing way (Thammaraksa, Powwattana, Lagampan & Thaingtham 2014:100). Teachers are a trusted source of knowledge in society UNESCO 2009:24). Lack of sex education in the homes and the inability to talk about sexuality in public because of its taboo nature has pushed the responsibility of teaching sex education onto the teachers (Kay, Jones & Jantaraweragul 2010:10; Kiragu 2007:7).

Category 5.2: Lack of trained teachers

Teacher's preparedness is essential for effective sexuality and all teachers involved in teaching should be trained. However, in this study majority of the teachers responsible for sexuality education reported receiving no pre-service or in-service training in the subject. Lack of training affected the understanding and utilisation of the teaching materials.

Sub-category 5.2.1: Training of few selected teachers

In the schools, only a few teachers received training on sexuality education, but the general feeling was that all teachers should be trained because they are all expected to teach.

> "I think the teachers should be sensitised through meetings and workshops because many times when workshops are held only a few people are called and the rest left behind. It may not be easy to roll down what was discussed to those teachers left behind." (T5)

> "Training was also done for few people but my wish is that they should call all the teachers so that all of them come and receive first-hand information so that they can know how to handle." (T1)

A typical in-service training for teachers in Uganda follows the model which aims to maximise the number of trainers with limited human and financial resources and reaching a large number of teachers in a short time (Schwille et al 2007 in Padmini et al 2014:126). One week workshops are organised for the few selected teachers who are subsequently expected to understand and pass on the information to their colleagues (Padmini et al 2014:126). However, this model of teacher training has been much-criticised for its limited success in changing teachers' practices and behaviour.

Most teachers reported being involved in teaching sexuality education by just relying on the teacher's handbook without any training.

> "Some of the teachers are just given books to get the information to be passed across and they use it but are not trained." (T2)

> "Though I was teaching sex education I really did not understand it that." (T3)

> "I think every teacher should have general knowledge so that when it's their turn to teach it they should be able to deliver instead of training select few sometimes who may not be there." (T5)

These findings indicated that the teachers' sexuality education guide was of very limited use to the teacher thus defeating the purpose.

Category 5.3: Difficulty understanding the teaching resources

Due to lack of training, the teachers experienced difficulty in understanding the teaching resources and therefore were not effective in passing on the information to the adolescents.

Sub-category 5.3.1: Confusing 'second hand' information

All teachers were involved in teaching sexuality education regardless of whether trained or not. The teachers who were not trained relied on the teaching resources and guidance from the trained teachers which sometimes was confusing as expressed below:

> We were reading from the books and it was very difficult especially those of us in the lower class unless you get your charts then you just demonstrate for the lower class because it was not into details." (T2)

> "With the current sex education it was not helping so much because they could give you the books you can read and get confused there, they were just giving the talking compounds and the children were green about." (T5)

One of the major problems which are attributed to poor delivery of sexuality education is teacher's lack of understanding of fundamental sexual reproductive health (SRH) information (Naz 2014:676). Lack of training keeps teachers feeling embarrassed, anxious, not understanding the teaching materials, and unsure of what to say or how to begin (Padmini et al 2014:12; Phiphitphatphaisit & Saengjun, 2007 as cited in Thammaraksa et al 2014:100). Consequently, teachers have negative impressions about and are not confident in providing sex education (Thammaraksa et al 2014:100).

From this study, it is evident that for successful implementation of school-based sexuality education, teachers need to be well-selected, trained, supervised and supported.

Category 5.4: Ineffective teaching strategies

Some of the teaching methods used were considered to be ineffective. Studies have reported use of the conservative didactic teaching methodologies which do not encourage exploration of communication, decision making and critical thinking skills as ineffective for teaching sexuality education.

Sub-category 5.4.1: Inadequate strategies

Participants felt that using certain teaching aids like audio-visual equipment would facilitate better understanding of the information.

> "The strategies used I can't say is adequate because when we go to the modern world most things are audio or visual, children learn better when they see, touch, or listen. The reason I say is still inadequate we struggle to draw pictures on the charts and the children draw in their books but if a case study could be videotaped and the children get to see how a person has suffered as result of using the wrong facts it would be more effective." (T3)

The teachers in this study were concerned with the lack of modern teaching aids like videos, internet. The aids however, on their own may not facilitate learning as long as their focus is limited to provision of knowledge with an absence in opportunities to explore the behavioural and affective dimensions of experience necessary (Kiragu 2007:13; Beyers 2012:370).

In addition some strategies were considered to be entertaining not educative.

> "Here they also sing songs but they always get over joyed with the kind of play or song and it becomes almost like an entertainment so they don't get the message." (T4)

The use of participatory approach in learning requires a transformation of traditional classroom roles in which the teacher becomes a facilitator, their role transformed from one of directing or transferring knowledge to one of facilitating, sharing, enabling and catalysing, as well as learning and reflecting themselves while placing learners at the

centre of their own learning process (Sopekan 2014:29). To make it profitable supplementary learning activities such as such as games, drama, play lets, songs or films should not be an end in itself but followed by self-reflections, assignments, materials for further reading, references about the topic to enhance experiential learning (UNESCO 2009:21; Ponzetti et al 2009:95; Sopekan 2014:31). The findings showed that teachers need training in participatory methodologies to effectively implement sexuality education.

Category 5.5: Limited resources

In this study, lack of required resources like teaching materials, trained human resource and funds undermined the effectiveness of sexuality education.

Kirby et al (2006) as cited in Padmini et al (2014:124) argued that within resource-poor settings, the implementation of school-based programmes are likely to be constrained precisely by the lack of access to necessary financial, material and technical resources. Education systems in Uganda face financial and other constraints, which affect the provision of primary and secondary education in general (Abbie 2013:[online]). This lack of financial and human resources within the education system can have serious implications on sexuality education in terms of both coverage and quality of implementation (Kivela et al 2013: 493).

Sub-category 5.5.1: Few teaching materials

Poor funding of the programme affected its implementation as described by the participants.

> "Then the written materials like textbook and may be hand-out are few and some
> time there is only one yet each child should have had one during the session".
> (T6)

Lack of support, resources and services for the effective implementation of Sex education remains a challenge (Naz 2014:681). Lack of resourcing indicates a lack of ownership of HIV/sexuality education and political commitment toward young people's ability to transition to an AIDS-free society (Padmini et al 2014:126).

Sub-category 5.5.2: Lack of funds

In two schools sexuality education was carried out in open discussion sessions with the adolescents called "*boys and girls meetings*". However, these meetings were sometimes not implemented due to limited funds.

> "These girls and boys meetings are also affected by availability of funds". (T4)

Participants expressed that the schools lacked funds for implementation of the sexuality education programme. This is supported by Peerapipat (2006 as cited in Kay et al 2010:11; Kivela et al 2013:493) who stated that schools incorporating a sex education programme were faced with lack of funding for personnel, materials, equipment, teacher in-services, and so on. Schools therefore, should negotiate with policy-makers and the government to ensure that adequate funds are available in order to effectively implement a comprehensive sexuality education.

Category 5.6: Poor treatment of teachers

The treatment of teachers by government was generally viewed as poor as reflected in the expressions of; low salaries, lack of voice in society, lack of respect and lack of interested.

Sub-category 5.6.1: Poor remuneration

Remuneration of teachers in Uganda is exceptionally low compared to the work demanded of them:

> "Teachers were not happy about the government pay because here they are sending us to come and work tirelessly for the rest of our lives not only for one day or one year but if you could see the allowance given to us you would not believe it." (T3)

"We are not happy about the government treatment especially of the teachers because it is now left in the hands of the teachers to do that work. They give us little pay yet we spend the whole day with the children." (T2)

In Uganda, like in most developing countries of the world, education is mainly financed by the government. The per capita spending on public primary education in Uganda however, is low compared to other countries in SSA with the same national wealth). This is mainly due to high levels of corruption, high debt ratios, weak tax collection and administration and large informal sector (UIS, UNESCO-IIEP, UNESCO 2011:39). The education system in the country has been marred by several industrial strike actions by teachers of various institutions of learning as an evidence of an existing problem between the teachers and government (Marphatia, Legault, Edge, & Archer 2010:20 Abbie 2013:[online]). The negligence of government to the teacher's demand contributed to high level of disregard of teachers in the society (Iliya & Simdet 2013:114).

Sub-category 5.6.2: Lacking incentives

Low, missing and delayed salaries have forced teachers to spend their time looking for extra sources of income to meet their needs.

"On the side of the teachers, some are not willing to take it because nowadays people look at the work he/she is doing and monetary aspect. If they see that there is nothing which can bring them additional money, sometimes they may not at all participate in teaching." (T6)

Teaching sexuality education does not provide any incentives to the financially struggling teachers so they take on second or third jobs which lead to teacher absenteeism and therefore, no-one is there to teach the children. Teacher absenteeism is a barrier to sexuality education implementation (Marphatia et al 2010:20; Coughlan 2014:[online]). However, the concept of incentive should be addressed so that teachers do not only consider monetary incentives but also other e.g. reduced absenteeism, reduced adolescent pregnancies, reduced risky behaviours and safe sex as strong motivating factors.

Sub-category 5.6.3: School/teachers not respected in the community

According to UNESCO (2009:6, 24) one of the advantage of using classroom teachers for sexuality education is that teachers are a trusted source of information and respected members of community. This is not the case in Uganda as expressed by the teachers in this study:

> "The school does not have voice to control the community". (T2)

> "No one gives us respect or appreciation. We teachers have no voice and you find that in the community any bad things now they refer them to teachers; any drinking person is a teacher, a bad building is for a teacher". (T5)

In this study, the teachers' perceptions of their status and the status of teaching as a career as viewed by education stakeholders and the general public was largely negative. This negative perception of status and profession may affect their confidence in the implementation of the programme. Compared to other high status professions, teachers have expressed being less respected and lacking authority (Hargreaves, Cunningham, Everton, Hansen, Hopper, McIntyre, Maddock, Mukherjee, Pell, Rouse, Turner & Wilson 2006:IX). Poor condition of services, heavy work load, poor remuneration, low social and public image, and continued ingratitude shown to teacher by parents and public in general have frustrated many teachers and have contributed to the low morale of the teachers (Emogu 2005 as cited in Ilya & Kidet 2013:114).

Sub-category 5.6.4: Lack of motivation/interest

Although all teachers were expected to teach sexuality education, some teachers were not interested,

> "Sometime, some teachers are; I would say they are not interested when it is their turn to prepare the presentations, because it is done in turns." (T1)

One of the desirable characteristics of a sexuality educator is interest in teaching the curriculum and personal comfort when discussing sexuality (Kirby 2009 as cited in UNESCO 2009:23). In this study, teachers can act as barriers to implementation in the classroom if they are not motivated, a finding also reported by Clarke (2008:53-55).

Category 5.7: Fear

Fear of providing sexuality education was experienced in different ways by the adult participants.

Sub-category 5.7.1: Fear of raising sensitive issues/political interference

There were instances when teachers felt threatened by speaking up against sexual exploitation of adolescents especially when the culprits were politically and socially connected in the society.

> "So the problem we have is that sometimes you try to raise sensitive issues like early marriage or defilement, the case is always turned on us because politics has come in. We teachers are poor if you are put in jail you will die there because we can't afford to bribe the judges." (T3)

The teachers were in a dilemma because although they are aware of the social injustices that have negatively impacted on adolescent sexual and reproductive health, and they felt obliged to protect the adolescents, they did not feel empowered to influence social change and to promote adolescent sexual health. This finding is supported by Maylor (2009) in Wood, De Lange & Mkumbo (2013:142).

Sub-category 5.7.2: Fear and shame

In this study, teachers acknowledged the importance of teaching youth about HIV and AIDS. However, Francis (2010:317) had reported that teachers also felt teaching sexuality in general was culturally more challenging than teaching about HIV and AIDS in a science class. As part of society hostile to public discussions on sexual matters teachers feared to challenge the existing norms and values (Helleve et al 2009:202). Many teachers feel embarrassed and wish to keep a professional distance between

themselves and the learners (Mukoma et al 2009:42). This results in little open and frank discussion forthcoming from learners (Naz 2014:676).

Teachers, adolescents and parents in this study also reported fear and shame of discussing sexuality.

> "Other teachers actually fear to tell the truth to the children when they talk about parts of the body while others may not be able to mention parts of the body as we the science teachers do, those are challenges that other teachers meet." (FGI B6)

> "Some teachers, just like shy children don't come up freely and they feel that the subject should be for a few teachers to handle." (T5)

> "And you may find it very difficult as a parent if you are not strong hearted to tell them but once you have told them they will be able to keep it in their minds." (P2)

In many societies, there are controversies and fears surrounding the issue of adolescent sexuality (Francis 2010:316). The findings in this study indicate that parents, adolescents and teachers often opted for silence regarding provision of accurate sexuality education. This often created barriers against open discussion with adolescents and giving adequate and comprehensive information on sexuality to young people (Naz 2014:676; Fazli Khalaf et al 2014:372). In addition, fear of encouraging sexual activity among adolescents, or fear of parents accusing them (teachers) as perpetrators of sexual activity among adolescents and/or feeling that it is inappropriate for the teachers to talk about these things to learners who are so young have contributed to the silence (Boonstra 2011:22).

Category 5.8: Lack of role models

Adolescents learn from the examples set by the familiar adults in their lives. Adult role models are most needed during adolescence (Shtarkshall, Santelli & Hirsch 2007:117). Parents and other adults, play a critical role in the physical, emotional and sexual development of young people (Boonstra 2007:18). The adolescents in this study expressed that they lacked role models among the parents and teachers.

Sub-category 5.8.1: Teachers not exemplary

The participants felt that besides teaching, there are other inherent roles or characteristics that adolescents sought for from the teachers.

> "Some of the teachers are not exemplary, when you tell the child not to misbehave because it is risky on the other hand the child finds you as a teacher doing it. So the child will not believe in you wholly." (T5)

Teachers' behaviour greatly shaped adolescents' attitudes and values regarding sexuality education. There is the inherent power that teachers wield over the cognitive and value formations of learners (Bennell, 2004 in Woods et al 2013:142). Strong bonds with teachers and peers at school can be a positive influence on the adolescents.

Sub-category 5.8.2: Lack of parental supervision

Parents play an important function as role models, particularly during the adolescent years because adolescents most likely seek out role modelling in their parents whom they depend on for both knowledge and example. Therefore, there is a need for parental support and household presence as adolescents, are influenced by their parents as role models. The increasing trend of absence of parents from homes was seen as a challenge:

> "Parents nowadays because of poverty mind more about money and not the child. They leave the child in bed in the morning and only return in the evening, and they don't even follow their children to the school. Even though parents are blaming the teachers I blame them a lot." (T2)

Parental monitoring and supervision are important avenues for keeping adolescents from risky situations and activities while the adolescent is developing responsible decision-making skills (Rupp & Rosenthal 2007:460; Wamoyi et al 2010:2). Warm and supportive parent–child relationships have been found to provide young people with more security and confidence to meet academic challenges and to resilience of adolescents to negative peer influences (Hurd, Zimmerman & Xue 2009:777). As

supported by Wamoyi et al (2010:1), in this finding, adolescents lacked the necessary parental supervision due to the parents need for employment which makes it difficult for them to effectively monitor adolescents. The absence of parents from home may also present opportunities for adolescents to engage in sexual activity.

Not only were parents not providing the necessary supervision but at times they are encouraging adolescents especially girls to engage in sexual activity for material gain.

> "Nowadays also the parents are interested in getting material gains and expose the children to forced prostitution, for example, they send the children go help certain 'uncle' so and so especially girls with the intention of actually encouraging the children to engage in sexual relationship. So that, however, much the teachers provide sexuality education at school these type of children cannot listen anymore because of the situation at home". (T3)

Participants stated that some parents were actively promoting sexual activity for the adolescents in exchange for material gains. Poverty is thus a detriment to sexuality education and in some poor families; girls and young women are seen as a source of income, even if it involves prostitution (Kiragu 2007:12; Nobelius et al 2010:490).

Young people are vulnerable because they depend on their parents for provision of material things as well as love and support (Wamoyi & Wight 2014:169). Therefore, have no negotiating powers over parental decisions. A young person who may return home to find engaging in prostitution or being sexual abused may not have the power to apply the knowledge and skills taught in sexuality education (Kiragu 2007:12).

Category 5.9: Lack of government commitment

Successful sexuality education programmes require formal mechanisms established by the education authorities to oversee its implementation (Padmini, Clarke & Aggleton 2014:128). This builds support at community and school level for sexuality education. The teachers expressed concern about the lack of government commitment to schools to ensure continuity of the programme. Yet they are expected to deliver wonderful results for morally upright children.

Sub-category 5.9.1: On and off programme

The teachers reported that after the launch of the national school-based sexuality education curriculum in 2003 government support weaned off drastically and the implementation of the programme stalled until recently.

> "For me sex education/PIASCY is still somehow problematic because if I am to take like PIASCY I think it has started like some 13 years in Uganda. It started well but somewhere in the middle it died completely where you could not even hear about it completely because emphasis from the top is not there. So, again they have just woken it up." (T4)

The inconsistency could be attributed to lack of funds, non-involvement of all stakeholders and lack of ownership of the programme by the education ministry. Political and social leadership at all levels is needed to support the implementation of sexuality (Boonstra 2011:20), and to ensure continuity and consistency UNESCO 2009:9).

Sub-category 5.9.2: Lack of support supervision

In this study, teachers viewed teaching sexuality education as an extra burden and in the absence of support and supervision from the education authorities teachers chose to stop implementing it and focused on examinable subjects.

> "This is now from government, they only introduced it (the programme) once and after the introduction they left everything, and they relaxed. You know, with our work (teachers) we have so much work to do therefore when they relaxed the teachers also relaxed until recently." (T5)

As in other previous reports Padmini et al (2014:123) and UNESCO (2009:24), lack of enabling environment affected the consistency and continuity of the implementation of the programme in this study.

Category 5.10: Challenges related to adolescents

This category described some of the challenges parents and teachers faced in providing sexuality education to adolescents. Including perceptions that sexuality education promoting sexual activity, adolescents are maturing early and adolescents are challenging the teachers.

Sub-category 5.10.1: Adolescents experimenting with the information

The teachers felt that sexuality education promoted curiosity hence sexual activity among the adolescents.

> "There are others after getting the information they want to try out the "NEVERS" so you tell them never do this, but they want to try, challenging why is the teacher telling me never do this? So, at the end they may indulge in other things." (T6)

> "Negative part is that, many of these kids want to try the things we tell them so that they see if the effects are there on them. I remember a P3 boy picked a girl and went to have sex. They wanted to practice what we had told them." (T3)

In this finding, the teachers perceived that sexuality education leads to early sex, a finding contrary to several previous studies that have indicated that sexuality education rarely, if ever, led to early sexual initiation. Sexuality education can lead to later and more responsible sexual behaviour or may have no discernible impact on sexual behaviour (Kirkby 2009 in UNESCO 2009:8; Padmini & Aggleton 2013:43).

Sub-category 5.10.2: Adolescents maturing early

The teachers also expressed that children were maturing quite early before gaining access to the information and skills needed to guide their decisions and behaviour regarding their sexual and reproductive health.

> "These kids of ours nowadays, anyway, I don't blame them because they are still young and with nowadays life of ours, they are exposed to these thing so early. I was shocked the other day when a child in primary three started her menstruation and I keep asking my mind, how can I help a girl in primary 3 to overcome these

things? So these days indeed children go into changes very fast, therefore we
need to guide them before they start." (T3)

This finding is supported by Gluckman and Hanson (2005) in Goldman (2011:155) that
girls and boys are reaching the reproductive fertile period of puberty earlier than in the
previous generations.

Sub-category 5.10.3: Adolescents challenging teachers

The teachers also often experienced being confronted with their own sexuality in the
classroom.

> "Sometimes children who are sexually active say how come this teacher is telling
> us to abstain, is she not having sex with her husband?" (T4)

The narrow focus on abstinence only education and general belief that adolescents are
too young to have sex has created dissatisfaction among the sexually active
adolescents who felt their needs were not being addressed. Teachers on the other hand
felt that it was a lack of classroom discipline and inappropriate comments from the
students.

Sub-category 5.10.4: Young teachers vulnerable

Teaching about sexuality, initiated open communication on sexuality issues that was
viewed as breaking the professional boundaries especially between young teachers and
students in which young teachers became potential or actual girlfriend/boyfriend.

> "Young teachers, you know these days some teachers come to the profession
> when they are very young and when they are talking about sex education to the
> adolescents, the teachers can be lured into a sexual relationship by the boys and
> girls if they are not strong hearted." (T4)

Outside the classroom settings, teachers had contact with students and maybe it was in
such settings that the teachers perceived that the adolescents took advantage of this
freedom to initiate and engage in an intimate relationship between a teacher and a

student. This is finding is similar to what Helleve, Flisher, Onya, Mukoma & Klepp (2011:22) reported. In this study, teachers felt that the adolescents had tempted teachers.

Category 5.11: HIV positive adolescents affected

The advent of antiretroviral drugs and improved care of perinatally infected children who get infected at birth with HIV has led to an increasing number of HIV positive children who have transitioned into adolescence and young adults. Like all young uninfected peers, HIV-infected youth perceive that most people of their age are having sex and that there is indeed pressure to do so, both by a certain age and at a certain point in a relationship (Baryamutuma & Baingana 2011:213; Naswa & Marfatia 2010:2). HIV positive adolescents' knowledge of HIV transmission and safer sex was found to be low (Wiener, Haven, Lauren & Wood 2007:471; Ross, Camacho-Gonzalez, Henderson, Abanyie & Chakraborty 2010:63). With respect to the rising incidence of newly diagnosed HIV-positive adolescents HIV-infected adolescents represent a unique group requiring specialised medical and psychosocial HIV care to in order to optimise their health and limit HIV transmission to others.

Schools play a key role in providing the right information, an enabling environment and supportive services that assist adolescents to make informed decisions regarding social and sexual issues and contribute to a better future (UNICEF 2011:11). However, in this study, participants reported that HIV positive adolescents were not getting all the support and information needed both at home and at school.

Sub-category 5.11.1: Lack of skills for handling HIV positive adolescents

Sex and family life education for adolescents living with HIV must therefore help them make decisions on sexuality and raising a family. Teachers in this study felt ineffective in handling HIV positive adolescents as a special group.

> "The other challenge is we are having difficulty in talking to the HIV positive adolescents. We don't have any approach or skills on how to take them aside and talking to them is difficult. As a result some of them leave school and get married to healthy partners further spreading the scourge." (T3)

"For children who are HIV positive, we don't talk about issues like relationship because they are still young, I think they get counselled from where they get the drugs." (T5)

In countries with high HIV sero-prevalence rates a large numbers of the adolescent population to whom sexuality education messages are given are already infected with HIV. Therefore, sexuality education should not only address issues of preventing HIV infection but also living with HIV infection such as the importance of avoiding re-infection, the urgent need to have STIs treated (Ross et al 2010:63), rights and responsibilities concerning sexual relationships, planning for a family among others (Birungi, Mugisha, Obare & Nyombi 2009:184). These findings suggest that the planning and implementation of the sexuality education does not address the information needs of the HIV positive adolescents.

Sub-category 5.11.3: Lack of family support for orphaned HIV positive adolescents

The HIV/AIDS epidemic has continued to ravage the populations of sub-Saharan Africa leading to unprecedented excess mortality with far reaching impact. Orphanhood resulting from HIV/AIDS mortality remains a huge problem, especially in sub-Saharan Africa (Kathleen et al 2010 in Zagheni 2011:761). The extended family has been recognised as a major safety net for orphans in sub-Saharan Africa. As the number orphans due to HIV/AIDS rises, the material basis of extended family relations may become insufficient to meet the needs of the orphans.

"Most of them are orphans being looked after by elderly grannies who are not able to provide much." (T5)

Besides health and education impacts, orphans suffer economic hardships often because they tend to live in larger households in which the caregiver is normally an elderly (Monasch & Boerma 2004 in Zagheni 2011:763), who are already poor, face the loss of economic support from their adult children and unexpected social, psychological and economic burden due to the care-giving role they assume (Kakooza & Kimuna 2006:63).

In this study, teachers reported that HIV positive adolescents' family living condition made them vulnerable to risks. This is in line with Mmari, Kaggwa, Wagman, Gray, Wawer and Nalugoda (2013:153) who found out that young females who did not live with both parents were more likely than those who did to have had sex before the age of 15. The orphaned adolescents became victims of sexual coercion because of their social and economic vulnerability (Naswa & Marfatia 2010:4; Moore et al 2007b:45). Adolescents with inadequate provisions reported involvement with multiple sexual partners (Kunnuji 2014:640; Nobelius et al 2010:490). Young people whose material needs are inadequately met tend to be involved in transactional sex which involves the exchange of sex either for material things or services.

Category 5.12: Inappropriate information

The teachers reported that some of the information was misleading and not appropriate for children in Primary schools. However, the perceived appropriateness of particular learning objectives should be based on available data and evidence rather than because of personal discomfort or perceived opposition.

Sub-category 5.12.1: Some topics not appropriate

The some teachers and parents felt that some of the information passed to the adolescents was not appropriate and instead detrimental.

> "Some topics are not fit to be given to the kids like being faithful to your partner, stay in school and complete at least primary seven (P7). These words may not be a strong encouragement to those who may think that if you complete P7 is enough. Another concept is AIDS kills. With new discoveries, new facts show that (may be arrived at like they say) AIDS does not kill but it is the opportunistic infections which kill when ones immunity is lowered. In addition such message gives no hope for those who test positive, and that is why others try to commit suicide. Even use condoms at primary level; I don't think it's proper to encourage them to use condoms." (T4)

> "We should have one united voice that they should abstain from sex because they are still young." (P3)

The participants agreed that adolescents in primary schools should be sent a clear message that they were too young to have sex. This finding was interpreted as influenced by the abstinence only model of sexuality education that was adopted by Uganda and according to Francis (2010:314) the general belief that adolescents are sexually innocent. However, According to UNESCO, "A dual emphasis on abstinence together with use of protection for those who are sexually active is not confusing to young people. Rather, it can be both realistic and effective" (UNESCO 2009 in Boonstra 2011:22).

Participants from all three groups variously recommended that children in this age group should learn about puberty including body changes, hygiene, and menarche as well as the physiology of sexual intercourse, including how pregnancies occur and how diseases are transmitted.

Category 5.13: Cultural barriers

In many societies public discussion on sexuality and sexual behaviour is considered a taboo and so teachers and parents feel uncomfortable to engage in communication about sexuality with the adolescents (Boonstra 2011:20; Kibombo et al 2008:15; Nath 2009 in Padmini et al 2014:122). The belief that talking to young people about sex will encourage earlier sexual activity forms the basis of much of this resistance (UNESCO 2009:8; Kibombo et al 2008:15).

Sub-category 5.13.1: Against cultural norms

The adult participants expressed that culture is a barrier to sexuality communication.

> "Our culture is a bad culture, because anything concerning sex should not be taught to the young ones. For us men we think that women should be the ones to teach young girls about sex." (P2)

> Adult participants faced the challenge of teaching adolescents either as a parent or teacher.

"But there is only one challenge that we teachers face especially when a teacher has got a his own child in that class much as you are in the class performing the government service of teaching the children we still carry part of the culture, what the culture dictates to you that parents should not talk about sex to their own children that's what the culture since we grew up in culture, it's part of us and getting out of it to begin calling a spade a spade and not a big spoon so you find that they give out those difficult topics to other teacher who may not be prepared to teacher." (T5)

Culture not only inhibited the parents and teachers from teaching the adolescents but also influenced the adolescents' attitudes toward the teachers as expressed below:

"Culture also influences the adolescent's reception to the information if for example they see a female teacher talking to boys about sex education they imagine something must be wrong with the teacher because culturally it is a taboo for female to start talking to the boys about sexuality." (T6)

These findings are supported by previous studies which reported that delivery of sexuality education in schools are often constrained by social and cultural constraints to discussing HIV and AIDS, sexual relations and power inequities (Naz 2014:674; Aggleton 2013:108). Teachers' personal or professional values could also be in conflict with the issues they are being asked to address (UNESCO 2009:8; Helleve et al 2011:20). Cultural constraints also influence the quality of sexuality education by restricting the provision of proper and accurate information (Fazli Khalaf et al 2014:361).

Category 5.14: Religious barriers

The teachers expressed that religious orientation of adolescents influenced how they received the information.

"Some children from religious families like the 'Born Again Church' or Pentecostal faith, associate sex education with evil and do not pay attention to the sessions." (T2)

There is a religious moral implication against sex education. Religious beliefs that are interpreted in a way that discourages the use of contraceptives may contribute to unsafe

sex and unwanted pregnancies, including misconceptions that marriage protects individuals from HIV/AIDS (Naz 2014:676). This finding indicates that religious orientation of some children was a barrier to sexuality education.

Category 5.15: Environmental/social barriers

Sub-category 5.15.1: Influenced by the location of school

The kind of social activities in the school neighbourhood is viewed as an avenue for promoting risky behaviours.

> "School location also; you find a school located near either a market or drinking places (bars). Therefore, such schools cannot help learning because they are not supported by the community." (T4)

According to the ecological transactional model, different neighbourhoods present different sets of risks for adolescents (Institute of Medicine and National Research Council 2011:5). Social risk factors have been shown to increase the likelihood that adolescents will engage in risky behaviours.

Sub-category 5.15.2: Social media influencing adolescents

All groups of participants indicated that the media and technologies are now part of young people's lives influencing their sexual behaviour negatively.

> "You know, the children we are teaching these days are so open-minded about sex. Unlike in the past, they don't fear anything, they behave the way they see on TV and are now exposed to different things which they want to demonstrate or practice." (T1)

The increasing exposure to sexual content on the media is reported to create the perceptions that everyone is having sex and that they consider doing so as acceptable (Kay et al 2010:16).

Sub-category 5.15.3: Negative peer influence

All groups of participants agreed that peers influenced adolescents negatively most of the times.

> "Adolescents when with their peers show their true colour, but when at school pretend to be good." (FGI-G4)

> "Peer influence is there, the bad one." (P5)

> "some adolescents even if you tell them that HIV/AIDS is there, they never listen to our advice due to bad peer influence from their out-of-school peers; so they don't pay attention to the advice from school." (T6)

The importance of peers shifts at adolescence. The theory of reasoned action states that when an individual socialises with particular people, he or she tends to adopt the perceived attitudes and values of significant others (Institute of Medicine and National Research 2011:7). The participants agreed that what students learned from their peers negatively influenced their perceptions about sexual attitudes (Kay et al 2010:14).

Conclusion on theme 5

Sexuality education occurred within an ecological niche made of the political, family, socio-economic, cultural factors that coalesced to create barriers which impeded, shaped, and guided implementation of school-based HIV/AIDS education programmes.

To effectively implement sexuality education there is a need for careful planning, budgeting, advocacy, training, implementation, monitoring and evaluation with continuous support and involvement of all stakeholders from the beginning.

THEME 6: SUGGESTIONS FOR NEEDED CHANGES

Based on the needs for effective sexuality education the participants made the following recommendations:

Category 6.1: Need to keep up with the trends

Participants felt that information was evolving so fast therefore, there was a need for the teachers and teaching materials used in teaching sexuality education to be up to date.

Sub-category 6.1.1: Update teaching materials/ books to match the demand

The teachers felt that the teaching materials currently being used were old and not adequately addressing the information needs of the adolescents thereby have forced adolescents to rely on other sources of information like the media and peers.

> "So, those who have written the book concerning the subject they should update their books because nowadays children have easy access to much more information when compared to what the books have. The books we are using are now very old." (T3)

This finding, showed weakness in ministry of education's planning, costing and budget needed for the adequate development and provision of resources including materials.

Sub-category 6.1.2: Retraining teachers to meet the needs

The teachers acknowledged that increased access to information and technology is likely forcing adolescents to seek information from other sources when their information needs are not met at school. Hence, there is a need for refresher training to in order for teachers to stay current.

> "Retraining should be done, you know, among these adolescents some have become so advanced on the computer thing. You may find that the information you are teaching the child might have already be accessible through the computer and found in the internet. So they begin to think that they know so." (T1)

Sexuality education is unlikely to succeed if teachers, 'do not feel comfortable with the contents or the style of delivery, or have personal values which conflict with the programme (Clarke 2008:54).

Category 6.2: Involve all stakeholders

The limited implementation of sexuality education in most countries is due to resistance or lack of awareness of other stakeholders. Greater community and stakeholder involvement creates a wider support base for implementation of sexuality education through policy initiatives and change in attitude combined with social marketing (Lavalekar 2014:109; Smith & Harrison 2013:12)**.**

Sub-category 6.2.1: Participation by all

Participants from all groups believed that sexuality education should be a responsibility of all education stakeholders.

> "It is the duty of everyone to participate. Parents, politicians, religious leaders should have a role to play. At school peers can help because they can understand very fast, the Parent Teachers Association, since they represent the parents, the political leaders and the religious leaders because this concerns the morals." (FGI-B4)

The participants emphasised on the shared responsibility between parents and the schools that it was important for parents and their children to talk about sex at home.

> "In addition to the teachers, their parents should also talk to the children." (FGI-G3)

> "Not all parents are not doing this but they should be told to start doing these." (P1)

> "Parents should also be involved because while the child receives information from the school they should find the same reinforcement from the parents that would aid their learning a lot." (FGI-B4)

This finding indicated that communication on sexuality was not happening in the homes and participants recommended that sexuality education should begin at home. In

addition parents should be invited to participate in the school session. Similarly, it is argued that effective programmes should involve parents because, to date, the most promising programmes have greater scope and aim to modify the social context for young people (Mathews, Aaro, Grimsrud, Flisher, Kaaya, Onya, Schaalma, Wubs, Mukoma, Klepp 2012:120).

Category 6.3: Seek external support

Sexuality education is a sensitive topic in many societies and need the involvement of all stakeholders at different levels during implementation.

Sub-category 6.3.1: Involve health personnel

The participants recommended that services of health care personnel should be enlisted.

> "If the teachers need any support or if they fail then we shall ask the health workers from either TASO, Gulu referral hospital to assist." (T3)

> "I think besides teachers the health personnel people should be involved because for them they know how to tell the children the things in details; with us, we simply read from the books." (T4)

> "The health personnel like doctors should also be involved because they have more in-depth knowledge than the teachers who only rely on the text book guide." (FGI-G4)

In their own words, the teachers in this study felt that sexuality is most suited for the healthcare workers. This could be interpreted as a result of the teacher's lack of confidence and training, ineffectual, or otherwise inability to teach quality sexuality education. This finding agree with the UNESCO (2009:24) and Goldman (2011:157) recommendations that sexuality education should be delivered by sexuality education professionals, with proficient knowledge of content and use effective instructional methods to address needs of young people. It is suggested that sexuality programmes should combine awareness-raising and skills development with access to services, often in partnership with service providers (UNICEF 2011b:11) Health-care providers

therefore, can offer practical and moral support to school-based sexuality programme in the education and service components (Birungi et al 2008:20).

Sub-category 6.3.1: Need to share external experiences

The teachers desired the use of personal testimonies of individuals who were affected because of bad decisions on sexual behaviour to reinforce their teachings.

> "If the government could afford, we should encourage the use of testimony so that when they (adolescents) hear from other sources they get to know (appreciate) what the experiences are like outside there." (T1)

This is in line with previous recommendation that, even an expert adult would also be a good presenter as they would have the knowledge to answer the children's questions and the youths could trust the accuracy of the information (Hanglund 2006:374).

Category 6.4: Need more

Effective sexuality education programmes should strive to identify and address these reasons. It is also important to build upon young people's existing knowledge, positive attitudes and skills. Thus, effective programmes should build on these assets as well as address deficits.

Sub-category 6.4.1: More time and sessions

Adolescents identified the need to maintain consistency and increased frequency of sessions in order to benefit.

> "If we could include weekly sessions so that when the children come for the meeting sessions they have an idea of what we are discussing." (FGI-B4)

> "If more time could be allocated for sex education in class during the integrated lessons so that we can have enough time because at the moment we don't go into the details" (FGI-G1)

> "As we grow up we need more and frequent sex education." (FGI-B2).

Kirby and Laris (2009) in UNESCO (2009:23) stated that sufficient time is required in order to address the needs of young people on information about sexuality, multiple topics on risks and protective factors that affect decision-making need to be addressed. The narratives by the participants could be interpreted that the implementation of sexuality education was limited by availability of time and additional time can be added as an extra-curricular activity. Much as committing sexuality education as an extra-curricular activity would have added advantages, integration of sexuality education into the teaching curricular is more likely to result in more positive outcomes.

Sub-category 6.4.2: Include more topics

One teacher expressed the need to have more topics included. Practicing homosexuality is contrary to the accepted cultural norms and is illegal. The practice among adolescents is usually a result of coercion.

> "Homosexuality or lesbianism and contraception are usually not discussed; we mainly talk about the dangers of early marriages and sexual maturation management. I think homosexuality should be discussed in order to alert adolescents about the dangers of homosexuality which may destroy their organs. And not to give in for money used to coerce them into the practice." (T6)

The sexuality education in Uganda adopted the morally sensitive approach that restricts provision of information considered against cultural or religious norms. The teachers in this study explained the need for a more comprehensive approach to education. More students, now or in the future will be sexually active with members of their own sex especially in developing. It is recommended that planning and implementation of sexuality education should take into consideration discussions on sensitive issues like homosexuality (UNESCO 2009:7). However, the challenge in the practice of homosexuality among the adolescents is a violation of human rights which takes the form of sexual coercion as described by the participant in this case.

Adolescents desired information on protection from rape:

> "We need more information on how to fight those strangers who come to rape us." (FGI-B1)

"I want them to include topics like HIV voluntary counselling and testing." (FGI-B3)

The adolescents expressed the need for programmes that encourages testing and treatment for STIs, including HIV. The findings concur with WHO (2013:2) that adolescents are vulnerable to HIV infection and the HIV epidemic among adolescents needs more attention and a tailored approach. Issues and services for adolescents should be included explicitly in national HIV responses, policies and plans. It would appear from this study that adolescents need increased access to testing through provider-initiated testing and counselling in health services in all high HIV-prevalence countries, and through community-based services for adolescents from key populations in all settings.

In generalised epidemics, HIV testing and counselling with linkage to prevention, treatment and care is recommended for all adolescents (UNICEF 2011a:10; WHO 2013:2, 4). In addition, some young people are hindered in their ability to obtain essential services by limited protection for young people's confidentiality and right to medical privacy (UNAIDS 2013:18). There is therefore a need for improving adolescent reproductive health care by providing customer-friendly environment where adolescents would be assured of confidentiality of the information they provide.

Category 6.5: Need to teach abstinence only

The adult participants expressed the need to provide abstinence only sexuality education, and agreed that adolescents should not learn about safer sex measures.

"We should have one united voice that adolescents should abstain from sex because they are still young and one clear reason for sex say that sex is for procreation and not for pleasure because if it's for pleasure then they are entitled to have it." (T4)

"Children should only be told about the negative consequences of sex at this stage anything that encourages the children to have sex and be faithful should not be encouraged in the schools." (P4)

Cultural restrictions, as well as government policy of teaching abstinence only sexuality education may have contributed to the strong opposition to the more morally conservative approach advocated by the teachers including those who participated in this study. Despite evidence of sexual activity among adolescents and young people in published reports, policy makers still insist on abstinence-only sexuality education. Abstinence-only policy restricts the access of young people to accurate information (Fazli Khalaf et al 2014:363; Padmini & Aggleton 2014:433).

Abstinence only education is inappropriate for learners who may already be sexually active. Several studies found that sexuality education programmes had a greater impact on behaviour if students were given information before they became sexually active rather than after (UNESCO 2009:7). In this study, it was revealed that the, concept of pleasure in sex was discouraged which is in line with Lamba, Lustig & Graling (2011:305). This however, negates the importance of pleasure and positive sexuality education to sexual health, rights, equality and safeguarding against sexual coercion and harm (Hirsta 2012:423; Lamb et al 2011:305).

Category 6.6 Support teachers

Teachers needed motivation from school management with the implementation of the programme.

> "The administrators should be close to the teachers because the gap is always big because they always give some little motivation. (T1)

> "Sex education teachers should be motivated because they don't only deal with the book but also involve creativity because they have to make sure that they continuously come up with new ideas". (T6)

School management is expected to take the lead in motivating and supporting, as well as creating the right atmosphere in which to implement sexuality education and address the needs of young people.

Category 6.7: Needs integration

Participants expressed that integrating sexuality education in the formal school curriculum especially in the other subjects other than science or biology will lay emphasis on its implementation. In addition, the content should be made culturally acceptable.

Sub-category 6.7.1: Incorporate culture into teaching SBSE

To avoid conflict with culture and values of the communities, the participants expressed the need for sexuality education to integrate certain cultural aspects that would make it more acceptable.

> "So the main thing to me is finding a way of incorporating culture to modern teaching so that teachers will not find it difficult to teach." (T2)

The teachers also felt that if sexuality education was made compulsory and examinable, most teachers would take it more seriously. Teaching sexuality education is culturally sensitive and is a source of personal and professional conflict for teachers. To be effective, sexuality education should be culturally appropriate and adopted to local context, through engaging and building support among the custodians of culture in a given community (UNESCO 2009:8). Thammaraksa et al (2014:104) found that training teachers in culturally sensitive issues led to development of positive attitudes toward sex education, increased perceived self-efficacy and increased sex education skills in culturally sensitive topics.

However, it is argued that there is a need to change the social norms and harmful practices that are not in line with human rights and increase vulnerability and risks. The role of traditional community leaders and parents in shaping and refocusing social norms and practices should be emphasised through engagement in the curricular development and playing role models.

Sub-category 6.7.2: Integrate into the school curriculum

Teachers and adolescents suggested inclusion of sexuality education across all subjects.

> "In the school curriculum it should be there and the syllabus has to be fully developed." (T6)

> "It should be integrated in all the subjects, at the moment it is also integrated in the science subjects." (FGI-B2)

Although participants expressed desire for the integration of sexuality into the curriculum UNESCO (2009:19) found that there are a number of factors which influence the decisions to integrate sexuality education into formal curriculum including general educational policies, availability of resources (including the availability of supportive school administration, trained teachers and materials), competing priorities in the school curriculum, the needs of learners, community support for sexuality education programmes and timetabling issues. Kivela et al (2013:1) reported that intra-curricular programme is more effective and cost effective to scale up compared extracurricular one. The education system in Uganda need to take cognisant of the factors reported to influence integration of sexuality education into the formal curricula in order to effectively offer a more comprehensive education to the young people.

Category 6.8: Adjust according to school location

Sub-category 6.8.1: Start in lower classes in rural schools

Since the introduction of Universal Primary School Education in Uganda in 2002, many children in the rural settings have enrolled in schools and most of them start late beyond the official age of 6 years. These late comers have created an environment where classrooms have classmates who are not age-mates. The teachers and adolescents recommended that sexuality education should therefore be introduced in the lower classes to cater for these late entrants.

"It should be started in lower primary since in the rural setting most children begin school when they are old so they need this information." (T5)

It is important to provide clear, scientifically accurate and gender sensitive information to young the people as they enter adolescence. Haglund (2006:372) asserts that sex education should be introduced early, prior to students becoming sexually active.

5.4   CONCLUSION

This chapter presented the findings from the analysis and interpretation of the data from interviews and Focus Group Discussions. Major themes, categories and sub-categories that emerged from the data were tabled and discussed accordingly. Meaning units for each theme that were represented by appropriate quotations from the participants' words were indicated. Creation of meaning was identified as an important component of the findings as the participants benefits of what sexuality education. Further discussions elucidated the challenges to the implementation of sexuality education by the teachers, adolescents and parents. The experiences of sexuality education highlighted issues on evidence of how sexuality education was planned and implemented at all levels. Different suggestion to overcoming the challenges were also reported as expressed by the participants.

This study has provided insight into six themes from which a substantive theory model of SBSE has been developed. This theory is set out and discussed in detail in the following chapter.

CHAPTER 6

DEVELOPMENT OF A SUBSTANTIVE THEORY: EMPOWERING ADOLESCENTS WITH THE RIGHT INFORMATION TO INCORPORATE THE EXPERIENCE AND PERCEPTION OF SBSE

6.1   INTRODUCTION

The last objective of this study was to develop a substantive theory of the experiences and perceptions of the participants of school-based sexuality education. The purpose of the chapter, was to show how the findings led to theory building rather than theory-testing. The conceptual relationship between the themes/categories in the model are described. Discussion of the emergent theory and various components in line with relevant literature are also made.

Theory building is an inductive process in which research begins with observations and uses inductive reasoning to derive a theory from the observation. The theory attempts to make sense of the observations. Theory testing is a deductive approach which follows the path of logic most closely. It begins with a theory, and leads to a new hypothesis which is put to the test by confronting it with observations that either lead to a confirmation or a rejection of the hypothesis (Snieder & Larner 2009:16). The observations should provide a test of worth of the theory. Pelissier (2008:3) adds that deductive approach moves from the general to the particular.

Grounded theory is a systematic inductive and comparative approach for conducting research for the purpose of constructing theory (Charmaz 2006 in Bryant & Charmaz 2010:10). One of the objectives of this study was to develop a substantive theory. A substantive theory is one that is grounded in research on one substantive area (Creswell 2013:89; Strauss & Corbin 2008:281). The findings from this study, provided a substantive platform for developing a theory on school-based sexuality education. In the following sections, the model developed on the theory is presented and discussions on the different components are made.

6.2   OVERVIEW OF STUDY FINDINGS: THE SUBSTANTIVE THEORY

According to Charmaz (2006:136), the constructivist approach challenges the assumptions of creating general abstract theories and leads us to 'situated knowledge'. This research has resulted in the researcher's theorising of the studied experience of adolescents, teachers and the perception of parents of SBSE from the participants' perspective that resulted in a substantive theory.

Glaser and Strauss (1967) in Charmaz (2006:176) urge the researcher to discover the social process. Similarly, Corbin and Strauss (2007 in Creswell 2013:88) explain that the focus of the research question during analysis is understanding the process of the experience and the researcher later returns to the participants to ask detailed questions on; what was central to the process (core category), what influenced the core category to occur (causal conditions) and what effect occurred (outcome). The outcome of grounded theory analysis is to generate a rich, lightly woven, explanatory theory that closely approximates the reality it represents (Strauss & Corbin 1998:57). The analysis of the data from this constructivist grounded theory study led to the construction of a substantive theory logically organised around the overarching core category of as the experiences and perceptions of participants of SBSE from their perspective. The core category explains what the research is all about in a word or two. The core category does more than tell a story. It provides the structural frame for organising categories and their lower level concepts into a theoretical explanatory framework (Corbin 2011:14). The substantive theory is encapsulated in the textbox below.

> A theory of empowering adolescents of with the right information and skills as the substantive theory of the participants' experiences and perception of school-based sexuality education.

The theory that was developed is a general explanation of school-based sexuality education, as the core process of *Empowering adolescents with right information and skills,* influenced by context and conditions such as, *dominant concepts of relevance of content taught*, mechanism of *provision of information on SBSE, challenges faced*

during the implementation of SBSE and suggestions for changes needed with the outcome/consequence of sexuality education as *the meaning assigned to SBSE* (Strauss & Corbin 1998 in Creswell 2013:88).

According to Charmaz (2006:159), by using a conceptual model, the connections present within and between the concepts and inherent part of the analytic process in grounded theory are made clear (Figure 6.1).
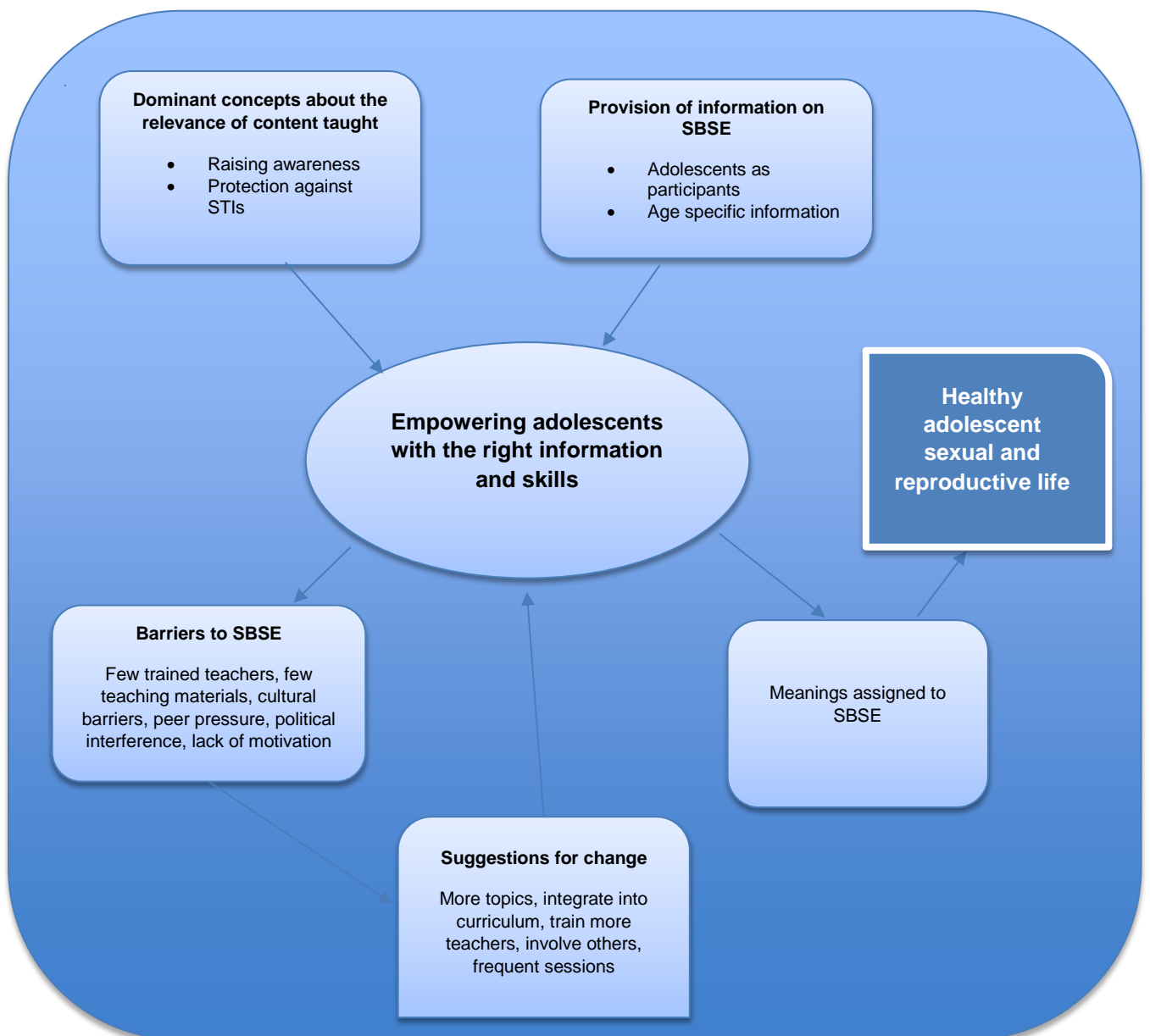

**Figure 6.1   Representation of the substantive theory: Empowering adolescents
With the right information and skills**

According to symbolic interaction, as exposited by Lynch and McConatha (2006:89), the themes discussed below are subjective interpretation of reality that impacted and helped to influence the experience and perceptions of participants regarding SBSE. The intent of a constructivist grounded theory study is to make meaning of what others have about the world (Creswell 2013:25).

6.3   COMPONENTS OF THE MODEL

In this study, each participant mentioned that school-based sexuality education was beneficial to the adolescents even though there were challenges that affected its implementation. Following Strauss and Corbin (1998:123-145) procedures for analysis the researcher returned to the participants to find out how adolescents were benefiting from the programme. There were three (3) other themes that emerged from the data, which described the conditions/contexts in which the process of "*empowering adolescents*" education is experienced as: supportive, challenging and requiring changes to improve benefits of sexuality education and the outcome of the experience. The conceptual model developed had key elements:

Context: in which sexuality education occurs.
Process: the manner in which disclosure occurs, (how?).
Strategies/actions: to overcome barriers to implementation.
Outcome: of provision of sexuality education.

The themes were combined to generate an explanatory theory that intuitively felt right as depicted in Figure 6.1. The format of this chapter and elucidations contained in it will be based on this grounded theory model of "*empowering adolescents.*"

6.3.1   The core category/process: Empowering adolescents with right information and skills

Empowering adolescents with right information and skills emerged as the category/process of the research. The core category is intended to answer the main question/ objective of the study (Polit & Beck 2014:315). The following factors played a role in identifying the core category: (a) pervasiveness – it is a fundamental basic process that occurs and accounts for change over time irrespective of place and (b)

centrality - most other categories and their properties are related to it and the core category also accounts for a substantial proportion of the variation in behaviour.

6.3.2 Dominant concepts about the relevance of content taught

Provision of certain key concepts in the content of information and skills deemed as relevant for adolescents during SBSE shaped the experiences of the participants.

6.3.3 Provision of information on SBSE

The study has shown that the context in which information was provided influenced the benefit of SBSE. Specifically, providing age-specific information and using strategies that engaged adolescents as active participants contributed to the relevance and easy understanding of the benefits of sexuality education. The contexts were also considered to be essential for the adolescents to build understandings of their experience and for them to successfully engage in positive behaviours.

6.3.4 Challenges faced during provision of SBSE

The process of *empowering adolescents* was hampered by a number of challenges that undermined its effectiveness. The contextual challenges ranged from individual to family, school, community and national levels enshrined in the sociocultural, physical and spiritual spheres.

6.3.5 Strategies/actions: Suggestions for needed change

Experiences and perceptions of the barriers to implementation of SBSE led to the generation of desired changes across different levels necessary to facilitate the success of the programme.

6.3.6 Outcome: Meanings assigned to SBSE

It was an outcome that is attributed to the benefit of SBSE. It presented the change in the adolescents' knowledge and understandings that occurred over time and with experience of provision of information that enabled them to make meaning of SBSE.

6.4   DISCUSSION

The discussion of findings is opened by comparing and contrasting findings from this emerging theory against literature evidence to look for confirmation and discontinuation in the extant literature. The results of this study shed new light on the experiences of teachers and adolescents and perceptions of parents regarding SBSE. Discussions are made on theoretical model that focuses on the core category of "*Empowering adolescents with the right information*" and the related themes. In this model, the empowering adolescents occurred under enabling conditions such as providing information; focusing on relevant concepts in content provided and ensuring that the sexuality education was delivered using specific strategies that allowed the adolescents actions and interactions with others in a way that formed the experiences and perceptions of SBSE. However, there were also challenging contextual factors at various levels that influenced the benefits of the SBSE. Strategies/actions were recommended by the participants as a means to enhance the benefits of SBSE for preparing adolescents during this transitional period and into adulthood.

The discussions presented flow from the process, to the context and outcome of the experience of SBSE.

6.4.1   Empowering adolescents with the right information

Empowering is defined as to make (someone) stronger and more confident, especially in controlling their life and claiming their rights (*Oxford Dictionary*:[online]). Empowerment is the process that enhances the capacity of individuals and groups to make choices and transform the choices into desired actions and outcomes (World Bank: [online]). This enables them to influence the course of their lives and the decisions that affect them. Sexuality education is based on the philosophy that young people should be empowered to be responsible for their actions (UNESCO 2014:12). It gives adolescents complete, accurate and age appropriate information to help them reduce and or prevent risk of HIV/AIDS, other STIs and unintended pregnancy hence controlling their lives (UNESCO 2009:3). The concept of empowerment calls for supply and demand; sexuality education offers information and skills which the adolescents utilise to prepare for successful transition into adult life.
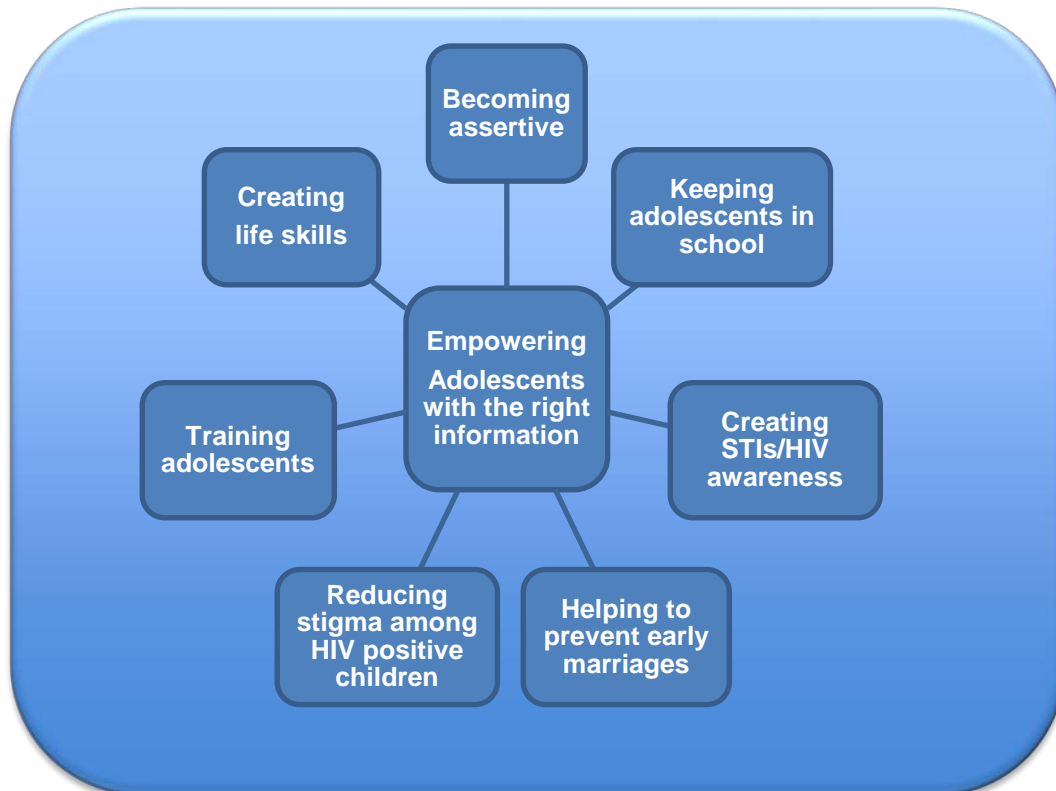
Figure 6.2 The attributes of the empowerment in SBSE

There are key elements of any successful empowerment efforts; Access to information, Inclusion and participation (Laverack & Mohammadi 2011: ii259). Similarly, the UNESCO (2009) guidelines for sexuality education state that the main objective of sexuality education is to increase knowledge and develop or strengthen skills among adolescents to promote and sustain risk-reducing behaviours. It further suggests that to implement the programme successfully there is need for active participation of all the stakeholders at different levels to ensure support and sustainability and specifically involvement of adolescents in the teaching process.

Bandura's theory of social learning also guided the interpretation of findings; it is posited that people learn from one another via observation, imitation and modelling. It explains human behaviour as continuous reciprocal interactions between the cognitive, behavioural influences (*www.learning-theories.com*). The benefits of school-based sexuality education are experienced as cascade effect when each adolescent engages with information and skills provided in making decisions that protect them from risky behaviours as in Figure 6.3.
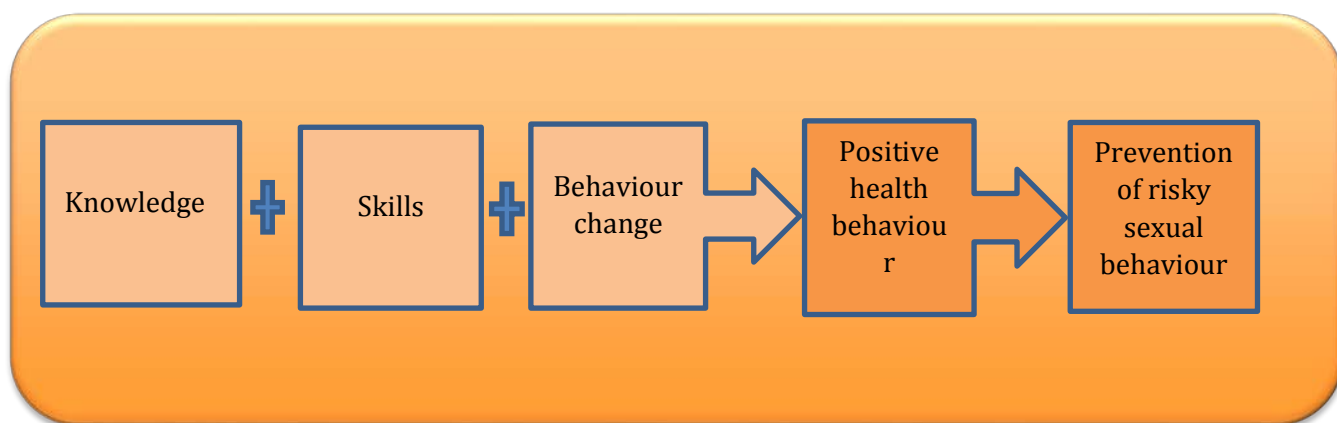
Figure 6.3   The benefits of sexuality education

(Adopted from Vranda & Rao 2011:11)

The figure shows that adequate knowledge about adolescence coupled with skills and behavioural changes would result in positive behaviour towards sexuality and consequently, prevention of risky sexual behaviour. The positive cases would then be observed and imitated by others who in turn influence a bigger group Skills, hence positive outcomes.

6.4.1.1   *Keeping adolescents in school*

Empowerment begins with education. It is the best development investment a nation can make (UNICEF 2009:21). This realisation led to the declaration of eight millennium development goals (MDG) at a United Nations general assembly in 2000; the second goal is achieving universal primary education by 2015 (UNICEF 2011b:26). Education is a protective factor for adolescent health; Schooling delays marriage and pregnancy which are major causes of school dropout for girls in many countries. School-based sexuality education equips adolescents with information and skills needed to protect them from unwanted pregnancy or sexually transmitted infection, including HIV, and may thereby increase their chances of staying in school. In turn, staying in school will provide greater protection as confirmed by the participants in this study (WHO 2011: [online]).

> "It helps us to abstain from sex and to prevent diseases like HIV/AIDS, to avoid unwanted pregnancy which can lead to school drop- out and hatred from our parents." (FGI-G2)

It can change other peoples' decision because others may have made up their minds to go and get married when they are still in school so it can change other people minds." (FGI-B1)

6.4.1.2   Creating STIs/HIV awareness

Young people remain at the centre of the HIV pandemic especially in Sub-Saharan Africa where fifty young people are infected every hour (UNESCO 2014:7). While the knowledge about HIV in general may be high among adolescents, there still exists a wide knowledge gap about HIV prevention among young people (UNESCO 2014:2). Increasing young people's access to essential prevention information, skills and services is critical to prevent HIV infection among young people and to empower them to protect themselves and live healthy, AIDS-free lives (UNICEF 2011:1). Primary schools bring large collections of children together to learn under similar conditions. Therefore, effective school-based HIV and AIDS education is likely to reach many children and young people, raise their awareness on STIs/HIV by providing correct and reliable HIV information which will equip them with the skills they need to protect themselves before they become sexually active. This observation has previously been echoed (UNESCO 2014:12).

6.4.1.3   Creating safe school environment for female adolescents

Despite increase in school enrolment in many developing countries in response to the MDG 2 of universal primary education, gender inequality in school attendance and school completion rate between the boys and females remain a matter of concern. For many post-pubescent girls; menstruation, poor sanitation at school and lack of sanitary product access increase the risk of menstrual leaks that lead to frequent harassment by boys in and around school toilet areas add to the shame and embarrassment experienced by as possible causes of schoolgirl absenteeism and school drop for these girls (Jewitt & Ryley 2014:138). A safe school environment is one that is characterised by mutual respect and secured feeling by all the students.

Sexuality education encourages students to assume responsibility for their own behaviour as well as their behaviour towards other people through respect; acceptance; tolerance and empathy for all people. Therefore, creating school environment that

encourage school attendance, prevent stigmatisation and hence enhance learning for both boys and girls is necessary for addressing the disparities and gender inequities in schools.

6.4.1.4   *Helping to prevent early marriages*

Early or childhood marriage is a marriage is legal or customary union between two people, of whom one or both spouses is below the age of 18, is still a common practice for the girl child in developing countries with dire consequences. Child marriage violates girls' rights by curtailing a critical period for growth, learning, identity formation and experimentation and imposing adult roles and responsibilities before she is physically, psychologically and emotionally prepared (UNFPA 2012:8,11). Child marriage directly threatens health and wellbeing: complications from pregnancy and childbirth together are the main cause of death among adolescent girls in developing countries. Early marriages lead to school drop out for the female adolescents (Karei & Erulker 2010:3).

School-based sexuality education empower girls at risk of child marriage through, for example, providing knowledge and life skills training for sexual and reproductive, provision of safe spaces for girls to discuss their futures, the provision of information about their options, and the development of support networks help them to better communicate, to negotiate and make decisions that directly affect their lives (Muthengi & Erulker 2011:9). It is therefore necessary that school-based sexuality education should be adopted and integrated into the formal education system in schools in Uganda as a strategy to prevent early and childhood marriages through empowering young people to take control and make rational decisions about their future.

6.4.1.5   *Reducing stigma among HIV positive children*

Due to stigma and discrimination, many adolescents living with HIV are therefore left to deal with sexuality and relationships entirely on their own, leaving them isolated and fearful of sex and sexuality, while others lack sexual and reproductive health information and skills around safe sex. Sexuality education can help adolescents to not only develop and maintain safer behaviours, but also reduce stigma and discrimination towards people affected by, and living with HIV (UNESCO 2014:13).

6.4.1.6 Training adolescents

Training is the process of learning the skills one needs to do a particular job or activity (*Cambridge Advanced Learners Dictionary* 2008:1546*)*. Training is a process of empowerment that gives the adolescents the skills and confidence to act in a productive way. In this study, female adolescents were trained in skills of making local sanitary pad as part menstrual health management of sexuality education. Access to menstrual products increases school attendance and mobility for the adolescent girls during menstruation (Jewitt & Ryley 2014:139).

6.4.1.7 Creating life skills

Life skills are behaviours used appropriately and responsibly in the management of personal affairs. The terms sexuality education and life skills education have been used interchangeably; however, the World Health Organization (WHO) defines both terms differently. Life skills are defined as "abilities for adaptive and positive behaviours that enable individuals to effectively deal with demands and challenges of everyday life" (WHO 1993). They are a set of human skills acquired via interactive pedagogy that are used to handle problems and questions commonly encountered in daily human life to promote life skills (UNICEF 2012:7). Sexuality education is didactic age appropriate teaching method designed to prevent new HIV infection and other risky sexual behaviours (UNESCO 2014:9).

Life skills education is an important vehicle to equip young people to negotiate and mediate challenges and risks in their lives, and to enable productive participation in society. Life skills are a component of sexuality education. Schools therefore, provide opportunities for young people to develop life skills, and sexuality education linked with life skills-based education has proved effective in delaying first sexual intercourse and, among sexually experienced young people, in increasing condom use and decreasing the number of sexual partners (UNESCO 2014:13).

The study has demonstrated that there is a need to create life skills among young people and this can be achieved through developing sexuality education curriculum that incorporate life skills component. The process of developing such curricular should be

consultative and engage the young people, and different approached on delivery should be adopted.

6.3.1.8   Becoming assertive

Assertiveness means standing up for your personal rights - expressing thoughts, feelings and beliefs in direct, honest and appropriate ways. It is a life skill regularly referred to in social and communication skills training *(*www.skillsyouneed.com). Young people with low sexual assertiveness skills may be likely not to use birth control/condoms consistently and to be coerced in their sexual relationships (UNICEF 2012:10). Assertiveness is needed by the adolescents for effective communication, negotiation and refusal skills when faced with difficult decisions to make.

Adolescents who are assertive can effectively negotiate safer sex to prevent unwanted pregnancy and STIs, including HIV, and resist unwanted sexual proposals from adults and peer pressure. They are also more likely to identify and obtain services needed for pregnancy prevention, prenatal and postpartum care, and STI/HIV diagnosis, counselling and treatment (UNESCO 2009:23).

In this study, sexuality education has been shown to address these specific skill areas (such as decision-making and assertiveness skills) which are effective in promoting desirable behaviours, and preventing negative or high-risk behaviours.

6.4.2   Context for providing SBSE

A context is defined as the conditional structure represented as a concept or set of concepts in which action/interaction/emotional responses are embedded (Corbin 2011:14). In addition, the contexts influence the core category/process (Creswell 2013:22). Implementation of sexuality education was supported by specific conditions. This is in line with constructivist's view that researchers focus on context within which meanings and experiences are formed (Creswell 2013:25). The following discussions are of what formed the experiences and perceptions of SBSE among the participants.

6.4.2.1   Dominant concepts about the relevance of content taught

There is widespread culture of silence on sexuality issues in families and communities which have contributed to ignorance and misinformation among adolescents. In this study, participants described the dominant concepts of content of SBSE as being about raising awareness on physical maturity and protection against sexually transmitted diseases without going into details. The goals of sexuality education are to increase knowledge and strengthen skills to promote healthy behaviours (UNESCO 2009:2).

6.4.3.2   Provision of information on SBSE

Adolescents as participants

Sexuality education is a sensitive issue. Effective sexuality education is characterised by use of participatory methods and other learner centred approaches help them to personalise the information; as well as a logical sequencing that builds on knowledge and skills over the years of education.

Age-specific information

Evidence suggests that sex education should start early, before young people reach puberty, and before they have developed established patterns of behaviour (Mueller Gavin & Kulkarni 2008:94). Sexuality education introduces subject matter that is age-appropriate and relevant to learners' social situation and cognitive development. (UNESCO 2009:2).

It is important that adequate monitoring and supervision by the relevant authorities is conducted to ensure adherence to these standards during implementation of sexuality education.

6.4.3.3 Challenges experienced in the provision of SBSE and strategies/actions needed

The delivery and quality of school-based sexuality education were compromised by, poorly prepared teachers, competing priorities, overcrowded curricula, and inadequate curricula and teaching materials. Also political, religious and societal opposition to teaching certain topics to adolescents, large classes and education being focused on examinable subjects are challenges experienced.

Selective teaching is often a challenge, particularly in situations where teachers do not feel mandated or supported by the school or community to teach about sexuality, relationships and sex in general, or are uncomfortable with sensitive issues or unprepared to address them as said by teachers' experience that:

"We teach them how to stay safe by abstaining from sex not to use condoms because at their age they are not supposed to use it but stay away from sex."

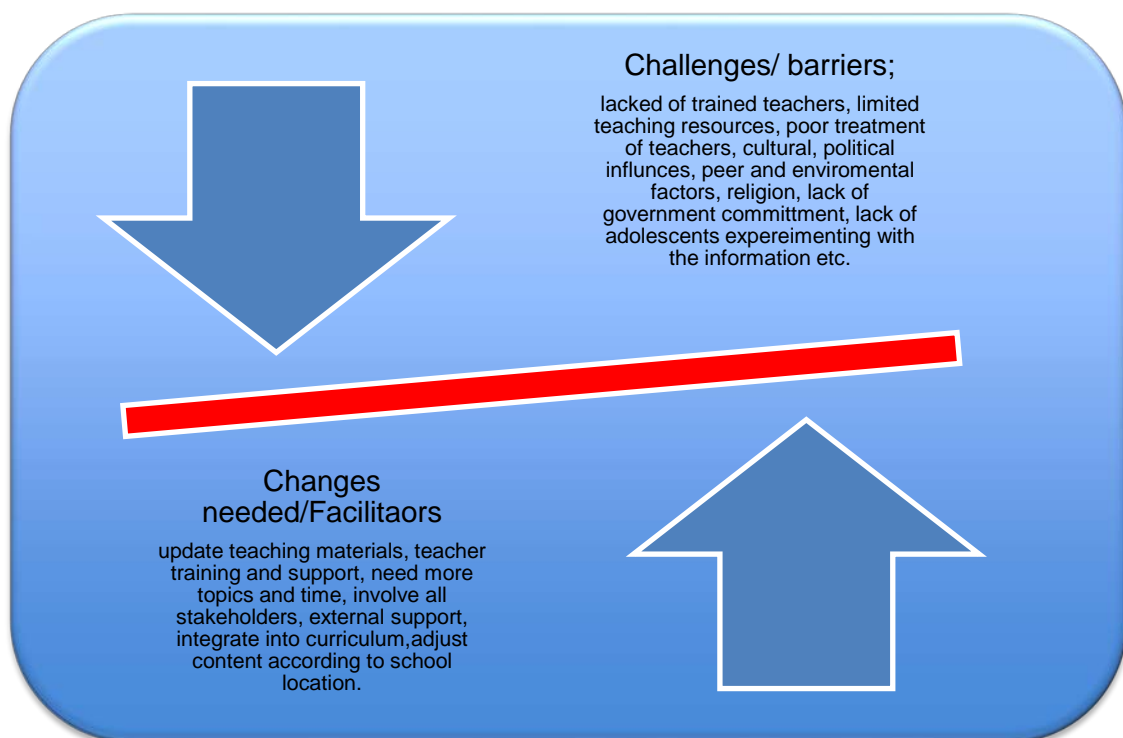These barriers compromised the quality of SBSE (Figure 6.4).

Figure 6.4 The strategies/actions needed to overcome the effect of barriers on SBSE

6.4.3.4 Strategies/actions for changes needed

The participants identified strategies/actions needed to improve the effectiveness of SBSE as described below:

One major facilitator for SBSE as described by the teachers in this study was teacher training to equip teachers to deal with modern realities, like the increase in the availability of information through new communication technologies and media. This suggests the need for introduction of pre-service and regular in-service training to teachers which will ensure that they become a source of correct information and trusted persons with whom young people can raise sensitive and complicated issues about sexuality.

All the participants recommended the need to involve all stakeholders at various levels for advocacy and to increase support base for its implementation and sustainability. Therefore, this means that policy designers have to devise the roles and level of engagement of the different stakeholders in the implementation sexuality education which will help to overcome some of the sociocultural barriers.

Teachers and students advocated for integration of sexuality education in the formal curriculum in order to expand the coverage and to increase frequency of exposure to the content. The ministry of education should ensure that sexuality education becomes a component of all the subjects taught in primary schools.

Parents and teachers emphasised the need to focus on abstinence only approach while adolescents desired the inclusion of more topics to include HIV testing and counselling. This shows a mismatch in the assumed and actual sexuality education needs of the adolescents. Programme developers need to ensure that adolescents' views are included for sexuality education to be effective in meeting these needs.

Another barrier identified at the programme implementation level was inadequate distribution of teaching materials. There is need for ministry of education to secure adequate funding for purchase of teaching resources.

6.5   CONCLUSION

One of the objective of this study was to develop a substantive theory that explained how the participants experienced sexuality education in the different settings and meaning that they assigned to these experiences. This chapter described the substantive theory of *empowering adolescents with right information and skills* as the participants' overall experiences and perceptions of SBSE. This theory emerged through the researcher's own interpretation and is situated in the local and interactional context of the study area. The discussions provided general explanations on model developed based the relationships between the themes identified in chapter 5. It also provided insight on the ***context*** in which sexuality education is experienced, secondly, the ***process*** involved in sexuality education, the ***strategies/actions*** needed to overcome barriers and the ***outcome*** of school-based sexuality education.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1   INTRODUCTION

In this chapter, the discussion of the findings, conclusions and appropriate feasible recommendations based on the research objectives were made. The criteria for evaluating the current study, reflections on the strengths and limitations of adopting the methodology of constructivist grounded theory and contributions of the study, the implications of the study findings for policy, curriculum designers, and education, and future research are presented. Finally, the summary and conclusions of the study are presented.

The primary purpose of this study was to study the experiences of adolescents, teachers and the perception of parents regarding SBSE in rural primary schools with the aims of developing a substantive theory grounded in empirical data from interviews with adolescents, teachers and parents.

Qualitative research design and method employing the constructivist grounded theory was used. Semi-structured individual interviews were held with teachers and parents and FGI with adolescents from four primary schools.

7.2   CONCLUSIONS

This chapter focused on making conclusions on the objectives of the study and recommendations on the qualitative data analysis findings. The researcher summarised the findings on the experiences and perceptions of SBSE based on the identified themes. The scope and limitation of the study were indicated. Recommendations in general were stated and implications related to Education and health sectors and research were outlined. The study generated six themes from the data because of recurring regularity. These were validated through literature control. The direct quotes of the participants were presented as meaning units on tables to validate use of some of

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the concepts to label the categories. Based on the results of this study, the researcher drew the following conclusions:

- All the participants were supportive of school-based sexuality education in primary school because it provides right information and skills necessary to promote healthy sexual and reproductive.

- There was lack of commitment from the ministry of education and district education in ensuring a sustained implementation of the programme.

- Sexuality education was not integrated in the formal curriculum but taught in science subjects some schools and as an extracurricular activity in other schools.

- There was insufficient one time training for a limited number of teachers yet almost all the teachers were expected to teach sexuality education at any given time.

- Due to lack of training, the teachers experienced difficulty in understanding the teaching resources and therefore were not effective in passing on the information to the adolescents.

- Lack of required resources like teaching materials, trained human resource and funds undermined the effectiveness of sexuality education.

- Abstinence only model was being implemented but some of the teachers and adolescents desired inclusion of more topics beyond what was provided.

- The teachers and adolescents wanted more participation of parents in the teaching of sexuality education both at school and home.

7.3   EVALUATION OF THE STUDY

Charmaz (2006:182) outlined four criteria that were used to guide constructivist grounded theory as: credibility, originality, resonance and usefulness.

Credibility

Credibility is concerned with whether the results are plausible in terms of the data presented, the analysis, the evidence presented for claims made and the breadth of data gathered. Credibility of a study is crucial not only in terms of the data gathered but to the entire research process.

The data meets these criteria in the following way:

- The research presents intimate familiarity with the topic through a presentation of a wide range literature review of school-based sexuality education, the presentation of study findings into SBSE and a range of discussion and implications of the study taking the existing literature on SBSE into account and comparing this to the new empirical findings in this study.

- The sample group consisted of a range of participants, diverse in terms of age, location and responsibilities in provision of sexuality education resulting in a broad range of perspectives on sexuality education. These ranges of data have provided a rich source from which to make the claims presented. In addition, to facilitate depth to the data in-depth interviews and FGIs lasting on average one hour facilitated a relatively lengthy interview with sufficient time to explore areas of relevance to the participants" covering a broad range of topics. The researcher conducted the interviews in a location which suited the participants, typically these took place in their schools and homes.

- The careful listening, reading and re-reading of the recorded and transcribed data formed an important process of getting close to the data and having confidence in its overall credibility. Finally the analysis of the interviews with the participants allowed the researcher to get as close to the participants' experiences and perceptions of SBSE as possible. In keeping with constructivist grounded theory approach, the result of the study is not the ultimate truth per se, but rather a co constructions of the 'truth' based on the understanding and interpretations of the researcher.

Originality

This study adds to the body of work already present in adolescent sexual and reproductive and specifically SBSE. This study has presented "fresh insights" into (1) experiences of primary school aged children in rural school settings (2) the perceptions of parents regarding provision of SBSE in primary school and (3) the context in which sexuality education is provided. Other qualitative studies have focused on secondary school students and teachers in urban settings and explored mainly the facilitators and barriers to SBSE. The implications of the study are further set out later in this chapter.

Charmaz (2006) argues originality should be measured in terms of whether the data presents: "a new conceptual rendering of the data" (p182). This is represented in this study in the new model (Fig 6.1) of the participants' experiences and perceptions of SBSE. The model sets out the contexts of SBSE, the process of SBSE, strategies to overcome the barriers and the outcome of SBSE. This provides clarification that the benefits of SBSE remains even in rural settings without a formal curriculum. In addition, the parents' support of SBSE are explained. This study's clarification of the benefits of SBSE may facilitate further fruitful exploration in other context in the future.

The social and theoretical relevance of this work are reflected in the implications of the findings for health care practice, employers, and future research and are set out in further detail in later in this chapter.

Resonance

Charmaz (2006:182, 183) offers the following questions to be used to assess the resonance of a study:

- To what extent do the categories present "the fullness of the studied experience? 2) To what extent have links been made between: "larger collectivities or institutions and individual lives, when the data so indicate?"

The process of examining: "the fullness of the studied experience" was achieved by ensuring that by the end of the period of data collection no new issues regarding experiences of SBSE were being raised in the interviews. This is termed "theoretical saturation".

Links were made between: "larger collectivities or institutions and individual lives". In this study, sexuality education was identified as being of relevance in the lives of all adolescents in a broad range of settings. These included in school and at home as well as for personal relationships with friends, family and community. The study identified the need to overcome barriers at individual, family, community and national levels for effective implementation SBSE. In addition, the model that was developed provides the reader with understanding of the conditions under which SBSE experienced.

Usefulness

The analysis presents findings that offer interpretations that the school authorities, community leaders, parents, ministry of education officials can use to in an effort to improve the experiences of SBSE. This study contributes to the existing knowledge of sexuality education and some insight on the changes to be included in the teaching materials, training teachers on specific areas like orphans and vulnerable children. In addition, recommendations are provided later in the chapter in relation to the contribution of this study to enhancing the implementation of SBSE.

7.4   STRENGTHS AND LIMITATIONS OF THE STUDY

All research approaches have their difficulties and limitations and acknowledging the limitations of this research does not decrease the value of the study, but rather enriches it by making the underlying assumptions and premises transparent and open to criticism. The findings from this study cannot be representative of all adolescents, teachers and parents regarding school-based sexuality education therefore not generalisable. Acknowledging the potential merits of this criticism however, the researcher believes that the research findings in this study offer scope for individual application in the school-based sexuality education. By highlighting the range of issues raised from the study the results offers possible guidance for sexuality education stakeholders about the issues they specifically need to address in the implementation of school-based sexuality education.

The small number of participants in the study may be considered a limitation of the work. However, the number of participants in this study is in keeping with other qualitative research designs in which sample size is determined by information needs (Polit & Beck 2014:286).

Theory is validated in terms of plausibility and usefulness for understanding, rather than in terms of 'truth'. The plausible relationships among the concepts provided in this study give direction for scientific understanding which can be strengthened through future research (Strauss & Corbin 2008:278).

In conclusion, this work provides valuable insights for the stakeholders involved in planning, implementation and evaluation of SBSE at various levels to reflect on, appraise and challenge their experiences and practices. There is therefore, scope for future researchers to test the suggested theory in a more comprehensive way e.g. through assessing its accuracy as a predictive tool.

7.5   RECOMMENDATIONS

In this section, description of recommendations derived major findings of the study are made accordingly. Specific recommendations addressed to the different stakeholders for improving the delivery of SBSE are provided:

To policy makers, educational designers and implementers

Ministry of education should take leadership in fostering involvement and participation of all stakeholders, particularly parents and other community groups, to support teachers and deliver sexuality education that addresses children's needs.

It was evident that in-service training for teachers is insufficient, given the sensitivity and complexity of sexuality education. There is need for national plans to build capacity at institutional, organisational and personal levels to lead and support school-based sexuality education. Teachers need quality pre-service training and follow-up in-service training and support.

There is a need to pay more attention to the needs of specific groups of adolescents like those living with HIV by training teachers and addressing the needs of these group in curricula and learning materials to meet their knowledge and skills needs for healthy sexual reproductive health lives. Additionally, there is need to strengthen the links between education and integrated HIV and sexual and reproductive health services. It will also require new ways of working and new partnerships at all levels.

There is need for policy makers to consider the adoption of the comprehensive sexuality education model in order to address the risk prevention measures beyond abstinence as requested by some parents and adolescents.

There is need to integrate sexuality education into the formal education system to expand its reach significantly and implement programmes that include at least twelve or more sessions. In order to address the needs of young people for information about sexuality, multiple topics need to be covered.

Recommendations to the district education officers

District education officers are the links between the schools policy makers at the Ministry of Education. They should demonstrate the importance of SBSE by their commitment to offer support to schools through supervision and monitoring the implementation. They also need to gather feedback from schools to inform policy makers on the challenges and needs of the teachers and schools during the implementation of school-based sexuality education.

School administrators should set strategic goals of equipping the physical environment with adequate updated teaching resources and equipment. To meet educational needs and promote the attainment of basic, safety and self-esteem needs of learners.

Schools should consolidate the efforts to identify other experienced stakeholders with interest and the time to participate in the knowledge, information and experiences to adolescents on the subject.
Campaign to reduce the misperceptions regarding the risks of sexuality education should be implemented among the parents and community as a whole.

Recommendations to teachers

Teachers as key implementers of the programme need to actively identify and present challenges faced to the relevant school authorities.

Media literacy education should be provided to help adolescents critically analyse and make informed decisions about the messages they access from the media.

Sexuality education teachers need to have regular team meetings; and, a teaching plan should be required for all teachers to ensure coverage of and to prevent the replication of content.

Recommendations to parents and community

To foster community empowerment and sustainable of the programme, community leaders should collaborate with schools in their community as partners to promote adolescent adolescents' reproductive health.

Parents should support interventions to increase parent-adolescent communication about sex education, such as providing training for parents to enhance their competencies to discuss about sex with their adolescents sons or daughters.

Community leaders like religious and cultural leaders should be encouraged to provide sexuality school-based sex education hand in hand with morality based-education.

Recommendations to may be higher education institutions

The authorities at higher institutions should ensure that sexuality education is implemented for the following reasons: the students going for higher education are much younger these days and also to include those who may have missed during primary and secondary schools. Secondly, many students will be living away from home for the first time, may develop relationships, and may become sexually active.

Recommendations for future research

A quantitative research can be done to include more students from other settings.

7.6   CONTRIBUTIONS OF THE STUDY

The research aim was to explore and describe the experiences of adolescents, teachers and the perception of parents of SBSE in rural primary schools and develop a substantive theory, and this aim has been achieved. The theory of experiences of adolescents and teachers and perceptions of parents of SBSE provides a conceptual rendering of the data that furthers understanding of the studied experience as in Fig 6.1 Theorising entailed interaction between the researcher and the participants and the studied phenomenon and of co-constructing abstract understandings about and within it

(Charmaz 2006:130. The resultant theory is a substantive theory that furthers understanding of participants' experience of SBSE. The theory that has been developed rests upon the researcher's interpretation of the studied phenomenon.

There is considerable commonality among young people in terms of their needs regarding sexuality, however, there are also many differences across communities, settings and age groups in their knowledge, their beliefs, their attitudes and skills (UNESCO 2009:18). This work has provided valuable knowledge on experience of primary school students which has been little researched. This information can be utilised to improve the implementation of SBSE by building upon adolescents' existing knowledge, positive attitudes and skills as well as address the barriers that were identified.

In contrast to use of one narrow method of data collection such as a questionnaires, there was inherent value in employing different data gathering approaches and different sources of information. Integrating interviews and focus group interviews resulted in 'listening to' participants; 'seeing and hearing' what was happening and 'being there' (Lambert and Loiselle 2008:230). The use of the triangulation methods contributed to the trustworthiness of the study.

7.7   IMPLICATIONS OF THE STUDY

7.7.1 Implications for the education sector

The findings have shown that the education sector can help young people acquire knowledge, develop attitudes and build skills for sexuality and risks prevention. Ministry of Education can utilise the feedback to plan, finance and implement by:

- Launching the policy to promote sexuality education in all schools and integrate the programme into formal school curriculum, providing opportunity for teachers and students to have sexual communication in a sustainable manner.
- Timely revision of contents in accordance with the dynamic information age and students' needs. In addition, there is need for focus on ways of helping the increasing HIV orphans and vulnerable children.

- Incorporating sexuality education as a course in the pre service training of all the teachers to develop teachers' competency to become sex educators, and honing their competency periodically through in service training. Pre-service training will help erase doubts whether sexuality education, the formation of appropriate sexual attitudes belong to their work as teachers.

- School authorities should provide an enabling environment, guidance and support to teachers involved in delivering SBSE. Supervisors should make sure the programme is being implemented as planned, that all parts are fully implemented (not just the biological parts that often may be part of examinations).

- Ministry of Education should collaborate with other community stakeholders like faith based organisations, cultural institutions in advocacy and implementation of SBSE.

7.7.2 Implications for the health sector

A multisectoral collaboration between the ministries of health and education is needed to:

- Develop a referral link between school-based sexuality education and health care services for adolescents who may be in need.

- Enlist expert information from health care professionals during the implementation of SBSE.

7.7.3 Implications for research

The findings from this study indicated a need for future research to evaluate the effectiveness of the SBSE offered in Ugandan primary schools in promoting safer sexual behaviours.

Further research is needed to include the views of other stake holders such as ministry of education officials, community leaders and politicians.

From this study, there was general consensus on involving the communities like parents in the implementation of SBSE, future research should be conducted on how to involve the community.

7.8   CONCLUSION

In this final chapter the research is concluded. Limitations were highlighted and strategies to control them were also identified. Key findings were presented. Lessons learnt and recommendations were formulated based on experiences of participants as emerged from the study. Different areas of research were identified for further investigation.

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Annexure A

Client information leaflet and informed consent

Annexure B

Assent form

Annexure C

Permission letter to conduct research in primary schools

Annexure D

Ethical clearance certificate, Unisa

Annexure E

Research clearance, Office of the President, Uganda

CLIENT INFORMATION LEAFLET AND INFORMED CONSENT

Name of Study: School Based sexuality education in rural Uganda: A grounded theory exploration

Primary Researcher: Susan Achora

Supervisor: Prof. Thupayagale-Tshweneagae

Co-Supervisor: Prof. Yohanna Mashalla

INTRODUCTION

You are invited to volunteer for a research study. This information leaflet is to help you decide if you would like to participate. If you agree to participate in this study you should understand what is involved. If you have any questions please ask them before you agree to participate. You can call the researcher at: +968 92631021. You should not agree to take part unless you are satisfied with all the procedures involved in this research.

WHAT IS THE PURPOSE OF THIS STUDY

This study will help generate a theory which will contextualise and show the relationships between sexuality education of school going adolescents and the consequences of sexual and reproductive practices of adolescents.

WHAT WILL BE EXPECTED OF ME?

If you decide to take part in this study, you will be part of the parents of adolescents who go to primary schools or a teacher who teaches sex education to primary school going adolescents. You will be expected to share your experiences/opinions/ knowledge about sex education to school going adolescents.

WHAT IS THE DURATION OF THE STUDY

The study will last for one year.

HAS THE STUDY RECEIVED ETHICAL APPROVAL

The protocol of the study was submitted to the Higher Degrees and Ethical Committee of the Department of Health Studies, at the University of South Africa and the committee granted written approval. The study protocol was also sent to the Uganda National Council for Science & Technology higher Education Ethics committee of Kampala and permission has been granted by letter.

Permission has also been sought from the Gulu District Education office and permission has been granted.

WHAT ARE MY RIGHTS AS A PARTICIPANT IN THIS STUDY

Your participation in this study is voluntary; that means you do not have to be part of the study if you do not want to. If you said you will participate and you change your mind, it will be fine. You can stop at any time.

WILL THE STUDY PROCEDURES HURT ME?

The study and procedures involve no foreseeable physical discomfort. However, as a participant you may experience some sad emotions as you go through your experiences. If you feel so, you need to report to the researcher who will immediately give you supportive counseling.

WHAT ARE THE RISKS INVOLVED IN THIS STUDY

The study procedures involve no foreseeable risks to you or your family.

CONFIDENTIALITY

All information obtained during the course of this study is strictly confidential. Your identity will not be revealed when the study is reported in scientific journals. All the data that has been collected will be stored in a secure place and will not be shared with any other person without your permission. The audio-taped recordings and any other data will be kept under lock and key. The data will be destroyed after two years of publication of this study.

INFORMED CONSENT

SCHOOL BASED SEX EDUCATION IN RURAL UGANDA: A GROUNDED THEORY

Ms Susan Achora: PhD student at University of South Africa.

Please mark box on the right with Y for Yes and or N for No

1. I confirm that I have read and understood the information sheet for the above study and have had the opportunity to ask questions. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reasons. ☐

3. I agree to take part in the above study. ☐

4. I agree to the interviews being audiotaped. ☐

5. I agree to the use of anonymised quotes in publications. ☐

Name of Participant--- Date: ----------------------
Signature: ----------------

Name of Researcher: ---------------------------------------Date: --------------------
Signature: --------------------

ASSENT FORM

**STUDY TITLE: SCHOOL-BASED SEXUALITY EDUCATION IN RURAL UGANDA:
A GROUNDED THEORY EXPLORATION**

Your parent/Guardian knows we are going to ask you to participate in this study by asking you questions. I want to know about your experiences about sexuality education in your school. The interview may take 30 minutes to one hour. The questions and your answers will be audio-taped. Your name will not be written anywhere on the research instrument. No one will know these answers came from you personally.

If you do not want to participate, you can stop at any time. There will be no bad feelings if you do not want to do this. You can ask questions if you do not understand any part of the study.

Do you understand? Would you like to participate Yes/No

Name:--

Signature:---

Date:---

Researcher's name:---

Researcher's Signature:---

Date:--

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of south africa

UNIVERSITY OF SOUTH AFRICA
Health Studies Higher Degrees Committee
College of Human Sciences
ETHICAL CLEARANCE CERTIFICATE

HSHDC/197/2013

Date: 1 August 2013   Student No: 5328-556-5

Project Title: School based sexuality education in rural Uganda: A grounded theory exploration.

Researcher: Achora Susan

Degree: D Litt et Phil   Code: DPCHS04

Supervisor: Prof GB Thupayagale-Tshweneagae
Qualification: D Tech
Joint Supervisor: Prof Y Mashalla

DECISION OF COMMITTEE

Approved | √ | **Conditionally Approved** | |

Prof L Roets
CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE

Prof MM Moleki
ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES