

The Influence Of Gender On Youth Sexual And Reproductive Health Security In Zimbabwe



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Abstract

Sexual and Reproductive Health has been recognised internationally as one of the key determinants of the socio-economic development of Nations. Few studies have looked at youth SRH and in particular the influence of gender on young people's SRH security in Zimbabwe. In addition, youth SRH security is threatened by the antagonism among policy stakeholders and their failure to come up with one coherent policy, conservative cultural and gender norms and the pervasive impact of the HIV/AIDS epidemic. Using logistic regression and frequency analyses, this study sought to analyse the effects of gender on youth SRH security in Zimbabwe. Data from the 2010-2011 Demographic Health Survey was analysed on the knowledge, attitudes and sexual behavioural practices of youths. Results of the study appear to confirm that there are gender effects on young people's SRH security. Results showed higher levels of knowledge of SRH risks among women. In terms of attitudes, there were gender differences on key issues which have a bearing on SRH security. For example, the odds for males to hold negative attitudes towards an HIV positive woman were much higher compared to women. The odds were higher for male participants to hold positive attitudes towards condoms compared to women. Women participants appeared to prefer faithfulness to one partner only as the best way to prevent HIV and STD transmission. The odds for males to be supportive of young children being taught about condoms were also higher compared to women. Consequently, the odds for condom use at last sex were seven times higher for males than women, making women more vulnerable to SRH risks associated with unprotected sexual encounters. In conclusion, gender has significant influences of young people's SRH security. The policy environment and cultural norms on gender and youth sexuality need to be improved.

Key words: Gender, sexual and reproductive health, knowledge, attitudes, behaviour

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List of acronyms

AIDS	:	Acquired Immune Deficiency Syndrome
CEDAW	:	Convention to Eliminate All Forms of Discrimination Against Women
HIV	:	Human Immunodeficiency Virus
ICPD	:	International Conference on Population and Development – Cairo 1994
NGO	:	Non-governmental organisation
SRH	:	Sexual and reproductive health
STD	:	Sexually transmitted disease
STI	:	Sexually transmitted infection
UNFPA	:	United Nations Population Fund

Chapter 1: Introduction

1.1 Background

Sexual and reproductive health (SRH) is among the important fields in demography. Historically it was characterised by population control and family planning. The International Conference on Population and Development (ICPD) in Cairo 1994 marked a paradigm shift in the field of SRH. For the first time SRH was embedded into the wider socio-economic development setting of Nations. The paradigm shift was marked by social development with women's and girls' empowerment and human rights recognised as key to achieving sustainable development. SRH for young people was included for the first time in this holistic paradigm (Finkle and McIntosh, 2002). Reproductive health was re-defined as "a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity, in all matters relating to the reproductive system and to its functions and processes. It implies that people are able to have a safe and satisfying sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so". Sexual health is the ability to enjoy sex without the risks of unwanted pregnancy, sexually transmitted infections or unsafe abortions (Report of the International Conference on Population and Development, Document A/Conf. 171/13, United Nations, 1994, paragraphs 7.2 and 7.3). Sexual and reproductive health security is achieved when members of a community are able to identify, prevent and manage risks to their reproductive health (Middleberg 2002). It means that people are knowledgeable about the risks to their sexual and reproductive health and behave in a manner consistent with preventing reproductive diseases and disorders and have effective coping strategies with illness. This study focusses on the effects of gender on youth sexual and reproductive health security.

1.2 Youth sexual and reproductive health in Zimbabwe

Youths make up about 32.1% of the population of Zimbabwe (US Census Bureau, 2012). They face a number of sexual and reproductive health risks among them STIs, including HIV, unwanted pregnancies, and lack of access to comprehensive SRH education and services (UNFPA 2011). Statistics show high vulnerability among female youths compared to their male counterparts. Findings from the 2010-11 Zimbabwe Demographic and Health Survey (ZDHS) showed that 24% of youths aged 15-19 years were already mothers, showing a high rate of adolescent fertility. HIV prevalence among those aged 15-24 years was 6%. The disaggregation by gender showed a higher prevalence of 7% among female participants compared with 4% among males. STI prevalence was 8% and contraceptive use among the sexually active was only 38% among the youths.

Prior to 1995, youths were excluded from SRH programmes on the assumption that they constituted the healthiest segment of society (Ministry of Health and Child Welfare 2001). However, after the Cairo ICPD, the Zimbabwean government included youth sexual and reproductive health in the national health policy in line with ICPD resolutions. The new policy took into consideration all the ICPD policy recommendations. It was detailed in terms of issues such as rights; the role of parents; transition from childhood to adulthood; SRH risks and consequences; SRH needs and services; contraceptive options for youths and post abortion care (Ministry of Health and Child Welfare, 2001). In practice, the new policy has failed to be implemented (Marindo et al, 2003).

1.2.1 Youth SRH policy and challenges to implementation in Zimbabwe

Since the adoption of the 1994 ICPD guidelines on youth sexual and reproductive health, the first real attempt at a national programme to address youth sexual and reproductive health

needs in Zimbabwe was carried out in 2008. This involved an assessment of youth sexual and reproductive health needs and was carried out under UNFPA in collaboration with the government of Zimbabwe. The exercise also involved other stakeholders in the country, such as the Church, community leaders and NGOs whose task was to mobilise society around advocacy on HIV/AIDS, sexual and reproductive health and gender issues. The result was a new national approach aimed at mainstreaming HIV/AIDS into all country programmes for Zimbabwe and integration of HIV/AIDS components into education and training institutions (UNFPA, 2011).

With regards youth sexual reproductive health, there was antagonism between the Church and traditional cultural leaders on the one side and international aid agencies on the other. The Church and traditional cultural leaders subsequently prevailed and successfully lobbied for government policies promoting abstinence only for young people (Marindo et. al, 2003). The result has been a compromise in which youth sexual and reproductive health policy is essentially abstinence only and is education based. The education policy known as the AIDS Action Plan in Schools supports life skills building and abstinence until marriage. It is part of the National Population policy which was developed with support from UNFPA and provides general guidelines on attitude change, gender equality and removal of obstacles for young people. The policy does not mention condom use. Among the education policy provisions is immediate expulsion from school for girls who fall pregnant. In addition to school based education, the approach to youth SRH is predominantly biomedical and the responsibility to promote responsible behaviour is left to health care providers (Marindo et. al, 2003; Chiweshe, 2010; UNFPA 2011).

1.2.2 Social norms and effects on gender and youth sexual and reproductive health

Youth SRH continues to suffer mainly as a result of the established cultural norms and the short history of interest in this particular domain (Marindo et. al, 2003). The Zimbabwean social norms generally view issues of sexuality as taboo and not to be discussed with young people (Creel and Perry, 2003; Marindo et. al, 2003; Cowan et. al, 2008). Eighty percent of Zimbabweans are Christian and as such society is influenced by strong moral and traditional African cultural values. Both the religious and cultural norms do not condone premarital sex. The values exert particular pressure on girls and unmarried women. Virginity is valued among young unmarried women and the practice of paying bride price for marriage is linked to the belief of a woman being a virgin. Premarital pregnancy is considered an embarrassment to the family. If a premarital conception occurs, the couple is usually forced into marriage and the responsible man's family can be ordered to pay compensation to the woman's family (Marindo et. al, 2003).

1.2.3 Current developments in youth SRH in Zimbabwe

With modernisation and problems such as increasing rates of premarital pregnancy, HIV and other sexually transmitted infections, the traditional cultural and religious norms are under strain. The increased rates of HIV infection and premarital pregnancies are an indication of vulnerability to sexual and reproductive risks among young people, especially girls (Marindo et. al, 2003). International agencies, led by the United Nations, have intervened and are promoting condom use (Annan and Mousavizadeh, 2012). However, they face public resistance and are ridiculed for promoting sexual immorality among young people (Marindo et. al 2003). In 2010, the Ministry of Education attempted to address the problem of teenage pregnancy and the negative impacts on girls' education. An attempt was made to amend the policy to enable girls who fell pregnant in school not to be expelled but rather be given maternity leave. The measure had to be reversed within weeks due to pressure from conservative groups in the country (Chiweshe, 2010).

1.3 Societal and Academic relevance of the study

This study is relevant because of a number of reasons. Securing the sexual and reproductive health of young people, particularly women and girls, is key to the socio-economic development of the country. In addition the country is faced with the HIV/AIDS epidemic whose eradication depends largely on preventing new infections among young people. In terms of academics, there is dearth in studies focussing on gender differences in young people's sexuality. Finally, the lack of a clear and coherent strategy to deal with gender and youth and sexual and reproductive health also makes the study relevant.

1.4 Objective and Research Questions

Objective: To assess the influence of gender on the sexual and reproductive health security of youths in Zimbabwe.

Main question: Based on the knowledge of reproductive risks and the attitudes and behaviour patterns, what is the influence of gender on the sexual and reproductive health security of youths in Zimbabwe?

Sub-questions:

What is the level of knowledge of reproductive risks among female and male youths in Zimbabwe and are there gender differences?

What are the attitudes of the youths towards sexual and reproductive health issues and are there gender differences?

What are the sexual behavioural practices of the youths and are there gender differences?

To what extent do the knowledge and attitudes of the youths influence their sexual behavioural practices thereby promoting sexual and reproductive health security?

1.5 Structure of the study

Chapter One introduces the study. Chapter Two describes the conceptual model and theories used for the study. The hypotheses and literature review are also presented in Chapter Two. Chapter Three presents the methodology and the results are presented in Chapter Four. Chapter Five gives an outline of the results, discussion, conclusion and recommendations.

Chapter 2: Theoretical Framework

2.1 Introduction

Two theories and literature are chosen to develop the conceptual model in order to answer the research questions and provide the foundation upon which the study is built. These are the Theory of Reasoned Action by Ajzen and Fishbein (1980) and the Education about HIV and AIDS by Miedema et. al (2011). The theories are chosen because they show respectively, how individual decision-making is affected by the social context and the influence of type of sex education on SRH knowledge. The conceptual framework developed from the theories and literature shows the factors which influence youth SRH security how these are in turn influenced by the social context.

2.2 Theories

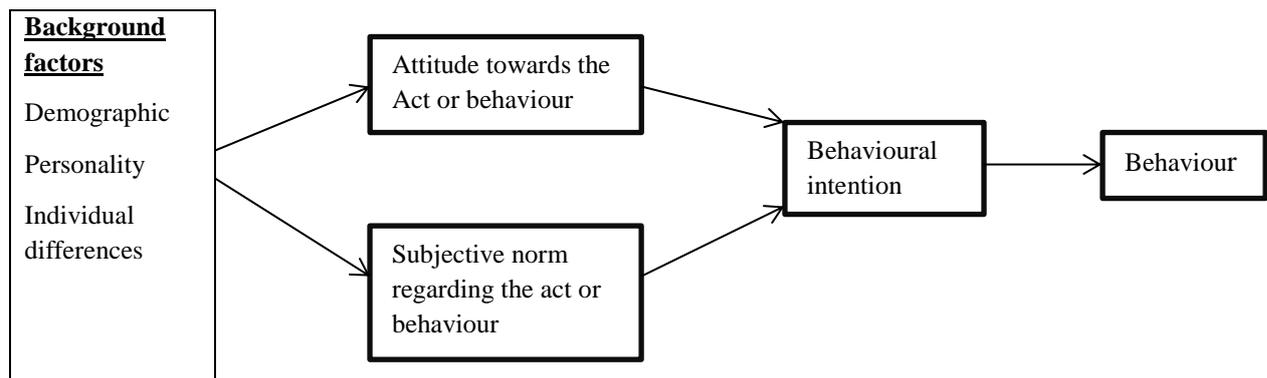
2.2.1 Theory of Reasoned Action

The theory of reasoned action is a decision-making theory. It states that the intention to perform behaviour is a determined by the individual's attitude towards the behaviour and subjective norms (Ajzen and Fishbein, 1980). Attitudes are negative or positive judgements held by an individual about performing the behaviour. Attitudes are shaped by the social context (Siegler et. al, 2012).

Attitudes are influenced by an individual's beliefs about the outcomes of their behaviour and the evaluations of these outcomes. For every behaviour outcome, an individual holds a set of beliefs and evaluation of outcomes. Subjective norms are an individual's belief about what significant others in society, known as "referents", think about the behaviour. Referents can be a specific individual or a group who may influence an individual's behaviour. The individual's normative beliefs are what a specific referent person thinks one should or should not do regarding the behaviour. Descriptive norms refer to the individual's beliefs on whether the referents actually perform the behaviour or not. For any given behaviour there are significant referents such as parent, friend, church, teacher or sibling. For each referent there is a normative belief of what the individual thinks the referent would want them to do. There is also a measure of the motivation for the referent's wish for the individual to comply with them (Ajzen and Fishbein, 1980).

The actual performance or non-performance of the behaviour will depend on the attitude strength and the intention to perform the behaviour. Thus, attitudes can be changed by changing an individual's beliefs, outcome evaluations or the strength of their beliefs. Each belief has a measure of strength. Beliefs are affected by background factors such as demographic, personality and individual factors such as gender. They are derived from sources such as culture, religion, science or education. Some beliefs such as culture and religion are shared within a group and these tend to be strong and difficult to change (Ajzen and Fishbein, 1980). Figure 2.1 shows the concepts of the theory of reasoned action.

Figure 2.1: Model of the theory of reasoned action



Ajzen, A., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*

2.2.2 Education about HIV and AIDS

Miedema et al (2011) in their analysis of HIV/AIDS education classify the approaches into three paradigms, namely science-informed, rights-informed and moralistic-informed approaches. They developed the framework from a study of 60 education programmes from different parts of the world. The framework is an attempt to link education theory to the development of HIV/AIDS education programmes and allow a more systematic approach to HIV/AIDS education programmes.

The first paradigm is the science-informed paradigm. This is further sub-divided into three main approaches. The first approach under the science-informed approach is the biomedical approach. This encompasses the involvement of medical personnel in teaching young people the facts about HIV and AIDS. The other approach is rooted in experimental psychology, that is, psychosocial studies of the determinants of safer sex. Lastly is the approach which emphasises epidemiological and behavioural studies to evaluate intervention effectiveness. The common theme is that HIV/AIDS education should be based on theory and evidence. Some common concepts are “behavioural determinants”, “research”, “experiments”, “causality” and “scientific knowledge”.

The second paradigm is the rights-informed approach where emphasis is on human rights in HIV/AIDS prevention. Key issues include “rights”, “participation”, “empowerment” and “choice”. Within this paradigm, a distinction is made between programmes which emphasise internationally recognised formal human rights instruments and those more loosely informed by the concept of rights. The former are particularly interested in the legalistic aspect of rights and obligations of duty holders, usually governments, to provide the rights to the right holders. The latter emphasises active citizenship, empowerment and the concept of sexual rights. Participation is the key theme of the rights-informed paradigm.

Finally is the moralistically-informed paradigm. The main argument underlying this paradigm is that problems related to youth sexuality bring to the fore the question of morality in HIV/AIDS education. This paradigm is advocated by the United States Federal government and is usually faith based. Islamic youth SRH policies also fall under this category. The English government’s Sex and Relationship Education (SRE) programme is not faith based but is moralistic. Common concepts of the moralistically-informed paradigm are issues such as “responsible behaviour”, “marriage” and “moral standards of behaviour”. Common aims are to reduce teen pregnancy through encouraging the avoidance of sex before

marriage as well as to strengthen traditional family values. In the case of the English SRE, the aim is to promote public health and personal development of young people (Miedema et. al 2011).

2.3 Literature review

2.3.1 Global overview of approaches to youth SRH

At the global level, it appears that the debate on youth sexual and reproductive health is between two main paradigms namely the abstinence only approach and the rights approach (Crane and Dusenberry, 2004). The abstinence only approach to solving youth sexual and reproductive health issues is advocated by the U.S. government. The rights approach is advocated by Western Europe, particularly the Netherlands, Germany and France. This paradigm argues for a human rights and science or evidence based approach (Crane and Dusenberry, 2004) and informs the 1994 ICPD policy guidelines (Finkle and McIntosh, 2002). Miedema et al (2011) in their analysis of HIV/AIDS education classify the paradigms into three, namely science-informed, rights-informed and moralistic-informed approaches. The antagonism between the two paradigms is reflected at the regional and local levels. The United States is the leading financier of SRH programmes and their policy on foreign aid for youth SRH programmes is the promotion of abstinence only programmes (Crane and Dusenberry, 2004; McFarlane, 2006). This has subsequently influenced youth sexual and reproductive health policy in the developing world, most of who depend on American funding.

2.3.2 Knowledge about SRH risks

Kirby et al (2007) reviewed 83 studies measuring the impact of school-based sex and HIV education programmes worldwide on sexual behaviour. They found that about 65% of the programmes improved sexual behaviours. The programmes resulted in delay or decrease in sexual activity or an increase in contraceptive use. Overall, sex education appears to have a positive impact on behaviour (Kirby et. al, 2007). Another study showed that secondary schooling was associated with lower probability of early sexual initiation among girls in sub-Saharan Africa. Zimbabwe had the lowest proportion of girls who had engaged in sexual intercourse before the age of 18 years. However, secondary schooling increased the probability of early sexual initiation among boys (Gupta and Mahy, 2003). Other factors associated with late sexual initiation were urbanisation, media exposure and higher social economic background. These results were corroborated by another study on age at first sex and HIV infection in rural Zimbabwe. The study found that women without primary education were more likely to have early sexual initiation and be infected with HIV (Hallett et. al, 2007). A study across 115 countries, including Zimbabwe showed that higher education attainment results in lower risk of HIV infection (Burroway, 2010).

A study by Hindin and Fatusi (2009) found that youth SRH education in Africa is largely influenced by cultural and ideologically driven restrictions. Much of it is limited to abstinence only as the ideal approach rather than a broader approach which would offer more information and choice. The study also showed that girls who engaged in premarital sex were stigmatised and this resulted in poor academic performance. Education policies in most African countries, including Zimbabwe, allow for girls who fall pregnant to be expelled. Although the education curriculum tends to improve knowledge, attitudes and intentions there is no lasting behavioural change.

In Zimbabwe, studies were carried out among urban and rural secondary school students. A study carried out among first year secondary school students in Harare, the capital city of Zimbabwe showed that although none of them had engaged in sexual intercourse, their

knowledge about HIV and AIDS was vague (Mlingo et.al 2012). The following were some of the results of the study. 100 per cent (n=75) had never been involved in fondling or sexual activity. 94.7% (n=71) reported that they had never been involved in kissing, while 5.3% (n=4) had been. 80% (n=60) did not consider themselves to be at risk to contracting HIV while 18.7% (n=14) considered themselves to be at risk. All learners reported that they had heard about HIV before, an increase from an earlier survey. The school was not the only source of learning. 60% reported that television was their main source of knowledge while (13.3%; n=10) reported that parents were their source of knowledge. (9.3%; n=7) reported that they got information from newspapers and (4%; n=3) from community activities. Parents ranked low as a source of information meaning that sexual issues were probably not discussed openly at home. Rural schools were more knowledgeable and girls more knowledgeable than boys. However, less than one-third (n=21) of the students could not readily mention the three common ways of HIV infection prevention. (93.3%; n=70) had never been tested for HIV compared with only (6.7%; n=5).

A study among rural secondary school youths showed misconceptions about HIV/AIDS (Chikovere et al, 2010). Young people associated the epidemic with loneliness, suffering, quarantine and death. The youths were afraid of acquiring the disease but at the same time they had limited access to contraceptives because of disapproval from adults. They also reported that they had difficulties communicating about their sexuality since this might imply to adults that they were sexually active.

2.3.3 Attitudes towards SRH issues

In Zimbabwe, one study looked at beliefs about condom use and abstinence (Marindo et.al, 2003). The study found that individual choice of youths was not a reflection of their underlying beliefs and sexual behavioural practices but rather deference to the views of adults. Policy makers, traditional and religious leaders promote abstinence as the only strategy for all young people while Non-Governmental Organisations and the private sector promote condom use. The study revealed that while youths expressed support for abstinence and morality, many were engaging in sexual activity because they did not know how to deal with their sexuality. All groups interviewed in focus group discussions expressed that abstinence was the first choice for HIV prevention. Most of their justification was from a Christian moral perspective. They also expressed the importance of maintaining virginity before marriage as well as parental influence and the need to preserve cultural values. The youths expressed negative attitudes towards condom use. Girls in particular questioned the safety of condoms. Overall, the views expressed were a reflection of the government's youth SRH education policy, religious and cultural beliefs. However, increasing rates of HIV infection and premarital pregnancy indicated that many young people were engaging in unprotected sex.

A study by Langhaug and others in 2010 on the SRH needs of rural girls in one province showed that there was a lot of bias against youths because of the cultural norms which deny youths the right to know about sexuality. The cultural norms were so entrenched in society to the extent that even healthcare workers were judgemental towards unmarried youths and were reluctant to offer them assistance. The study concluded that in order to improve access to SRH care for youths, there is need for training focussed on attitude change in addition to medical training for the healthcare providers. There is also need for clarity on legislation regarding provision of SRH care to the youths as many of the healthcare providers are reluctant on the basis of lack of clarity.

Erulkar et al (2005) carried a study on young people's preferences of sexual and reproductive health services in Zimbabwe and Kenya. The study showed that girls were more particular

about privacy than boys, indicating the effects of cultural norms which stigmatise premarital sexuality for girls. Girls also reported that service providers tended to be judgemental and moralistic when dealing with unmarried girls. This trend was shown elsewhere in Africa. Girls are affected by stigma as a result of cultural norms which are permissive of male sexual behaviour. Girls were expected to be responsible for prevention of premarital pregnancy but were stigmatised if they were known to be using contraceptives. At the same time, young men's status increased if they had many sexual partners. There was social stigma attached to health care for sexually related problems among health care providers (Bankole and Malarcher, 2010).

2.3.4 Sexual behavioural practices

One study analysed DHS data and survey data among 34 000 15 year female and male students in 18 African countries and 23 European countries and Canada. It showed increased contraceptive use worldwide over the past two decades among unmarried and married 15-19 year old female adolescents in comparison to older women. However, there was high inconsistency and a tendency to stop using contraceptives within a period of 12 months, resulting in increased risk to STIs and early pregnancies. The motivations for contraceptive use were mainly to avoid pregnancy rather than protection from STIs. The study also found that 14-38% from Europe and Canada were sexually experienced and 82% used condoms or pills at last intercourse. Forty per cent of the female participants from Africa were sexually active but contraceptive use was only 37% (Blanc et. al, 2009).

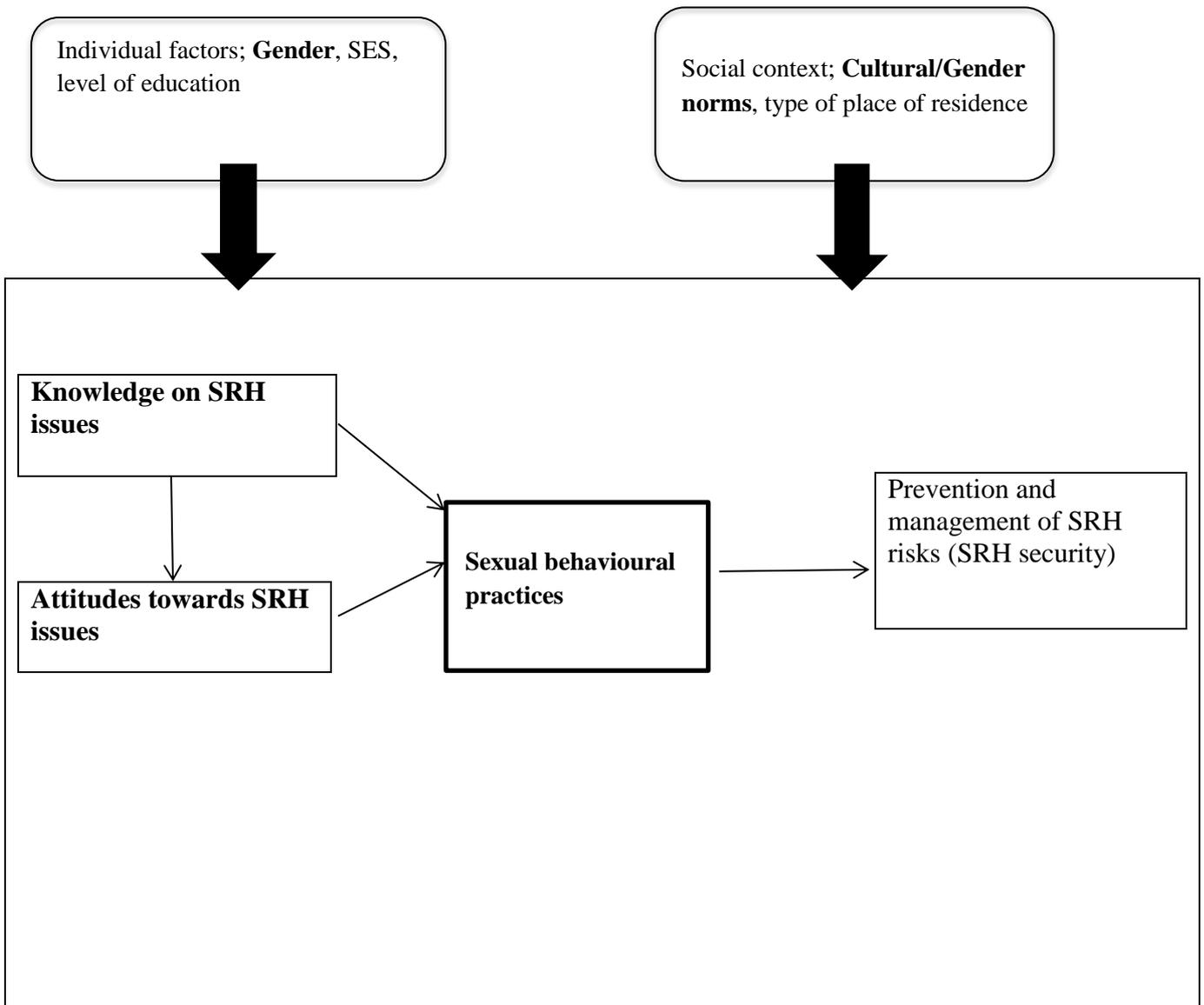
Bankole and Malarcher (2010) in studying barriers to young people's access to contraceptive information and services in Sub-Saharan Africa noted that young people were ill-prepared to handle their sexual and reproductive health. Thirty five percent of pregnancies among 15-19 year olds were unwanted or mistimed. Maternal mortality was the leading cause of death among this age group accounting for 15% of all deaths among young people aged 15-24 years. Unmet need for family planning for youths was 39%, the highest in the world. Girls were particularly disadvantaged as a result of cultural norms which are permissive of male sexual behaviour while against female sexual behaviour. This situation of double standards has resulted in failure to develop healthy communication skills between youths of opposite sex.

A review of global sex education programmes showed that there is increase in delaying marriage among young people in developing countries. However, this also means they are likely to engage in premarital sex. The result has been increased vulnerability to SRH risks. As a result, unwanted pregnancy rates and STIs are increasing (Kirby et al, 2007). In Zimbabwe, the trend is delay in age of marriage and increase in premarital sex. Girls who are enrolled in school were less likely to engage in premarital sex (Mensch et al, 2006).

Studies have tended to focus on youth SRH in general, the experiences of women alone and HIV/AIDS prevention. There is dearth in literature attempting to study the effects of gender on the sexual and reproductive health and wellbeing of young people. This study attempts to contribute in this particular aspect of youth SRH.

2.4 Conceptual Model

Figure 2.2 Factors influencing youth sexual and reproductive health security



The model above is constructed from the theory of reasoned action (Ajzen and Fishbein, 1980) and the theory about HIV/AIDS education (Miedema et al, 2011) as well as literature. The model sums up the relationship among the factors which influence the effects of gender on youth SRH security. Individual factors such as gender, social economic status and level of education as well as social contextual factors such as cultural norms and type of place of residence are used (Marindo et al, 2003; Bankole and Malarcher, 2010; Mlingo et al, 2012). These are predicted by the theory of reasoned action to influence attitudes and individual decision making on behavioural practices. The theory about HIV/AIDS education is also visible through the factors level of education and knowledge. Individual and social context factors, particularly gender and cultural norms, have an overarching influence on the factors which directly influence SRH security.

SRH security is determined by the relationship between knowledge, attitudes and sexual behavioural practices. The nature of the attitudes is determined by knowledge of SRH risks, individual factors and social norms. Knowledge depends on education about SRH issues

(Miedema et al, 2011). The attitudes held by an individual determine their sexual behavioural practices. Overall, interplay among the factors will determine sexual and reproductive health security, that is, the prevention and management of sexual and reproductive risks by the individuals in the social context.

2.5 Hypotheses

The hypotheses were generated from literature on past studies and the theories of reasoned action and education on AIDS which form the basis of the study.

1. Females are more aware of SRH risks compared to males (Mlingo et. al, 2012).
2. The youths hold positive attitudes towards sexual and reproductive health issues and there are no significant gender differences (Marindo et. al, 2003).
3. Males are more likely to engage in unsafe sexual behavioural practices compared to females as a result of the permissive social norms (Gupta and Mahy, 2003; Bankole and Malarcher, 2010).
4. The sexual behavioural practices of the youths do not reflect the knowledge and positive attitudes about sexual and reproductive health issues and males are more vulnerable than females (Marindo et. al, 2003, Blanc et. al, 2009).

Chapter 3: Methodology

3.1 Research design

The study is a cross-sectional descriptive study based on quantitative analysis of secondary data. The study analyses data obtained from the 2010-2011 Zimbabwe Demographic and Health Survey (ZDHS) to assess the influence of gender on youth sexual and reproductive health security in Zimbabwe. The data is analysed on variables about knowledge, attitudes and behaviour practices on sexual and reproductive health issues among young people in Zimbabwe.

3.2 Study setting

Zimbabwe is located in southern Africa, bordered by South Africa to the south, Mozambique to the east, Zambia to the north and Botswana to the west. The total population during the last census held in 2012 was 12 973 808 (ZIMSTAT, 2013).

In terms of sexual and reproductive health indicators, ZDHS was the only source on current data. According to the 2010-2011 DHS data, HIV prevalence was 15% among adults aged from 15-49 years, a decline from the 2005-2006 rate of 18%. Teenage pregnancy was also high at 24% among females aged 15-49 years. Rural teenagers with less education and of low social economic status tended to start childbearing at younger ages than other teenagers. Thirty per cent of women experienced violence in their lifetime since age 15, while 18 % had experienced it during the past year. Overall, 27% of the women reported that they had experienced sexual violence at some point in their lives.

3.3 Description of ZDHS and data quality

The Zimbabwe Demographic and Health Survey is part of the international DHS surveys carried out in developing countries (Measure DHS, 2012). The programme was established by the United States Agency for International Aid (USAID) in 1984 as a follow up to the World Fertility Survey and the Contraceptive Prevalence Survey. DHS surveys collect data on marriage, fertility, family planning, reproductive health, child health and HIV and AIDS. The stated objectives of the DHS programme are as follows:

- To provide decision makers in participating countries with information for policy choices
- To improve coordination and partnerships in data collection at the international and country levels
- To develop skills and resources in participating countries to collect high quality DHS data
- To improve data collection and analysis tools and methodology
- To improve the dissemination and utilisation of data

The main survey instruments consist of three different questionnaires, namely the household, male individual and female individual questionnaires. These are comparable across countries. To date, more than 130 nationally representative surveys have been carried out successfully in about 70 countries (Measure DHS, 2012).

In terms of data quality, DHS as one of the pioneers in the field of demographic data collection has also taken the lead in innovating ways to improve data collection and analysis tools over the years. Among its accomplishments is the adoption and use of information and computer technology where it has gone as far as developing the CSPro computer software which is used by other organisations in the demography domain. Therefore, DHS is one of the leading programmes in demographic data collection worldwide. As such data quality

from the surveys is highly reliable. However, challenges have been encountered in the developing world where it can be noted that surveys are prone to incomplete or partial responses. The complexity of the questionnaires has been one cause of inconsistencies in data quality, for both interviewers and survey participants. DHS data is also collected in retrospective and this makes the data prone to participants' recall bias (Measure DHS, 2012). Nevertheless, since the reproductive health questions are based on recent experiences of the participants and more direct questions, issues of data quality were not anticipated to be a major challenge for this study.

3.4 Conceptualisation and operationalization

For the purposes of the study, gender is the main explanatory variable used. The other explanatory variables are age, type of place of residence, level of education attainment and income status. The sections below describe the outcome variables used.

3.4.1 Knowledge of sexual and reproductive health issues

Education is the main tool for increasing HIV awareness and as such decreasing vulnerability to infection (Miedema, et al 2011). SRH security is also dependent upon awareness of SRH risks (Middleberg, 2002). DHS surveys offer extensive data on knowledge about sexual and reproductive health. Among the questions covered include knowledge about contraceptives, fertility, whether individuals are informed about the various methods of contraception, HIV/AIDS prevention as well as knowledge about STD symptoms (Rutstein and Rojas, 2006). Responses to these questions reflect the general awareness of sexual and reproductive health risks among participants.

Operationalization

Variables from DHS data on knowledge about reproductive health issues are used to answer the first question:

What is the level of knowledge of reproductive risks among female and male youths in Zimbabwe?

The following dependent variables are used:

Knowledge about at least one modern contraceptive; knowledge about AIDS; knowledge about any sexually infection; knowledge about whether a healthy looking person can be HIV positive; knowledge about HIV transmission; knowledge of the female ovulatory cycle. In addition, exposure to media and information will also be assessed through the variables on ever heard about family planning on radio and discussing family planning with a health worker in the last few months.

3.4.2 Attitudes

Attitudes are the beliefs an individual holds towards aspects in the world (Ajzen and Fishbein, 1980). Depending on their strength, one can predict the likely behaviour or by changing the attitudes, behaviour can be changed. In terms of sexual and reproductive health, DHS has a few key questions pertaining to attitudes. Data is used to answer the following research question:

What are the attitudes of the youths and are there gender differences?

Operationalization

In operationalizing attitudes, the aim is to see the effect of knowledge on attitudes, the resulting behavioural practices and the possible outcomes of those practices in terms of SRH security. For attitudes, the following outcome variables are predicted against the explanatory variables:

Attitudes towards gender-based violence, towards safer sex education to children, attitudes towards condom use as a way of avoiding HIV, attitudes towards having one faithful partner and attitudes towards HIV positive people.

3.4.3 Sexual behavioural practices

Healthy sexual behavioural practices are key to accomplishing sexual and reproductive health security (Middleberg, 2002).

Operationalization

For sexual behavioural practices, the study analyses data on age of sexual initiation, whether they used a condom during the last sexual encounter, whether they have been tested for HIV, whether they are covered by health insurance and whether they have had a sexually transmitted infection in the last 12 months (Measure DHS, 2011).

3.4.4 Gender

Gender refers to the socially constructed roles, behaviours, activities and attributes that a given society considers appropriate for men and women (WHO, 2012). Studies have shown that there are gender differences in the experiences of sexuality among youths in Zimbabwe.

Operationalization

For the purposes of the study, gender is treated as two sexes male and female.

3.4.5 Social economic status

Operationalization

Social economic status was measured by level of education and wealth index.

3.4.6 Youth

Operationalization

The concept varies across cultures but there has been a global agreement on youth as a distinct phase with characteristic needs in a person's life. WHO, UNICEF and UNFPA, in a joint statement agreed that the term "adolescent" refers to people between the ages of 10 to 19 years, "youth" are people between 15 and 24 years and "young people" are aged 10 to 24 years (UNFPA, 1998). These make up distinct yet overlapping categories all describing people in transition from childhood to adulthood. This study is targeting the "youth", aged between 15 and 24 years.

3.5 Sample design

The data is truncated to include only male and female youths aged 15-24 years old. Table 3.1 overleaf summarises the characteristics of the sample:

Table 3.1: Attributes of the participants

N=6975

Background variables	Males N	%	Females N	%	
Gender	3180	45.6%	3795	54.4%	
Type of place of residence					
Urban	1003	40.7%	1463	48.3%	51.7%
Rural	2177	59.3%	2332		
Total	3180		3795		
Education level					
No education	23	62.2%	14	44.9%	55.1%
Primary	759	37.8%	850	47.4%	52.6%
Secondary	2307	47.2%	2830		
Higher level	91	52.8%	101		
Total	3180		3795		
Wealth index					
Poorest	491	42.8%	655	48.9%	
Poorer	587	57.2%	667	46.2%	53.8%
Middle	697	46.8%	666	41.5%	58.5%
Richer	708	53.2%	824		
Richest	697	51.1%	983		
Total	3180		3795		
Age					
15-24 years	3180	45.6%	3795	54.4%	

From the table, female participants constitute over half of the sample (54.4%). Male participants constitute 45.6%. For both sexes, the majority of the participants are rural (64.6%) compared to urban (35.4%). The majority of the participants have at least secondary level education. Slightly less than half have primary education, while a few either have no education or higher than secondary level education. In terms of income level, as measured by the wealth index, among both sexes the sample appears to be evenly distributed across the different levels. Across all the variables, the overall proportion in terms of an average ratio of more females than males is repeated. The exception is the sample of individuals with no education, where the majority (62.2%) are male (Measure DHS, 2011).

3.6 Plan of analysis

3.6.1 Data handling

The original DHS datasets were two separate questionnaires for males and females. Firstly, the variable gender was created for the two datasets. The variables of interest were then selected and the two datasets were merged into a single file. Most of the outcome variables had three outcomes, “yes, no, don’t know”. The “don’t know” responses were treated as missing cases in order for the effects of participants who responded with yes/no responses to be predicted more accurately. The variable education attainment was recoded into four outcomes. Age was treated as one age group of 15-24 years. Knowledge of female ovulatory cycle was recoded into two outcomes of whether one knew the right response or not. Age at first sex was recoded into those who had experienced sexual initiation and those who had not yet experienced it. Knowledge of contraceptives was recoded into those who knew at least one type of modern contraceptive and those who did not. Some variables also had missing cases. This was particularly among the variables on HIV/AIDS knowledge which all had a

similar value of 235. It was assumed that these would not have a significant effect on the results of the study therefore they were excluded from the final analysis (Norusis, 2005). Condom use at last sex had an unusually high number of missing cases. This was a result of the number of participants reporting that they had not yet had sexual intercourse.

Table 3.2 Independent variables

Variable	Measurement level	Original categories	Recoded categories	N	Missing cases
Gender	Categorical		N/A	6975	0
MV012 Age in completed years	Continuous	Individual age groups	N/A	6975	0
MV025 Type of place of residence	Categorical	1. Urban 2. Rural	N/A	2466 4509	0
MV149 Education attainment	Categorical	0. No education 1. Incomplete primary 2. Complete primary 3. Incomplete secondary 4. Complete secondary 5. Higher	0. No education 1. Primary 2. Secondary 3. Higher	37 1609 5137 192	0
MV190 Wealth index	Categorical	1. Poorest 2. Poorer 3. Middle 4. Richer 5. Richest	N/A	1146 1254 1363 1532 1680	0

Table 3.3 Dependent variables

Variable	Measurement level	Original categories	Recoded variables	N	Missing cases
Knowledge					
MV217 Knowledge of ovulatory cycle	Categorical	1. During period 2. After period 3. Middle 4. Before period 5. At any time 6. Other 8. Don't know	0.No 1.Yes (Middle)	6092 883	0
MV301 Knowledge of modern contraceptive method	Categorical	0. Knows no method 1.Knows only folkloric method 2.Knows only traditional method 3.Knows modern method	0. No 1. Yes	233 6742	0
MV384A Heard about family planning on radio recently	Categorical	0. No 1. Yes	0. No 1. Yes	5820 1155	0
MV750 Ever heard of a sexually transmitted infection	Categorical	0. No 1. Yes 8. Don't know	0. No 1. Yes	198 6777	0
MV751 Ever heard of AIDS	Categorical	0. No 1. Yes	N/A	235 6740	0
MV754JP Can get HIV from mosquito bites	Categorical	0. No 1. Yes 8. Don't know	0. No 1. Yes	5349 1032 **359	235 **359
MV756 Healthy-looking person can have HIV	Categorical	0. No 1. Yes 8. Don't know	0. No 1. Yes	864 5740 **136	235 **136
Attitudes					
MV744A Beating wife justified	Categorical	0. No 1. Yes 8.Don't know	0. No 1. Yes	5121 1713 141	0
MV 777 Would want HIV infection in family to remain secret	Categorical	0. No 1. Yes 8. Don't know	0. No 1. Yes	3540 3010 **190	235 **190
MV778 Willing to care for HIV sick relative	Categorical	0. No 1. Yes 8. Don't know/ not sure/depends	0. No 1. Yes	437 6242 **61	235 **61
MV779 HIV positive teacher should be allowed to continue working	Categorical	0. No 1. Yes 8. Don't know/not sure/depends	0. No 1. Yes	961 5572 **207	235 **207
MV780 Children should be taught about condoms	Categorical	0. No 1. Yes 8. Don't know	0. No 1. Yes	3930 2629 **181	235 **181
MV754CP Always use condoms for protection	Categorical	0. No 1. Yes 8. Don't know	0. No 1. Yes	1091 5364 **285	235

Table 3.3 continued

Variable	Measurement level	Original categories	Recoded variables	N	Missing cases
MV754DP Have one partner only	Categorical	0. No 1. Yes 8. Don't know	0. No 1. Yes	552 5995 **193	235 **193
Sexual practices					
MV 481 Covered by health insurance	Categorical	0. No 1. Yes	0. No 1. Yes	6644 331	0
MV525 Age at first sex	Categorical	0. Not had sex 96. At first union 97. Inconsistent 98. Don't know	0. Never had sex 1. Has had sex	3270 3705	0
MV761 Condom use during last sex	Categorical	0. No 1. Yes	N/A	2264 894	3817
MV763A Had any STI last 12 months	Categorical	0. No 1. Yes 8. Don't know	0. No 1. Yes	6881 86 8	0
MV781 Ever been tested for HIV	Categorical	0. No 1. Yes	0. No 1. Yes	4391 2452	132

**indicates the sample who answered "don't know". These will be treated as missing cases.

3.6.2 Data analysis

The objective of the study was to assess the influence of gender on youth SRH security. To answer the objective, research questions were formulated. The main question was related to the knowledge of reproductive risks, attitudes and sexual behavioural practices and the influence of gender. Four sub-questions were formulated from the main question to answer questions regarding the level of knowledge of reproductive risks, attitudes, sexual behavioural practices and the gender differences. To answer all four questions, cross tabs were used to obtain frequencies showing the frequency distribution of responses by gender. Chi-square tests were used to analyse the statistical significance of the gender differences.

Logistic regressions were used to analyse the dependent variables for the effects of gender. Logistic regression was chosen because it is most suitable for predicting models in which the dependent variable has dichotomous outcomes (DeMaris, 1995; Norusis, 2008). Models were built to predict outcome variables for knowledge, attitudes and sexual behavioural practices against the independent variables gender, age, type of place of residence, social economic status and level of education. To assess the effect of gender, a two-stage analysis was carried out. Univariate logistic analyses including gender only as the independent variable were carried out followed by multivariate analyses including gender with other independent variables namely age, type of place of residence, level of education and wealth index. The purpose of the univariate analyses was to measure the effects of gender on the outcome variables. The multivariate analysis was to see if the model was improved by the inclusion of other variables (Norusis, 2008).

The effects were assessed by looking at the odds ratio and the significance levels of the Wald test. The odds ratio measures the likelihood of occurrence of the particular outcome as a result of exposure to the independent variable, in this case, gender in the univariate analyses and gender, age and socio-economic status in the multivariate analyses. Odds in logistic regression are defined as the probability of occurrence of an outcome compared to the probability of non-occurrence of the outcome. The odds ratio, denoted by $\text{Exp}(\beta)$, is the ratio

of the odds of occurrence of an outcome in one group to the ratio of it occurring in the other group. In the case of this study, the two groups were male and female participants, respectively (Norusis, 2008).

3.7 Ethical considerations

For this study ethical considerations with regards to use of secondary data were employed. Written permission was sought and granted from Macro International, the copyright owners of DHS, for the use of the data. The data was treated as confidential and was used solely for the purpose of the study. Data handling did not involve alterations which might distort results of the study. The data was not shared with other researchers.

Chapter 4: Results

4.1 Knowledge of reproductive risks

Table 4.1.1 below shows that knowledge of SRH issues differs significantly between male participants and female participants on most of the variables. This is the case for knowledge about modern contraceptives and the female ovulatory cycle where the level of knowledge is significantly higher among the female participants. Level of knowledge is also significantly higher among females for the question on whether a healthy looking person might be HIV positive. More female participants (68.9%) than male participants (31.1%) also discussed family planning with a health worker over the past few months. On the rest of the variables where differences were statistically insignificant, namely having heard about AIDS and STIs and about family planning on the radio in the recent past, female participants had higher frequencies. Statistically significant results are shown in bold.

Table 4.1.1: Knowledge of sexual and reproductive health issues by gender

		Males	Females	Chi-square p-value
Ever heard of AIDS				
No	N=235	43.8%	56.2%	0.581
Yes	N=6740	45.7%	54.3%	
Ever heard of a sexually transmitted infection				
No	N=198	41.4%	58.6%	0.231
Yes	N=6777	45.7%	54.3%	
Knowledge of modern contraceptive				
No	N=233	36.1%	63.9%	0.003
Yes	N=6742	45.9%	54.1%	
Knowledge of female ovulatory cycle				
No	N=6092	46.7%	53.3%	0.000
Yes	N=833	37.8%	62.2%	
A healthy looking person can have HIV				
No	N=864	50.9%	49.1%	0.001
Yes	N=5740	45.0%	55.0%	
Can get HIV from mosquito bites				
No	N=5349	43.1%	56.9%	0.000
Yes	N=1032	56.9%	43.1%	
Heard about family planning on radio over the last few months				
No	N=5820	45.3%	54.7%	0.234
Yes	N=1155	47.2%	52.8%	
Discussed family planning with health worker in last few months				
No	N=3648	82%	18%	0.000
Yes	N=610	31.1%	68.9%	

Statistically significant results are shown in bold

Table 4.1.2 below shows results from the logistic regressions of the effects of gender on knowledge of SRH issues. Gender alone was a significant predictor of most of the variables namely, knowledge of ovulatory cycle, whether a healthy looking person can be HIV positive, whether HIV can be spread by mosquitoes and discussion of family planning with a health worker in the past few months. It had no significant effects on knowledge about AIDS, STIs and exposure to information through the radio. The patterns did not change for the multivariate analyses except for knowledge about a sexually transmitted infection which became significant with the addition of other variables. In terms of the odds, they were higher for males on knowledge about modern contraceptives and whether mosquitoes could transmit HIV. The odds for females on knowledge of the female ovulatory cycle were about 1.5 times higher than males. The odds for females were also higher on whether a healthy looking person can have HIV. The odds for females having discussed family planning with a health worker in the recent past are 10 times higher compared to males. They decrease slightly to eight times higher when other explanatory variables are added.

Table 4.1.2: The effects of gender on knowledge of SHR issues

Variables	Univariate binary logistic regression		Multivariate binary logistic regression	
	Exp (B)	Sig	Exp (B)	Sig
Ever heard about AIDS (N=6975)				
Constant	29.874	0.000	0.051	0.000
Gender (ref=male)	0.929	0.581	0.786	0.084
Ever heard of sexually transmitted infection (N=6975)				
Constant	37.780	0.000	0.026	0.000
Gender (ref=males)	0.839	0.232	0.727	0.011
Knowledge of modern contraceptive (N=6975)				
Constant	36.857	0.000	0.001	0.000
Gender (ref=males)	0.664	0.003	0.565	0.000
Knowledge of ovulatory cycle (N=6975)				
Constant	0.117	0.000	0.000	0.997
Gender (ref=males)	1.441	0.000	1.417	0.000
A healthy looking person can have HIV (N=6604)				
Constant	5.875	0.000	0.656	0.522
Gender (ref=males)	1.267	0.001	1.222	0.011
Can get HIV from mosquitoes (N=6381)				
Constant	0.255	0.000	0.352	0.076
Gender (ref=males)	0.574	0.000	0.589	0.000
Heard about family planning on radio last few months (6975)				
Constant	0.207	0.000	0.000	0.997
Gender (ref=males)	0.926	0.234	0.894	0.091
Discussed family planning with health worker in last few months (N=4258)				
Constant	0.064	0.000	0.001	0.000
Gender (ref=males)	10.045	0.000	8.654	0.000

Explanatory variables:

Univariate logistic regression: Gender

Multivariate logistic regression: Gender, Age, Type of place of residence, Educational attainment, Wealth index

Statistically significant results are shown in bold

4.2 Attitudes towards sexual and reproductive health issues

Table 4.2.1 below shows frequencies on attitudes towards SRH issues. Frequencies are significantly different between males and females on the belief in having one partner only as a way to prevent HIV infection, the belief that an HIV positive female teacher should be allowed to continue to teach and that children should be taught about condoms as a way to prevent HIV infection. In all these, except the last one, the frequencies are higher for females than males. Frequencies on the other variables namely, on violence against women, condoms being effective for HIV prevention, whether HIV infection in the family should be kept secret and willingness to care for HIV infected relative, were not statistically significant. For these, female frequencies were higher than male frequencies.

Table 4.2.1: Attitudes towards sexual and reproductive health issues

		Males	Females	Chi-square p-value
Wife beating justified				
No	N=5121	45.8%	54.2%	0.734
Yes	N=1713	45.4%	54.6%	
Belief that condoms are effective against HIV/STIs transmission				
No	N=1091	47.9%	52.1%	0.202
Yes	N=5364	45.8%	54.2%	
Belief that having one partner only is effective against HIV/STIs				
No	N=552	50.7%	49.3%	0.016
Yes	N=5995	45.4%	54.6%	
Would want HIV infection in family to remain secret				
No	N=3540	45.9%	54.1%	0.618
Yes	N=3010	45.3%	54.7%	
Willing to care for sick relative				
No	N=437	48.5%	51.5%	0.209
Yes	N=6242	45.4%	54.6%	
Female HIV positive teacher should continue working				
No	N=961	61.6%	38.4%	0.000
Yes	N=5572	42.9%	57.1%	
Children should be taught about condoms to avoid AIDS				
No	N=3930	41.7%	58.3%	0.000
Yes	N=2629	51.5%	48.5%	

Statistically significant results are shown in bold

Table 4.2.2 below shows results from the logistic regressions on attitudes. Gender alone is a significant predictor of the belief that having one partner only is effective against HIV transmission. The odds are higher for females. The result is insignificant with the addition of other variables. The odds for females for both univariate and multivariate regression on the belief that an HIV positive female teacher should be allowed to continue teaching are highly significant and two times higher compared to males. Gender alone is also a significant predictor for attitudes towards children being taught about condoms as a way to avoid AIDS. The odds are higher for males than for females. Significance remains at the same level and the odds decrease only slightly with the addition of other variables. Gender does not have a significant effect on attitudes towards gender based violence, condoms as a way to avoid HIV/AIDS, willingness to care for a sick relative and belief that HIV infection in the family should remain secret.

Table 4.2.2: Effects of gender on attitudes towards sexual and reproductive health issues

Variables	Univariate binary logistic regression		Multivariate binary logistic regression	
	Exp (B)	Sig	Exp (B)	Sig
Wife beating justified (N=6834)				
Constant	0.331	0.000	0.226	0.010
Gender (ref=male)	1.019	0.734	1.085	0.157
Belief that condoms are effective against HIV transmission (N=6455)				
Constant	4.700	0.000	0.960	0.948
Gender (ref=male)	1.089	0.202	1.045	0.516
Belief that having one partner only is effective against HIV transmission (N=6547)				
Constant	9.714	0.000	0.421	0.238
Gender (ref=male)	1.239	0.016	1.182	0.064
Would want HIV infection in family to remain secret (N=6550)				
Constant	0.839	0.000	2.455	0.051
Gender (ref=male)	1.025	0.618	1.055	0.287
Willing to care for relative sick with AIDS (N=6679)				
Constant	13.373	0.000	0.325	0.071
Gender (ref=male)	1.132	0.210	1.016	0.874
HIV infected female teacher should be allowed to continue to work (N=6533)				
Constant	4.035	0.000	0.102	0.000
Gender (ref=male)	2.138	0.000	2.031	0.000
Children should be taught about condoms to avoid AIDS (6559)				
Constant	0.827	0.000	0.179	0.001
Gender (ref=male)	0.673	0.000	0.631	0.000

Explanatory variables:

Univariate logistic regression: Gender

Multivariate logistic regression: Gender, Age, Type of place of residence, Educational attainment, Wealth index

Statistically significant results are shown in bold

4.3 Sexual behavioural practices

Table 4.3.1 below shows results from the cross tabulations on sexual behavioural practices. Frequencies are significantly different between males and females on the number of participants who have had first sexual encounters. Of those who have had first sex, 40% were male while 60% were female. Of those who reported condom use during last sex, 70% were male compared to 30% female. The difference is statistically significant. Frequencies were also significantly different for those who had ever been tested for HIV. Twenty seven percent of these were males while 72% were female.

Table 4.3.1: Sexual behavioural practices

		Males	Females	Chi-square p-value
Covered by health insurance				
No	N=6644	45.6%	54.4%	0.992
Yes	N=331	45.6%	54.4%	
Age at first sex (Ever had sex)				
Never had sex	N=3270	51.8%	48.2%	0.000
Has had sex	N=3705	40%	60%	
Condom use during last sex				
No	N=2264	24.9%	75.1%	0.000
Yes	N=894	70%	30%	
Had an STI in the last 12 months				
No	N=6881	45.6%	54.4%	0.793
Yes	N=86	44.2%	55.8%	
Ever been tested for HIV				
No	N=4391	57.1%	42.9%	0.000
Yes	N=2452	27.4%	72.6%	

Statistically significant results are shown in bold

Table 4.3.2 overleaf shows results from the logistic regressions on sexual behavioural practices. The odds for females having had first sexual encounters are highly significant and 1.6 times higher than males. They increase to 1.8 times with the addition of other variables. Female odds for condom use at last sexual encounter are 0.1 times those of males and are highly significant for both univariate and multivariate regressions. The gender effects on the odds of ever being tested for HIV are highly significant. The odds for females are 3.5 times higher for females than for males. The odds increase to 4 times with the addition of other variables. Gender does not have significant effects health insurance cover and having a sexually transmitted infection in the last 12 months.

Table 4.3.2 Effects of gender on sexual behavioural practices

Variables	Univariate logistic regression		Multivariate logistic regression	
	Exp (B)	Sig	Exp (B)	Sig
Covered by health insurance (N=6975)				
Constant	0.050	0.000	0.000	0.997
Gender (ref=male)	0.999	0.992	0.901	0.387
Ever had sex (N=6975)				
Constant	0.849	0.000	0.000	0.000
Gender (ref=male)	1.611	0.000	1.794	0.000
Condom use at last sex (3158)				
Constant	1.110	0.072	6.531	0.017
Gender (ref=male)	0.142	0.000	0.127	0.000
Had a sexually transmitted infection in the last 12 months (6967)				
Constant	0.012	0.000	0.000	0.997
Gender (ref=male)	1.059	0.793	0.953	0.826
Ever been tested for HIV (N=6843)				
Constant	0.267	0.000	0.000	0.000
Gender (ref=male)	3.539	0.000	4.146	0.000

Explanatory variables:

Univariate logistic regression: Gender

Multivariate logistic regression: Gender, Age, Type of place of residence, Educational attainment, Wealth index

Statistically significant results are shown in bold

4.4 The link between knowledge, attitudes and behavioural practices

It appears that for the most part, knowledge and attitudes are not reflected in corresponding sexual behavioural practices. Knowledge on SRH risks is universal across both genders. However, there are differences on a number of variables which are key to promoting SRH security. This appears to be the case on ways of preventing HIV transmission. Males appear to hold positive attitudes about condoms, while females believe in faithfulness to one partner only. In this case, there is a link which can be explained by knowledge of a modern contraceptive which is higher for males. Subsequently, condom use is far higher for males than for females. The odds for females to have discussed family planning with a health worker in the recent past are far higher than males. They also have far higher odds for getting an HIV test. However, the relationship between knowledge, attitudes and sexual behavioural practices appears to be weak. For example, females hold negative attitudes towards condoms and subsequently condom use among them appears to be low compared to males. A higher number of females had experienced sexual initiation compared to males. Knowledge is reflected in corresponding attitudes in the case of attitudes towards a female HIV positive teacher. However, there is no clear link to safer sexual behavioural practices. On some variables, the relationship between knowledge, attitudes and sexual behavioural patterns is strong while on most variables the relationship does not appear to be clear.

Chapter 5: Conclusion and discussion

5.1 Overview of the findings

The objective of the study was to assess the influence of gender on youth sexual and reproductive health security in Zimbabwe. To achieve this, DHS data was analysed on knowledge, attitudes and sexual behavioural practices of young people on SRH issues.

In terms of knowledge, results appear to show that overall female participants are more knowledgeable than their male counterparts. However, this depended on the variables being measured. For example, there were no significant gender differences on variables related to the more general issues such as knowledge about AIDS or sexually transmitted infections. Gender did not appear to have significant effects on attitudes. However, on a number of variables statistics for females were higher than males. More males believed that children should be taught about condoms to prevent HIV infection. There were no significant differences on attitudes towards gender based violence, condoms as a way to avoid HIV/AIDS, willingness to care for a sick relative and the belief that HIV infection in the family should remain secret. In terms of sexual behavioural practices, among those who had sexual initiation, 40% were male while 60% were female. Of those who reported condom use during last sex, 70% were male compared to 30% female. More females (72%) had ever been tested for HIV compared with males (28%). The relationship between knowledge, attitudes and sexual behavioural practices is strong on key variables which affect sexual and reproductive health security. This is the case for condom use where males appear more knowledgeable than females and consequently hold positive attitudes towards condom use and the result is high frequency of condom use at last sex compared to females. Otherwise, the relationship does not appear to be strong on other variables.

5.2 Discussion of the findings

5.2.1 Gender effects on knowledge about sexual and reproductive health risks

The effects of gender on knowledge depend on the type of question. However, females generally appear to be more knowledgeable than males. These findings are corroborated by available research in Zimbabwe and confirm the hypothesis of the study (Mlingo et al, 2012). The differences are not significant for knowledge about AIDS and sexually transmitted infection. However, on other issues such as knowledge about the female ovulatory cycle, modern contraceptives, and other indirect questions on causes of HIV transmission as well as exposure to information from the media and health workers, gender had significant effects and frequencies were higher for females than males. Results from the logistic regressions show that the odds for either gender to be more knowledgeable depend on the variable. Odds for females were higher for knowledge of the female ovulatory cycle, one question about HIV transmission and whether the participant had discussed family planning with a health worker in the past few months. For males, the odds were higher on knowledge about a modern contraceptive, one question on HIV transmission and, for the multivariate regression, on knowledge about a sexually transmitted disease.

There are a number of possible explanations for the differences. From literature, it appears that school-based HIV/AIDS education improves knowledge and that girls tended to be more knowledgeable about SRH issues than boys (Miedema et. al, 2011; Mlingo et. al, 2012). Cultural norms appear to play a strong role in girls being more knowledgeable than boys. The norms place more responsibility on girls to prevent premarital pregnancy and maintain their virginity before marriage. Girls also face more adverse consequences if they fall pregnant outside of marriage, including shame and ridicule, early and forced marriage and expulsion from school (Marindo et al, 2003; Chiweshe, 2010). These factors are likely to motivate them

to be aware of SRH risks. It needs to be noted that more females (N=1785) than males (N=388) from the data were married or cohabiting or formerly married or cohabiting. This is likely to affect exposure to the media and SRH workers as a result of accessing antenatal health care.

5.2.2 Gender effects on attitudes towards sexual and reproductive health issues

There were no significant differences on issues like violence against women, condom effectiveness and stigma against HIV patients. However, females tended to believe in having one faithful partner as a way to prevent HIV infection. The effects became insignificant when other variables were included. Gender was also significant in determining attitudes towards an HIV positive female teacher being allowed to continue to teach. More females than males believed that she should be allowed to continue to teach. More males believed that children should be taught about condoms to avoid AIDS.

The findings nullify the hypothesis that attitudes are positive and there are no significant gender differences. Gender had significant effects on key issues such as the best way to prevent HIV transmission as well as condom use. It appears that women are generally negative towards condoms as a way to prevent HIV transmission and tend to disagree that children should be taught about condoms. The differing attitudes towards an HIV positive teacher where the odds for females to show support were 3 to 4 times higher than males are also noteworthy. The findings appear to show that male and female youths in Zimbabwe do indeed have different experiences towards sexuality. Literature showed lack of confidence in condoms by girls. Girls' preference for faithfulness to one partner only appears to be a reflection of the cultural norms in Zimbabwe (Marindo et. al, 2003). The differing attitudes towards an HIV positive female as well as condoms also appear to be the result of the cultural norms which tend to place differing standards on female sexuality as opposed to male sexuality.

5.2.3 Gender effects on sexual behavioural practices

More females have had first sexual encounters compared to males. Much fewer females (30%) compared to males (70%) reported condom use at last sex. More females (73%) had been tested for HIV than males (27%). There were no significant differences on other factors such as health insurance coverage and sexually transmitted infection.

It appears that contrary to the hypothesis, males do not necessarily engage in unsafe sexual behavioural practices. Condom use is high among males compared to females. Low condom use makes females more vulnerable to SRH risks, including HIV/AIDS and other STIs and unwanted pregnancies. This finding is corroborated in findings of previous studies. The prevailing cultural norms and policies in Zimbabwe ridicule condoms and associate them with promiscuity. Girls were particularly sceptical about condoms (Marindo et. al, 2003). The cause for the wide difference in attitudes and practices towards condom use between male and female participants appears to be a reflection of the gender norms. The norms are marked by the double standard of being permissive of male sexuality while unmarried women are expected to adhere to moral standards (Marindo et al, 2003; Bankele and Malarcher, 2010). The association of condoms with promiscuity also appears to be a factor in the differing views.

5.2.4 The link between knowledge, attitudes and behavioural practices

Findings showed that the relationship between knowledge, attitudes and sexual behavioural practices was strong on variables which affect sexual and reproductive health security. This appeared to be the case on modern contraceptives where males were more knowledgeable than females and this appeared to correspond with attitudes and practices towards condom

use. In terms of other variables, the relationship was not strong or straightforward. Females were generally more knowledgeable than males but this pattern did not translate into attitudes and sexual behavioural practices which promote SRH security.

The findings confirm the hypothesis that the sexual behavioural practices of the youths do not reflect the knowledge and attitudes about SRH issues. In addition, it does not appear to be the case that males are more vulnerable to risks than females. On the contrary, findings appear to show that females are more vulnerable to SRH risks than males. This is likely to be the result of the prevailing cultural norms and policies which promote different standards for males and females (Marindo et. al, 2003). Such double standards as well as the stigmas are likely to result in lack of open communication, thus making young people particularly girls, vulnerable to SRH risks (Bankele and Malarcher, 2010).

5.3 Limitations of the study

The study relied on DHS data and as such results were confined to the data provided. Only quantitative patterns could be observed and it was not possible to elicit direct responses from the participants on underlying causes behind the observed factors. Results are based on individual responses and there is the risk of ecological fallacy which is drawing conclusions about individuals based on results from a group (Babbie, 2010). Notwithstanding these limitations, ZDHS data provides quality and topical data which enables researchers to gain some understanding into gender effects on youth sexual reproductive health security. DHS data is population based and easily measurable on the issues the study was interested in.

5.4 Conclusion

In conclusion, there are gender influences on sexual and reproductive health security differences among the youths. Female youths are more vulnerable to SRH risks compared to their male counterparts. Knowledge of SRH risks is universal across both genders with females displaying higher levels of knowledge than males. Female participants also have greater exposure to SRH services through the media and health workers. However the knowledge does not translate into corresponding attitudes and sexual behavioural practices which promote SRH security, particularly among the female participants. The main factors affecting youth SRH appear to be attitudes and practices towards modern contraceptives, in particular condoms, and cultural norms which promote misconceptions about youth, particularly female sexuality. The policy environment which is characterised by antagonism among the various policy stakeholders has resulted in lack of a clear strategy to address youth SRH. The result is conflicting strategies based on antagonisms between morality, Christianity, cultural identity on the one hand and Western influences on the other. This leads to greater vulnerability and different standards for male and female youths.

5.5 Recommendations

5.5.1 Policy recommendations

The policy environment needs to be improved so that it is inclusive of all key stakeholders, including the young people themselves, working together in a manner which seeks consensus rather than disagreement. In particular, cultural norms which hinder open communication about sexuality need to be addressed (Marindo et. al, 2003).

The education curriculum needs to be expanded from the current abstinence only approach and HIV/AIDS prevention to cover broader sexual and reproductive health topics. The mainstreaming of sexual and reproductive health into the education curriculum has improved knowledge and attitudes (UNFPA, 2011). However, the approach of HIV and pregnancy prevention is unlikely to empower young people because it only depends on their self-

efficacy instead of complete knowledge about the whole subject. Such a scenario is only likely to reinforce misconceptions and fatalistic behaviour among the youths.

ICPD provisions inform parts of Zimbabwe's youth sexual and reproductive health policy on paper (Ministry of Health, 2001). There is need for full implementation of these provisions. Particular attention needs to be paid to gender empowerment in order to promote gender equality and improve the sexual and reproductive health security of women and girls.

5.5.2 Suggestions for future research

Future research might look into the policy environment with the view to see how youth SRH might be secured through participatory approaches and social inclusion. In addition, qualitative studies on the same topic can be carried out to further explore underlying social processes behind the factors studied in this study. Studies can also look at how to improve gender equality among young people in the area of SRH. Research might also look into how international policy guidelines such as the ICPD might be adapted to the unique local context.

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