KNOWLEDGE, ATTITUDES AND PRACTICES OF FEMALE STUDENTS REGARDING EMERGENCY CONTRACEPTION AT MIDLANDS STATE UNIVERSITY, ZIMBABWE

BY

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Declaration

I, **MAMBANGA PFUNGWA,** hereby declare that the research thesis titled "**Knowledge, attitudes and practices of female students regarding emergency contraception at Midlands State University, Zimbabwe",** is my own work and that it has not been submitted to this or any other institution for any other degree and that all the sources that have been used are acknowledged by means of complete references.

..... 04/02/2016

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Dedication

This study is dedicated to all specialised public health educators and promoters in the world and to my mother Nancy Sazunza who always wants me to be the best I can.

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Acknowledgements

I would like to pass my sincere gratitude to the Almighty God for being an ever-present guiding light.

I would like to express my gratitude to my supervisors Dr T Tshitangano and Prof H.A Akinsola for their time, knowledge, efforts and guidance which are beyond comparison. I am also grateful to my former Lecturer Prof D.T Goon, who has been and remains a pillar of strength, helping significantly with financial resources to enable me to cope with socio-economic conditions and to finish my studies.

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ABSTRACT

Background: Unintended pregnancy constitute a serious public health problem with WHO (2012) estimated global abortion rate to be 35 per 1 000 women aged from 15 to 45 years, and that twenty million of the abortion procedures were deemed unsafe with Africa having twenty-five percent of the illegal abortions. However, the introduction of emergency contraception (EC) has served as the last chance for women to avoid unintended pregnancies, though in countries like Zimbabwe the cause for underutilisation of emergency contraception has been hardly investigated.

Purpose: The main purpose of this study was to assess the knowledge, attitudes and practices of female students regarding emergency contraception in preventing unintended pregnancy.

Methodology: A quantitative approach using descriptive cross sectional survey design was conducted among 319 stratified random sampled female university students of Midland State University, Zimbabwe. A self-administered closed-ended questionnaire was used to collect the data for the study. The instrument was test-retested for reliability and the responses were compared using Cronbach's alpha which yielded high reliability alpha (α) value of 0.84. Data was coded and entered into a computer using Microsoft Excel 2010 and analysed using Statistical Package for Social Scientists (SPSS) version 22.0. Descriptive statistics was used to analyse data in the form of cross tabulation and the results were presented in tables, graphs and pie charts.

Results: The results indicated that among all sources of information about EC which includes health workers, leaflets and college clinic, only mass media (41%) has shown to be the most famous. Although female students know about EC, the knowledge about effective level and correct use of EC is poor. The attitudes of female students at MSU are unfavourable for EC as they gave reasons like EC promotes promiscuity (71.1%) and it can pose health risks (59.9%). The practice of EC at MSU is low with only 47% of respondents indicating that they have once used EC.

Conclusion and recommendations: The study concluded that there is lack of actual knowledge about EC which has directly influence attitudes and practices, and this has resulted in negative attitudes towards EC with low EC practices. The study therefore

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recommends the adoption and use of Health Belief Model (HBM) approach in promoting the young females to use EC to prevent unwanted pregnancies.

Key words (attitude, emergency contraception, female students, knowledge, practice,)

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LIST OF ABBREVIATION AND ACRONYMS

DHS	Demography and Health Surveys
EC	Emergency Contraceptives
ECPs	Emergency Contraceptive Pills
ESOG	Ethiopian Society of Obstetrician and Gynaecologists
HBM	Health Belief Model
HIV/AIDS	Human Immune-deficiency Virus and Acquired Immune-Deficiency Syndrome
IUCD	Intra-Uterine Contraceptive Device
KAP	Knowledge Attitude and Practice
MSU	Midlands State University
OTC	Over the Counter
PRB	Population Reference Bureau
SHAPE	Sustainability, Hope, Action, Prevention and Educational
SPSS	Statistical Package for Social Sciences
UN	United Nations
UNICEF	United Nations Children's Fund
UN	United Nations
UPA	Ulipristal Acetate
WHO	World Health Organisation

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CHAPTER 1

1. INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Introduction

Emergency contraception (EC) refers to any device or drug that is used as an emergency procedure to prevent pregnancy after unprotected sexual intercourse (Brokehuizen, 2009). The history of modern emergency contraception dates back to the 1920s, when researchers initially demonstrated that estrogenic ovarian extracts interfere with pregnancy in mammals (Haspels & Andriesse, 1973). The EC is a therapy for women who have had unprotected sexual intercourse, including sexual assault and known or suspected contraceptive failure, and want to avoid pregnancy. This chapter provides information to justify why this study was conducted and to provide the background information regarding female knowledge, attitudes and practices of emergency contraception in efforts to avoid unintended pregnancy. The objectives and envisaged benefits of the study are also outlined in this chapter.

1.2 Background of the study

Unintended pregnancies constitute a most serious public health challenge to women to an extent that they sometimes end in illegal abortions which, in turn, result in adverse consequences. Agrawal and Pooja (2013) attested that every year there are about 250 million pregnancies globally and one third of these are unintended, twenty percent of these undergo induced abortion. Ninety-seven percent of these pregnancies took place in developing countries including Zimbabwe (Grimes, 2006).

Unsafe abortions and unintended pregnancies have much unfavourable health effects and socio-economic effects in young women particularly in higher education institutions. The introduction of emergency contraception drugs and devices has served as the last chance for women after having unprotected sexual intercourse resulting from unintended sexual activity, contraceptive failure, or sexual assault (Lemma, 2009).

Westley (2013) consistently asserted that these emergency contraceptive methods include several kinds of emergency contraceptive pills, as well as insertion of a copper-bearing intrauterine device (IUD). The most common emergency contraception methods include the emergency contraception pills (ECPs), which are used after 72 hours of unprotected sex and intrauterine devices (IUDs) which were found to be effective when inserted after five days of unprotected sexual intercourse (Ibrahim, 2013). The correct use of emergency contraceptive

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pills (ECPs) reduces unintended pregnancy with 75% to 85% effective (Agrawal, 2013). Emergency contraception, which includes the insertion of an intrauterine device, can reduce by 75% to 99% the risk of becoming pregnant from a single act of coitus (Adhikari, 2009). Although emergency contraception (EC) does not prevent sexually transmitted diseases (STDs), it gives assurance to 8.6 million females worldwide who rely on condoms for protection against pregnancy, in case of condom slippage or breakage.

The knowledge, attitudes and practices (KAP) survey conducted on sexual behaviour of young people by Zimbabwe National Aids Council in 2014 at Midlands State University (MSU) revealed that 83% of the students are sexually active while 38% of students had not used condoms at their last sexual encounter (Zimbabwe National Aids Council, 2015). This clearly highlights the possibility of unintended pregnancies among young female university students. Preceding research suggest that most of the youth in tertiary institutions have greater independence from home that gives them opportunity to have sexual relationships and opportunities to experience romantic relationships, hence the promotion of pre-marital sex (Nibabe & Mgutshini, 2014). The environment at university or college is especially conducive to sexual risk taking as students' behaviour is out of parental control.

In both developing and developed countries unintended pregnancy poses a great public health problem to college students in that their career progress and academic performance is put in jeopardy. In addition, unintended pregnancy results in adverse health outcomes and diseases associated with unprotected sexual intercourse (Trussel, Nelson & Gates, 2014). Related studies conducted in different universities, revealed that the number of students who have positive attitude towards sexual practice and the number of those who are experiencing penetrative sex is increasing rapidly.

The first-entering and young college female students are the most vulnerable group of people, they are prone to early and unplanned pregnancy as university life is still new to them. Parker (2005) contended that gender inequity and cultural norms often make it hard to address the issue of contraception for young women. Lack of power within relationships can make it difficult, if not impossible, for young women to negotiate emergency contraception use with their partners. Fasanu, Adenkanale, Adeniji and Akindele (2014) attested that EC is essentially women-driven and its use and success rest mainly on how women perceive and practice it. Therefore this study seeks to explore the knowledge, attitudes and practices of female students regarding emergency contraception at Midlands State University (MSU), Zimbabwe.

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1.3 Problem statement

Despite the fact that the emergency contraception (EC) has recently become available in many developing countries including the sub-Saharan nations, the Zimbabwean fertility rate is still high, rising from an estimated 3.29 children born per woman in the year 2012 to 3.56 children born per woman in 2014 (World Bank Reproductive Health Indicators, 2014). According the Population Reference Bureau (PRB) in 2008 university students in Zimbabwe also constituted the 20% of mistimed pregnancies across the country (PRB, 2008). Zimbabwe was estimated as having more than seventy thousand illegal abortions every year with the women having 200 times of greater risk of dying from abortion complications than their South African counterparts (UNICEF, 2013). During vacation in June, 2012, the researcher visited MSU campus, and noticed a large number of pregnant students. Upon informal discussions with them it was revealed that the majority of the pregnancies were unintended. It was also revealed that these unintended pregnancies have led many students to dropping out of university. Some have resorted to unsafe abortions whereas others commit suicide after failing to cope with unplanned pregnancy at university. It is also stated in the SHAPE (2004) report that most unsafe practices in life are associated with a lack of knowledge regarding the aspects of health intervention like emergency contraception. The concern is that students at MSU do not have access to other contraception method except EC which is not being offered for free. It is out of this observation that the researcher gained the curiosity to investigate more on the knowledge, attitudes and practices of female students regarding EC at MSU, Zimbabwe.

1.4 Rationale for the study

In Zimbabwe studies regarding the use of EC in preventing unintended pregnancy among female students in tertiary institutions are few, with a lot of studies focused on HIV and AIDS awareness. In Zimbabwe emergency contraception is available and legally provided by the Ministry of Health and Child Welfare as well as in private pharmacies. However, much is underreported, and the factors that lead to underutilisation of EC after unprotected sex are not well understood. The present study focused on the EC as it is the only last chance for women to avoid unplanned pregnancies after unprotected sex unlike other general contraception which are supposed to be taken or used before sexual intercourse.

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1.5 Significance of the study

The EC has a clear benefit since the prevention of unintended pregnancy results in the subsequent decrease in maternal mortality and morbidity, hence academic progress among young women (WHO, 2011). The findings of this study are envisaged to be useful to stakeholders who include the Midlands State University management, ministry of health, Zimbabwe in the development, and implementation of national and institutional guidelines regarding the use of EC in preventing unintended pregnancy. The health service providers are expected to benefit from the findings pertaining to the level of usage of EC and perhaps entailing the improvement of EC availability after getting the report of the present study. The university should then be able to contemplate which methods and strategies to use in providing EC to counter poor academic progress due to unintended pregnancy.

1.6 Purpose of the study

The purpose of the study was to determine the knowledge, attitudes and practices of female students regarding EC in preventing unintended pregnancy at MSU, Zimbabwe.

1.6.1 Objectives

Specifically the study sought:

- To assess the knowledge of female students regarding EC.
- To describe the attitudes of female students towards EC.
- To examine the practices of EC by female students.

1.7 Research Questions

Specifically the study was seeking to answer the following questions:

- What is the level of knowledge of female students regarding EC?
- What is the attitude of female students towards EC?
- What are the practices of female students regarding EC?

1.8 Definitions of terms

Emergency contraception

Refers to the birth control drug or device used immediately (3-5 days) after having unprotected sex without using contraception or wherein the regular contraceptive failed as

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well as in the case of sexual assault (Fasanu et al., 2014). Two types of EC include emergency contraceptive pills (ECPs) and intrauterine devices (IUDs). In this study EC is any intervention that can be administered to a female after unprotected sex to avoid unintended pregnancy.

Knowledge

Refers to the fact, information and skills acquired through experience or education (Nibabe, 2014). In the case of this study, knowledge on EC included the understanding of how and when to use EC, the types and side-effects of EC.

Attitudes

Refer to the human degree of like or dislike and perceptions towards something, they might be positive and negative (Westerly, 2012). In this study attitude implied feelings of female students, including their views and judgement towards EC.

Practices

Refer to the observable actions of an individual in response to a stimulus. This is something that deals with the concrete, with actions. It is also repeated exercise in or performance of something in habitual manner. In this study practice referred to the EC level of usage that includes frequency and choice of EC.

Female student

It refers to an individual who bears young or produces eggs enrolled/studying at the university/college (Webster, 2014). For the purpose of this study the female students will be referring to all girls who are registered students who stay within MSU campus.

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1.9 Layout of Chapters

This section provides the layout in which the study follows:

Chapter 1: This chapter provides information on to justify why this study was conducted and to provide the background information regarding female knowledge, attitudes and practices of emergency contraception in efforts to avoid unintended pregnancy. The objectives and envisaged benefits of the study are also outlined in this chapter. The operational definitions of study are also included.

Chapter 2: This chapter presents the review of literature specifically draws attention to various published information and sources of literature, with specific focus on the knowledge, attitudes and practices of females regarding emergency contraception in preventing unintended pregnancy. This literature review chapter is divided in Data based literature as well as the Theoretical framework.

Chapter 3: This chapter covers an overview of methodology used in the study wherein the discussion focused around the research design, population sampling, data collection, data analysis and ethical considerations.

Chapter 4: This section presents the results of the study and interpretation of the findings based on the analysed data. The findings are statistically and diagrammatically presented in the form of frequencies and percentages on the same chapter.

Chapter 5: This chapter discusses the findings of the study based on literature review. The similarity, contradictions as well as practical implications of the findings will be debated. The discussion are arranged as headings based on the objectives of the study namely knowledge, attitudes and practices of EC among female students.

Chapter 6: This chapter presents the conclusions and recommendations based on the findings, and accordingly, this section is arranged into conclusions and recommendations.

1.10 Summary

The chapter discussed the background information regarding female knowledge, attitudes and practices of emergency contraception in efforts to avoid unintended pregnancy. The objectives and envisaged benefits of the study are also outlined in this chapter. The operational definitions of study were also included. The next chapter is focusing on the literature review.

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CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The typical purpose for analysing or reviewing existing literature is to generate research questions to identify what is known and not known about a topic and to identify concepts of the theoretical traditions within the bodies of literature, and to describe methods of enquiry used in earlier work including their success and shortcomings (Nibabe & Mgutshini, 2014). However, given the broadness of the aspect of female contraception, this review of literature specifically draws attention to various published information and sources of literature, with specific focus on the knowledge, attitudes and practices of females regarding emergency contraception in preventing unintended pregnancy. The review of causes of unintended pregnancy among college students and types of emergency contraception was also covered in this literature. This literature review chapter is divided in Data based literature as well as the Theoretical framework.

2.2 DATA BASED LITERATURE

2. 3 Emergency Contraception (EC)

Emergency contraception (EC) is defined as any method women can use after unprotected sexual and failure of contraceptive intercourse to prevent the occurrence of a pregnancy (Fasanu et al., 2014). Emergency contraceptive methods include the use of intrauterine devices as well as EC oral medications, which consist of higher doses of hormones found in oral contraceptive pills. Emergency contraception (EC) has the potential to reduce women's risk of unintended pregnancy, and EC medications are the only contraceptive method that can easily be used post-coitally to prevent pregnancy. EC is a therapy for women who have had unprotected sexual intercourse, including sexual assault and known or suspected contraceptive failure, and want to avoid pregnancy. The two most common reasons for seeking EC are failure of a barrier method (usually condoms) and failure to use or access any contraceptive method.

The history of modern emergency contraception dates back to the 1920s when researchers initially demonstrated that estrogenic ovarian extracts interfere with pregnancy in mammals (Haspels & Andriesse 1973). Veterinarians were the first to apply this finding, administering estrogens to dogs and to horses that had mated when their owner had not wanted them to. Despite scattered reports of clinical use of post-coital estrogens in humans as early as the

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1940s, the first documented cases were not published until the mid-1960s, when physicians in the Netherlands administered oestrogens extracts to a 13-year-old girl who had been raped in mid cycle, and 1966 gynaecologist Morris and biologist Wagenen successfully used the EC at Yale Medicine School, USA (Charlotte, 1996).

The Emergency contraceptives available today include emergency contraception pills (ECPs) and the Copper T intrauterine device (Downing, Payze, Doyle-Adams & Gorton, 2011). The ECP prevents a pregnancy by delaying ovulation, stopping ovulation or altering the lining of the uterus to make it less likely for a fertilized egg to implant. However, if a woman takes the ECP and a fertilized egg has already implanted in the lining of the uterus, there will be no effect on the egg. Three types of ECPs available in the pharmacies include the combined ECPs which contains both estrogen and progestin (Yuzpe method), progestin-only ECPs and an ECP containing ulipristal acetate (UPA).

Copper T IUDs can be inserted up to the time of implantation of six to 12 days after ovulation to prevent pregnancy, because of the difficulty in determining the day of ovulation; however, many protocols allow insertion up to only five days after unprotected intercourse (Downing et al., 2011). The latest WHO guidelines allow IUDs to be inserted up to day 12 of the cycle with no restrictions and at any other time in the cycle if it is reasonably certain that she is not pregnant. The copper IUD can also be left in place to provide effective ongoing contraception for up to 12 years.

Though, emergency contraceptive pills (ECPs) and devices (IUDs) have become more available in many developing countries, several studies has become concerned that limited provider knowledge and negative attitudes, as well as poor user awareness and access, have hindered female and adolescents in learning about and using ECPs (Agrawal, 2013). This author emphasized that an aggressive promotional and educative approach need to be adopted to make more and more women of reproductive age group aware of ECP and IUDs to prevent unintended pregnancy (Agrawal & Pooja, 2013).

2.4 Global Uptake of EC

Many countries have explicitly approved EC as a contraceptive method by licensing existing drugs or approving new drugs for use as EC, by incorporating EC into government regulated family planning services and protocols for treating sexual assault survivors. Many countries that permit EC among others Argentina, Brazil, Colombia, El Salvador, Kenya, Pakistan, Thailand, Venezuela and Zimbabwe have highly restrictive abortion laws (Global Review of

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Laws and Policies, 2004). The acceptance of EC in these countries reveals an understanding that EC is contraception, not abortion. Likewise, at the national level, the Zimbabwean Ministry of Health and Child Warfare permits all health care workers at appropriate facilities with qualified staff to distribute EC. The United Nations World Contraceptive Pattern of 2013 estimated that sixty-three percent of women of reproductive age in 2011 who were using an emergency contraceptive method, though contraceptive prevalence levels varied widely across major areas and sub-regions.

Contraceptive prevalence was lowest in Africa (31%), and less than twenty-five percent in Middle Africa and Western Africa, and seventy or higher in Europe, Latin America and the Caribbean and Northern America. Modern methods predominate in 2011, with nine in ten contraceptive users worldwide relying on a modern method of contraception which includes emergency contraceptive pills and inter uterine devices. The United Nations World Contraceptive Patterns identified the prevalence of EC use with Africa at one with the lowest rates with comparisons of 4% in South Sudan and 88% in Norway. Rahman et al (2013) reported that out of 208 million global pregnancies in 2011, 86 million (41%) were deemed unintended, with 19% ending in induced abortions and 15% miscarriages due to poor pre-natal care, thus needy for EC. Agrawal and Pooja (2013) attested that globally unprotected and early sexual relations are highly responsible for maternal mortality and other adverse consequences which can only be minimized through the correct use of EC.

World Population Prospects (2013) estimated that among major areas, Northern America has the highest level of contraceptive prevalence in the world (75 per cent) followed by Latin America and the Caribbean (73%) and Europe (70%). Only two countries with data in Europe have levels of contraceptive prevalence below 50% (Bosnia, Herzegovina and Montenegro). The World Contraception Patterns (2013) further indicated that the EC pill is the third most widely used contraceptive method in the world, with 9% of women aged 15 to 49 who are married or in a union relying on it. Use of the contraceptive pill has the widest geographic distribution of any method. Regarding the share of the pill in overall contraceptive use, there are more countries where at least 30 per cent of contraceptive users rely on the pill than there are countries where a similar share is accounted for the IUD. That is, in many countries, the pill is more popular among contraceptive users than female sterilization or the IUD even if the global prevalence of the pill is lower than that of female sterilization or the IUD (World Contraceptive Use, 2012).

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2.5 The EC in Sub-Saharan African Region

In developing countries of Africa it was estimated that the emergency contraception prevalence was at 50% in 2013, except in the Sub-Saharan region which was approximately at 25% (United Nations World Contraceptive Patterns, 2013). Identifying the unmet need for emergency contraception in Africa, out of 39 countries, 26 have 21% to 38% unmet need for contraception. Emergency contraception is a relatively new product on the Sub-Saharan African market and has only recently been made available to women directly from a pharmacist without a prescription. Maharaj and Rogan (2007) supported the view that there is currently a paucity of information about the impact of the legal rescheduling of emergency contraception pills on the availability and take up of emergency contraception. Demographic and Health Surveys from 2000 show that fewer than two percent of youth ages 15 to 24 have ever used emergency contraception in Armenia, Cambodia, Haiti, Malawi, Turkmenistan, and Uganda (DHS, 2000).

It is estimated that national anti-discrimination provisions are insufficient to protect young women from discrimination on the basis of age, marital status on the exercise of their right to access EC (Global Review of Laws and Policies, 2004). South Africa has been viewed as one of the progressive Southern African countries with recognition of contraception policy and the promotion of emergency contraception (EC); in particular, it has offered a useful platform for a critical analysis of the policy context surrounding reproductive health in South Africa since 1994. The dedicated contraception policy was designed within a unique economic, social and political context. With respect to the introduction of EC, the contraception policy formulation has also coincided with an increased global understanding of the importance of EC to the reproductive rights and the health of women (United Nations World Contraceptive Patterns, 2013).

2.6 The EC Situation in Zimbabwe

The rate of unintended pregnancy is higher in the developing nations than in any other industrialized nation (United Nations, 2008). Reasons for unintended pregnancy include failure to use contraceptives, failure to use contraceptives correctly, unplanned consensual intercourse and rape (Devine, 2012). Low uptake of emergency contraception is occurring in the context of a very high rate of unplanned pregnancies, sexual violence against women, unequal gender relations, maternal mortality and endemic poverty (Maharaj & Rogan, 2011).

The World Contraceptive Wall Chart (2013) estimated the use of EC in Zimbabwe at 41.3% (ECPs) and 0.2% (IUDs) during the period 2010-11. Little research into the low uptake of

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emergency contraception products has focused, at the micro-level, on the attitudes towards and knowledge of alternative contraception products by providers of reproductive health services and by public health sector clients. Still missing, however, is a contextual analysis of the macro-level determinants of emergency contraception use, in particular, and of the effectiveness, more generally, of reproductive health policy in Zimbabwe. Hickey (2009) attested that unintended pregnancy which ends with abortion is high in women of 18-30 years; in Zimbabwe this age group constitutes the college women wherein many abortions are conducted in unsafe procedures with sub- sequential, risk of morbidity and mortality.

Women with unintended pregnancy are at risk of poor prenatal care, post-natal care and adverse maternal behaviors. Young college students who fall pregnant unplanned, are most likely not to see the doctor in time. Researches revealed that deciding whether to carry the pregnancy to full term or to have an abortion presents a painful dilemma among young females particularly at school (Parker, 2005). University women with unintended pregnancy bear the physical, emotional and usually the financial burdens and heartache of an unwanted pregnancy.

University young women are most probably not mentally or physically prepared to bear a child and must weigh serious risks to their own health and career (Fasanu et al., 2013). As a result, induced abortion is chosen as the most appropriate option. Due to lack of parental guidance and counseling, the mistimed pregnant young female at college has no one to turn to for moral support and sympathy before, during or after an abortion even when medically safe services are available (Agrawal & Pooja, 2013). However it is increasingly recognized that poorly performed abortions are a leading cause of maternal death throughout the developing world including Zimbabwe. Women thus often endure an intentional abortion (induced) without prior, full information on the procedure, including possible risks or side-effects.

Mosher, Jone, Abma and Joyce (2012) revealed that for births that are unintended, the mother and the born child are at elevated risk of adverse social, economic, and health problems. Unintended births are associated with delayed prenatal care and behavioral change among young mothers such as, smoking during pregnancy, not breastfeeding the baby and poorer outcomes for the mother and the mother-child relationship. Longer-term negative consequences for children have been found by some longitudinal studies of unintended pregnancies that track the children into adulthood (Khan, Dixit, Bhatnagar & Brady, 2014). Related studies have shown that a female who indulges in an induced

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pregnant termination is most probable to suffer preterm delivery and miscarriages in the later life stage. Finer and Zolna (2011) attested that miscarriages are one of the most painful consequences of mistimed/unintended pregnancy. Nibabe and Mgutshini (2014) found that there is no gold standard of counting miscarriages since statistics is limited to fetal deaths at 20 weeks of gestation and later and the question goes back to those which happen earlier in pregnancy. The statistics in the developing countries shows the pregnancy outcome in 2010 were in 19% abortion, 15% miscarriages, 16% unplanned births and 50 % planned births (Tilahun, 2010). This clearly shows that a nation will be burdened with more children than desired, post maternal illnesses and fewer educational developments and career opportunities for women.

In Zimbabwe emergency contraception is available and legally provided by the Ministry of Health and Child Welfare as well as in private pharmacies. In 2013 the country pharmacies ran short of morning after pills during Christmas as many youths were believed to have engaged in reckless sexual activity (UNICEF, 2014). Apart from the shortage of EC, the attitudes of service providers have also been described as one of the factors contributing to high unplanned pregnancies. Particularly in Zimbabwe, many female youth have reported to have been questioned and humiliated by EC service providers especially in public hospitals, wherein their sexual life is condemned (SHAPE, 2004). In the context of Zimbabwe, abortion is illegal as indicated in the Zimbabwean Constitution Chapter 4 section 3, wherein "Parliament must protect the lives of unborn children, and that Act must provide that pregnancy may be terminated only in accordance with that law" (Zimbabwean Constitution, 2013).

Zimbabwe gained independence from Britain in 1980 and during the early years of independence like in the colonial period, students who fell pregnant during the course of their training programs were withdrawn from the course (Madzowere & Musarurwa, 2010). They had to re-join after giving birth and weaning their babies; however, from 1998 to date, pregnant students are allowed to continue with their studies. This gender-sensitive issue was not accompanied by the necessary support and guidance to help this special group of students pull through their studies with relative ease. It was only possible for the students if the use of EC was effective. Studies revealed that young college girls, becoming pregnant is a torment that is hardly ever planned and is often the result of social, economic and financial circumstances that rob them of their autonomy.

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However, preventing unwanted pregnancy among them is the important concern. The introduction of emergency contraception drugs and devices in the recent past can help them avoid such unintended pregnancies, though with low awareness and negative attitudes mistimed pregnancy had been recorded to be a public health problem (Agrawal & Pooja, 2013). There is a critical need for information on the airwaves and in print, and for education at health centres and local health posts on modern methods of contraception, including EC. The attention should be shifted on EC at health centres and health posts would be especially important, as it would educate young women on the costs and health consequences of unwanted pregnancies and induced abortion. Zimbabwe Statistics (2013) indicated that young university women (18-24years) constituted the 960 women who passed away from pregnancy related complications. This clearly highlights that college females are the most vulnerable group of people to the consequences of mistimed pregnancy.

2.7 Female students' knowledge regarding emergency contraception (EC)

Knowledge is a set of skills, fact information and understandings acquired through experience or education and it is also one's capacity for imagining and perceiving. Knowledge of a health behaviour considered to be beneficial, however, does not automatically mean that this behaviour will be followed. Westley and Glassier (2010) demonstrated that a market for EC has been demonstrated and numerous manufacturers and distributors are keen to supply products; in many countries they are starting to be mainstreamed into norms, pre-service training and services. During the 1999 International Population and Development Conference in Egypt it was emphasised that the United Nations system and donors should support governments in mobilizing and providing sufficient resources to meet the growing demand for access to information, counselling, services and follow up on the widest possible range of safe, effective, affordable and acceptable contraceptive methods, including EC (Global Review of Laws and Policies, 2004).

However, knowledge continues to be an important barrier in much of the world especially developing sub-Saharan nations (Khan, Saniif & Maully, 2014). A study in India indicated that education was found to be the most significant predictor of knowledge of EC, the women with a 10th-grade education or less were 6.7 times more aware of EC than the illiterate women whereas women with university education, were 25 times more aware of EC (Rahman et al, 2013).

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A recent review of emergency contraception literature from developed and developing countries indicates that awareness is generally low but slowly increasing. However, even where the concept of emergency contraception is known, knowledge of accurate use of the method is very low; this was revealed in surveys administered among university and post-secondary students in several African countries found that while a quarter to three-quarters of youth had heard of emergency contraception, accurate knowledge about its use was minimal (Conard, 2004). A study which was done in Nigeria, found that 75 percent of students surveyed were aware of emergency contraception, but only 12 percent knew that the first dose of ECPs should be taken within 72 hours of unprotected intercourse. In a related Ghana study it was found that only 11 percent of the students surveyed (22 of 196 surveyed) knew the correct timeframe for starting ECPs. This points the fact that many women are inadequately informed about EC, despite almost a decade of availability, while in countries like Zimbabwe there is limited research on women's knowledge of EC, particularly since its OTC (Over-The-Counter) status, the research findings have been reported indicating that women are not receiving adequate information about EC as an elective method of pregnancy prevention. The EC method is still relatively unknown in many countries, revealed from Demographic and Health Surveys and other country level surveys (Nibabe & Mgutshini, 2014).

A 2007 survey of adolescents in New York City schools by the Department of Health and Mental Hygiene revealed that fewer than half of these young people had heard about emergency contraceptive pills, despite extensive public outreach and media publicity surrounding the EC over-the-counter status in the United States of America (Agrawal, 2014). A study in India revealed that the importance of publicity increases EC awareness as most of respondents had heard about EC from electronic media, friends, and health care personnel (Mohammed, 2014). Information concerning EC, especially its dosage, timing of use, and possible adverse effects, are relatively simple to spread. Given the findings of the recent studies, educational programs would be helpful in creating awareness about EC. The findings of the study by Nibabe and Mgutshini, (2014) also indicated that there is an unmet need for intensive advertising via electronic and print media about EC related information, especially about its indications, dosage, timing of use, and possible adverse effects.

Studies attest that the already substantial misinformation that young women have about pregnancy risk and emergency contraception is being compounded by recent media coverage which speculates that side-effects, like nausea, heavy bleeding and cramps, regular use of emergency contraception may cause infertility and in some instances increase

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the risk of cancer. Mawathe (2009) on BBC news reported that EC emergency contraceptives come with an increased risk for things like blood clots and hormone-related cancers, like many traditional forms of birth control. These statements are factually incorrect but unfortunately are widespread and consequently, such negative and sometimes inflammatory media coverage only alarms women and may keep some away from using contraception. For women that are aware of ECs, numerous challenges remain, including concerns about privacy, cost, and in some settings, the ability to find a pharmacy with EC pills in stock (Downing, 2011). However, even where contraceptives are widely available, sexually active youths are less likely to use contraceptives than adults. The lack of specific knowledge and adequate information has consequently resulted in issues like regular contraception discontinuation, which opens a big gap for EC to fill.

The early sexual maturity which has made many females to face problems has been exacerbated by the inadequacy of knowledge about reproductive biology, early sexual relationships, limited knowledge of and access to contraceptive methods and therefore a low contraceptive use rate. A high student pregnancy rate in Zimbabwean universities implies a major problem with the sexual and reproductive health of the country's youth, and this includes the spread of sexually transmitted diseases (Mawathe, 2009). Unlike adult women, young female college students' use of contraceptives was found to vary across marital status with married women using the services most compared to cohabiting single women. In a related study, married women were found to be using contraceptives the most due to high incidences of sexual activities compared to single women (Khan et al., 2014).

Young women particularly at college are at the greatest risk of unintended pregnancy as they are unlikely to see a family planning provider before or immediately after the sexual activity. However, some students who acknowledge their sexual activities and obtain contraception might not be well motivated, and might overestimate the risks associated with oral contraception and therefore use less effective forms of contraception or discontinue its use altogether. Therefore mistimed pregnancies continue to haunt young females due to lack of knowledge and awareness for proper use of EC.

A Demographic and Health Survey (DHS) from 15 developing African countries has indicated that discontinuation of contraceptive use is one of the common cause of unintended pregnancy (MEASURE DHS, 2011). Mohammed (2014) found that women, who had ever used contraceptives, discontinued taking contraceptives and forwarded many different reasons for discontinuing or never using modern contraceptives (including EC). The

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reasons included the need to have more children, due to use of traditional methods, were due to religious prohibition, partner disapproval, fear or/and perceived side-effects of contraceptives, like being infertile and developing medical illness such as hypertension were the commonest side- effects (Khan et al., 2014). These perceptions show that unintended pregnancies are mostly as a result of poor awareness about modern contraception including EC and delayed marriages combined with early sexual intercourse also contribute to unplanned pregnancies.

2.8 Female students' attitudes towards emergency contraception (EC)

Attitude is a way of being; a position and has to do with leanings or tendencies to. This is an intermediate variable between the situation and the response to the situation. It helps to explain that among the possible practices for a subject submitted to a stimulus, that subject adopts one practice and not another. Attitudes are not directly observable as are practices, thus it is a good idea to assess them. Attitude also refers to the human degree of like or dislike. There is an African proverb that says, "It takes the whole village to raise a child." Likewise, the issue of early and unintended pregnancy is not one individual's responsibility; everyone has a role to play and change negative attitudes towards EC thus preventing unwanted pregnancy among university students.

Related studies in Tanzania, Ethiopia and South Africa indicated that although in many universities women seem to have the knowledge of EC, strong campaign for the change of attitudes to increase EC usage is still needed (Westley, 2012). In addition, Ibrahim (2013), revealed the relationship between the consumer and the service provider wherein most of participants with good knowledge had favorable attitude, age and years of experience were significant factors affecting knowledge, attitude and practice of health care providers. The service providers are the ones to promote low level of unplanned pregnancy through creating favorable grounds for EC services. In a study conducted among European nations, it was revealed that young women agreed that EC should not be a taboo subject or that that they should feel guilty about using since in some parts of the countries some label EC 'embarrassing and shameful' when asking for it (Nappi, Absacal, Mansour, Rabe & Shojai, 2013).

Older providers with more years of experience were found to have better knowledge, more favorable attitude and higher tendency to practice EC. However, women reported feelings of embarrassment or being judged by either a health care provider or pharmacist and as a

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result attitude was viewed as a potential barrier to using EC. Nappi et al. (2013) have consistently revealed that one significant attitude expressed by providers and women in some studies was that the use of EC was related to sexual promiscuity despite available data indicating its prevalence as a one-time method. Vahratian, Patel, Woff, and Xu (2008) specifically questioned college students about their perceptions and attitudes toward EC and found that 93% approved of EC in cases of rape and 86% approved of EC in the case of contraceptive failure. However, only 68% approved of EC in cases of unprotected intercourse. These findings are consistent with previous studies reported in which respondents associated use of EC with sexual promiscuity. Conducted research in different universities in Ethiopia concurred that the number of students who have a positive attitude towards sexual practice and the number of those who are experiencing penetrative sex and induced abortion are increasing (Tilahun, 2010). Despite this, their awareness with regard to preventing unintended pregnancy after unprotected sex is relatively limited. It is this consensus that sets the backdrop for the acknowledgement that making emergency contraceptive pills (ECPs) accessible to college students is a crucial first step in helping to curb the growing rates of unintended pregnancy and unsafe abortion (Vahratian et al, 2008). Imbedded within this is the need for a clearer understanding of the attitude that promotes or limits students' use of emergency contraceptives.

The use of emergency contraceptives is generally viewed negatively by the world because of a belief that the availability of information regarding contraception might encourage sexual activities among young people. Tilahun (2010) elaborated those women's feelings about their partners and about involving men in contraceptive and reproductive decisions must always be taken into account. Studies have indicated that, attitudes towards preventing pregnancy, knowledge and different method as well as the understanding of the side-effects of different methods are among the factors related to contraceptive use. Some respondents also felt that the process of acquiring contraceptives is often embarrassing thus resulting in negative attitudes towards EC. Trussel et al., (2014) also mentioned various reasons for non-use of contraceptive methods, the main reasons were pressure from family that is from husband, in-laws, son preferences and physical pressure. Moreover, studies on perception of spousal approval and opposition from husbands are positively associated with low contraceptive use (Fasanu et al., 2014).

Behavioural factors that frequently put young females at greater risk of pregnancy include experimentation and risk taking, as well as limited ability to plan ahead. The nature of relationships and frequency of intercourse are often different during college (18-24 years)

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than later in life. Jejeebhoy and Bott (2003) revealed that college life is characterised by shorter relationships, sometimes with long intervals in between, are common, and sex may be frequent and sporadic. This may lead to reluctance to adopt a regular contraceptive method or make it harder to plan to use one. The SHAPE Survey (2004) revealed that young people in all regions are sexually active, in most countries it is not the age at marriage, but the age at first intercourse outside marriage is viewed as an important factor determining the occurrence of unintended pregnancies.

Most young women are reported to have lost their virginity at university as first entering students or undergraduates. Relationships between young universities students are too characterised by gender imbalances and this increases the risks faced by young females. Parker (2005) contended that gender inequity and cultural norms often make it hard to address the issue of contraception for young women, despite the availability of contraception, lack of power within relationships can make it difficult, if not impossible, for young women to negotiate condom use with their partners.

Many young women also experience coerced sex. A review of 14 studies conducted in developing countries found that 15 percent to 30 percent of sexually active girls reported that their first sexual experience was coerced. Young males are widely perceived to need premarital sexual experience and with a variety of partners, females are not so perceived. The need to conform to these double standards may cause young females to fear disclosing their sexual activity, and may result in reluctance among them to report sexual experience (Parker, 2005).

This fear may also inhibit sexually active female adolescents from seeking contraceptive services. The fear of losing her partner or incurring his anger appear to be important factors inhibiting young females from exercising choice in the timing of sexual activity or negotiating the use of condoms or other contraceptives (Fasanu et al., 2014). Solomon (2006) attested that sexual maturation and sexual activity initiation are occurring at a younger stage and this has implications for young university females' reproductive health.

2.9 Emergency Contraception (EC) practices among females

Practices or behaviours are the observable actions of an individual in response to a stimulus. This is something that deals with the concrete, with actions. For practices related to health, one collects information on the use of EC. According to Mohammed (2014) the factors that influence contraceptive practice are versatile and difficult to determine although many

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studies make it evident that most women's use of contraception is associated with socio-demographic, socio-cultural, socio-economic, source of information and family planning factors. In related studies by Lemma (2009) the Ethiopian Society of Gynaecologists (ESOG) in its 7th annual conference deliberated on illegal and unsafe abortion in Ethiopia, and strongly recommended that EC promotion and practice in the country would reduce the incidence of unwanted pregnancies.

Srivastava, Srivastava D, Srivastava K, Sharma and Sana (2005) revealed that the gap between awareness and practices are seen to be prevalent across different reasons, where people are aware but reluctant to practice. The most common reasons for non-practice of contraception include fear of side-effects. Other reasons for non-practice were non-access to health facility, preference of male child, religious beliefs, cost, and family pressure. A study on causes of unplanned pregnancies by Furedi (2004) revealed that a lack of commitment to avoid pregnancies among couples was another cause of low usage of EC. In a situation where there is a lack of commitment to avoid pregnancies, one partner can manipulate risks for accidental pregnancies to occur. Women are likely to experience unplanned pregnancies, as they tend to develop irrational beliefs that they might be infertile and stop using contraceptives (Furedi, 2004).

Rahman (2013) concurred that religion was found to be a significant factor for EC practice with low levels of usage observed among Muslim women. This finding may reinforce the misconception that Islam opposes family planning, or it may be skewed by confounding variables such as lower socio-economic status, poor literacy, and early age at marriage among their society. Men might deliberately create situations where unprotected sex is likely such as by deliberately forgetting to buy condoms and insisting that if they have sex he will withdraw before ejaculation and then he gets carried away (Furedi, 2004). Therefore with all these intentional practices which include having sex during safe period of the cycle have resulted in low usage or poor practice of emergency contraception.

Research by Nibabe and Mgutshini (2014) revealed that nearly half of all unplanned pregnancies occur among women who reported using some form of contraception. Inconsistent or incorrect use of contraception is the major cause of such contraception failures. User knowledge, motivation and ability, co-operation of the partner, the cost, comfort, and ease of use of a particular contraceptive method, and individual concerns about side-effects or safety are all important determinants.

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Fasanu et al. (2014) suggested that tertiary students form an important high-risk group (17-24 years) as in any society they begin exploration of their sexuality, very often free of any parental guidance, under great influence from peers and often indulge in alcohol or other influential illegal substances. Finer (2011) concurred that religious affiliation played a role in the behaviour of young women, wherein the study findings has shown that women with no religious affiliation were been reported to have highest rate of unintended pregnancy. This clearly outlines that religiously motivated students tend to be principled than their counterparts.

2.10 CONCEPTUAL FRAME WORK OF THE STUDY

2.10.1 The Knowledge, Attitude and Practice (KAP model)

The KAP model in this study influenced the study objectives, literature review and the development of a data gathering tool. Therefore, this KAP model forms the framework of the study The KAP model had been employed in the hygiene education (Health Education and Promotion) field from 1960s to teaching patients how to correct their health behavior in practice, the cognitive learning was focusing on the knowledge and the ability of realization and the affective learning means to change subjects' intention, attitude or norms to adjust themselves through hygiene education, the psychomotor learning was focus on cultivating learners' health behaviour (Khan, Sarrif, & Maully, 2014).

Educational field focus on cultivating students' cognitive, affective, and psychomotor (Lai, 2006), against KAP model in hygiene education field, K (knowledge) to cognitive, A (attitude) to affective, and P (practice) to psychomotor in educational field, the difference is psychomotor requires students to have learned some skills, compared with P (practice) require the changing of behaviour as a target. In this study the KAP model will be used as a research model to explore students' usage of emergency contraceptives in preventing unintended pregnancy. Related studies find that knowledge will directly affect the attitude and practice, and that attitude will directly affect practice or intentions, except that the degree of impacts that knowledge affects practice through attitude is better than that of knowledge affects practice directly (Khan et al., 2014).

2.10.2 Summary

The chapter outlined literature specifically draws attention to various published information and sources of literature, with specific focus on the knowledge, attitudes and practices of females regarding emergency contraception in preventing unintended pregnancy. It

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analysed and narrowed EC from a global perspective to the regional. The following chapter is presenting the study methodology.

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CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter covers an overview of methodology used in the study wherein the discussion focused around the research design, population sampling, data collection, data analysis and ethical considerations. Burns and Grove (2009) describe methodology as including the design, setting, sample, methodological limitations, and the data collection and analysis techniques in a study. Henning (2004) contended that methodology is a coherent group of methods that complement one another and that have the ability to deliver data and findings that will reflect the research question and suit the researcher purpose.

3.2 Study Design

This study adopted a quantitative approach using a cross-sectional survey design. The cross-sectional survey design was chosen because the researcher collected data at one point in time. For the purpose of this study the cross-sectional survey design describes the level of knowledge, attitudes and practices of female student regarding emergency contraception as it is at the time of investigation. Integral to quantitative-cross sectional is the expectation that a researcher set aside his or her experiences, perceptions, and biases to ensure objectivity in the conduct of the study and the conclusions that are drawn.

3.3 Study Setting

The study was conducted at Midlands State University main campus, which is located in Senga area, 15 km south east of Gweru Central in Midlands Province. Its location is on the highway road between two Zimbabwean major cities that is Harare and Bulawayo. The university enrolled 17 298 with 12 700 females in 2015 including undergraduates, postgraduates, full timers and block release with 7 faculties (Law, Social Sciences, Arts, Commerce, Natural Resource Management, Education) with many departments within. The MSU originated as Gweru Teachers College and then later in 1998 it was given a University status. According to Zimbabwean University ranking MSU is rated as one of the most populous universities. It has enrolled most international students from Namibia, Cuba, Botswana, Kenya and Ghana. Therefore MSU can be defined as multi-cultural community. The campus has eight residential halls of which five of them accommodate female students. The university has an accredited general practice clinic provides primary health care, counselling, and specialist services from physician. The clinic is manned by one Session

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Physician, five midwives and a secretary. All registered students are legible to the services provided they had applied for a membership. Counselling sessions includes subjects like family planning, sexual health, nutrition, stress management and marital/relationship problems.

3.4 THE STUDY POPULATION

3.4.1 Target population

Study population is defined as the entire aggregate of cases in which a researcher is interested and it is therefore useful to make a distinction between the accessible and target population. The target population of this study was 1 048 female students residing at MSU main campus where in the sample be drawn systematically from five residential halls. All the residential halls have 1 048 bed spaces. The table below showcase the population frame.

Table 1: Population Frame

Halls Of Residence	No. Of Students	Percentage %
Ruzivo	127	12.1%
Rutendo	171	16.3%
Wadzanai	196	18.7%
Runyararo	194	18.5%
China City	360	34.4%
Total	1 048	100%

3.5 Sampling Method

A sample size is the number of entities in a subset of a population of a study and is an important feature of a study in which the goal is to make inferences about a population. Studies have indicated that the bigger the sample, the more the significant of the results. The following Slovin's formula was used to determine the sample size.

n = sample size of the adjusted population.

N= population size

e = accepted level of error set at 0.05.

$$n = \frac{N}{1 + N \times e^2}$$

$$n = \frac{1048}{1 + (1\,048 \times (0.05)^2}$$

$$= 1\,048/ (1+ 2.62)$$

$$= 289.5 + 29 \quad \frac{1\,048/3.62}{\text{sample size (n= 319)}}$$

The researcher added 10% (29) of the calculated sample size to cater the room for non-response. The stratified random sampling technique was employed, by dividing groups (strata) according to their residences. The systematic random sampling was used to select rooms from which participants was chosen. Systematic sampling was used to select students' room numbers. The total number of the rooms was divided by the sample size to find K value which is the interval value; K value = 1 048/319 = 3.

Therefore, every 3rd. room was selected for the study. The room numbers on each residence was written on a sheet of paper and put in a bowl, shaken together and the first room to start with was be selected randomly. The simple random sampling was employed as explained above within each residence where there was more than one bed. The table underneath shows the sample frame and sample size of the study.

Table 2: The Sample Frame and Sample Size

Halls Of Residence	No. Of Students (N_i)	No of respondents (n_i)	Percentage Sample
Ruzivo	127	39	12.2%
Rutendo	171	52	16.3%
Wadzanai	196	60	18.8%
Runyararo	194	59	18.5%
China City	360	109	34.2%
Total	**1 048**	**319**	**100%**

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3.6 Data collection tool

Data collection is a systematic way of gathering information relevant to the research purpose or question (Burns & Grove, 2009). For the purpose of this study, a self-administered questionnaire was provided in English without translation because the participants were believed to have a good understanding of English language. The questionnaires were formulated based on the study conceptual framework (KAP model, Chapter 2). The questionnaire comprised of four sections, demography and components of KAP model knowledge, attitudes and practices regarding the use of EC (Appendix: 1). The knowledge of EC was measured by analysing the percentage of participants' response to each and every question on knowledge section. The questions on attitudes were designed in Likert scale (strong agree, agree undecided, disagree and strongly disagree). The EC practices were measured through participant's percentage in response to the question. This instrument was developed and used after a thorough review of pre-existing instruments which were used to identify knowledge, attitudes and practices of people towards any medical intervention of any sort.

3.7 Validity and reliability of the data collection tool.

3.7.1 Validity

Validity refers to the degree at which an instrument is measuring what it is supposed to measure and it can be external and internal. In assessing the content validity, experts were consulted to verify the readability, clarity and comprehensiveness of the content as to whether it covers all dimensions of the construct literature. For validity, the supervisor went through the instrument and correct and accept it thus checking the validity of the instrument.

3.8.2 Reliability

Reliability is the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable.

To ensure the reliability of the questionnaire the test retest method was employed through administering it at two different times to a neutral population but with same characteristics. The test-retest study the researcher has chosen 10% (32) of the sample female students from Midlands State University at random. The reliability of the instrument was carried out by checking the similarity of responses from the 32 students who availed themselves for the

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second time. Cronbach's alpha which measures the degree of internal consistency ($0 \leq \alpha \leq 1.0$) of the instrument was used to ascertain the reliability of the instrument. The results yielded an alpha (α) value 0.84 it was therefore concluded that the instrument has high consistency, thus reliable.

3.8 Data collection process

Data collection is an important aspect of research; inaccurate data collection will ultimately lead to invalid results. In quantitative approach there are several methods of data collection which include clinical trial, observation and administering of surveys. For the purpose of this study, the investigator with the help of two female research assistants administered a paper-pencil closed-ended questionnaire to the participants in their selected rooms after school hours (1800 hrs). To ensure high response, the respondents were given enough time to complete the questionnaire the researcher and his assistants collected them back on the following day at the same time.

3.9 Data analysis

Data analysis was analysed using the Statistical Package for Social Sciences (SPSS) version 22.0. Descriptive statistics was used to summarize data. Cross tabulation was also employed to verify the relationship between the social biographic factors and the participant's knowledge, attitudes and practices response. The data were presented in form of frequency tables, pie charts and bar graphs to summarise the findings. On the section of EC attitudes, the chi-square analysis was carried out to determine the association between the females' attitudes towards EC and socio-demographic factors with the significance level set at 0.05.

3.10 Ethical considerations

Research ethics involves protecting the rights of respondents and institutions in which research is done, and maintaining scientific integrity (Burns & Grove 2005). A researcher is responsible for conducting research in an ethical manner and failure to do so undermine the scientific process and might have negative consequences. The researcher must address a range of ethical issues especially when a study involves human beings as these issues includes, permission of data collection, informed consent, right to refuse and informed consent. The research proposal was presented to the Higher Degrees Committee (SHDC) of the School of Health Sciences and to the University Higher Degrees Committee (UHDC) at

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the University of Venda for recommendation and approval by the University Research Ethics Committee. The ethical clearance (Project No. SHS/15/PH/12/0206) was then be presented to the Midlands State University's Director of Student Affairs in request for permission to access the students.

3.10.1 Informed consent and voluntary participation

Consent forms were given to each participant to sign. The researcher ensured that all the essential information such as purpose of the study and significance of the study, as well as voluntary participation was provided on consent form to enable the participants to make an informed decision before signing the form. Participants were told that they have the full right to refuse from participating in the research (they can choose not to respond to some or all questions) and participants that do not wish to further participate in the study can withdraw at any time.

3.10.2 Confidentiality and anonymity

The participants were told that the information collected for this research project will be kept confidential as completed questionnaires are kept under lock and the information provided by the participants is not to be made available or divulged to any other person. The researcher explained that information the participants put in the questionnaire is impossible to identify both by the facilitator and the investigator because it has no name or other identification on it.

3.11 Limitations of the study

The limitations of this study included the assumed negative attitudes from female students not feeling comfortable to expose their knowledge and practices of EC since it is related to their sex life. The researcher worked with female research assistants in order for participants to feel comfortable to respond to the questionnaire. Generalization of results to the rest of Zimbabwean tertiary institutions may not be possible due to a small sample size. Despite the limitations the results are vital in establishing basis for comparison of the students' level of knowledge, attitudes and practices regarding EC use among female university students across Zimbabwe.

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3.12 Dissemination of study findings

The report of the study in form of a dissertation was submitted to the Library of the University of Venda, the student management at Midlands State University and to the Ministry of Health, Gweru Zimbabwe. It is also envisaged that the findings will be published in a relevant journal so that it will be accessible to many audiences.

3.13 Summary

This chapter covered an overview of methodology used in the study wherein the discussion focused around the research design, study setting, population sampling, data collection, data analysis and ethical considerations. The next chapter is focused on the study findings.

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CHAPTER 4

RESULTS PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the results of the study and interpretation of the findings based on the analysed data. The findings are statistically presented in the form of frequencies and percentages. Chi-square test and cross tabulation was used in presenting the association between socio-demographic information and respondent's knowledge, attitude and practices. The response rate was 100% with all 319 participants successfully agreeing to take part in the study.

4.2: Socio-demography of respondents

This section outlines the distribution of the respondents by level of study, marital status, religion, age and places of residences. The study reveals (**Table 3**) that the majority (30.4%, n=97) of the respondents were second-year university students with the majority age being 23-24 years of age (26.3%) while only 2.8% were 19 years. The table 2 shows that the second years represented the large number with the postgraduate having the smallest representation of 16%. The study shows that out of the 319 participants 93.1% were single with minority of 6.9% constituting the married respondents. The majority of the respondents were Christians (56.6%) while 21.94% African tradition and 14.42% Catholic respectively. The Muslim was represented with a small percentage of 4.1%.

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Table 3: Demographic information of the respondents (N=319)

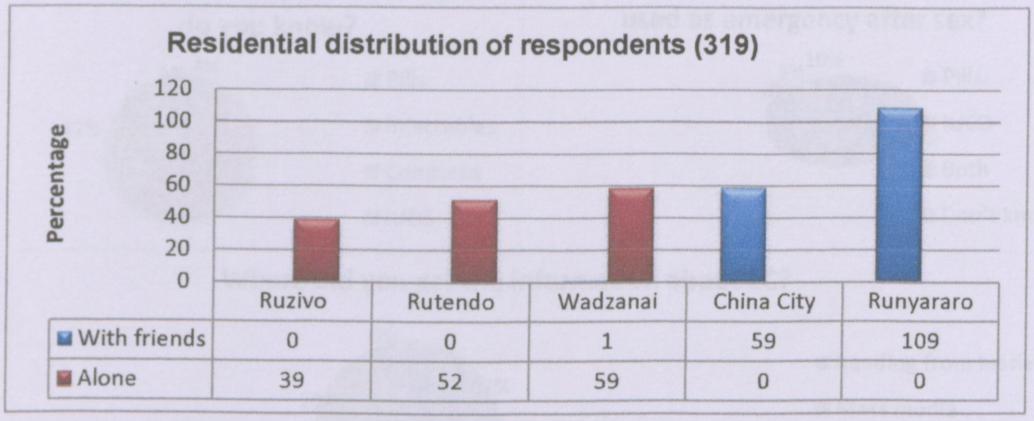
Characteristics	N (frequency)	% (percentage)
Age:		
19-20 years	72	22.6
21-22 years	70	22
23-24 years	138	43.3
26-27 years	39	12.2
Level of Study:		
1st Year	59	18.5
2nd Year	97	30.4
3rd Year	60	18.8
4th Year	52	16.3
Post-graduate	51	16
Marital Status:		
Single	297	93.1
Married	22	6.9
Religion:		
Christian	190	59.6
Muslim	13	4.1
Catholic	46	14.4
African tradition	70	22

4.2.1 Residential distribution of respondents

Figure 1 indicates the distribution of the respondents by residence with the majority of 52.9% (n=169) staying with a friend and 47% (n=150) staying alone in the residence. The study findings revealed that China City and Runyararo Halls have students who stay with a friend while Ruzivo and Rutendo have respondents who stay with a friend.

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Figure 1: Residential distribution of respondents (319)



4.3: Knowledge regarding Emergency Contraception

This section presents the findings regarding the respondents' knowledge of EC which is divided into the actual knowledge of EC, time limit, effective level and knowledge of where to obtain EC.

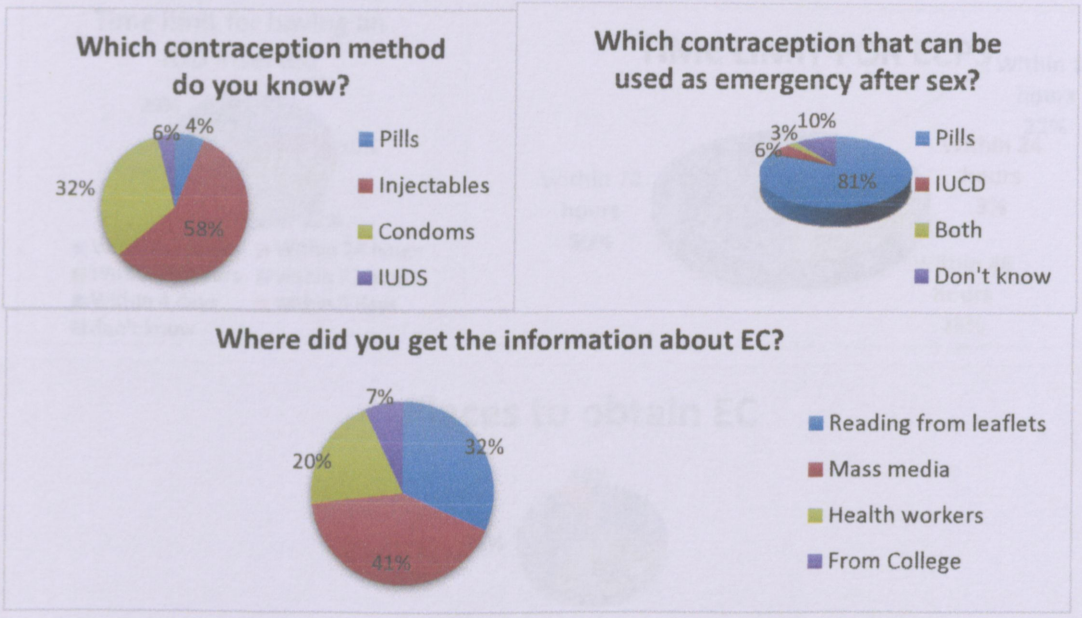
4.3.1 Respondents' knowledge regarding Emergency Contraception method

Figure 2 indicates that the majority (58%) of the respondents understand that the injectable is one of the contraception method with a small percentage of 4% mentioning pills. Pills were suggested by many (81%) respondents with only 6% identified IUDS as the method of emergency contraception; however, 35 per cent revealed both pills and IUDS can be used as EC with 10% did not have an idea. The study findings revealed that 41% of the respondents got information about EC from mass media, 32% from reading leaflets and 20% from health workers respectively. Only few (7%) revealed that they got information from the college.

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Figure 2: Knowledge regarding emergency contraception (n=319).

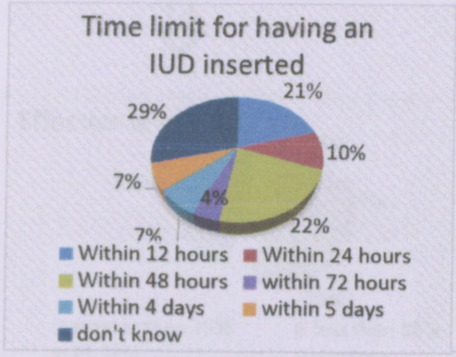


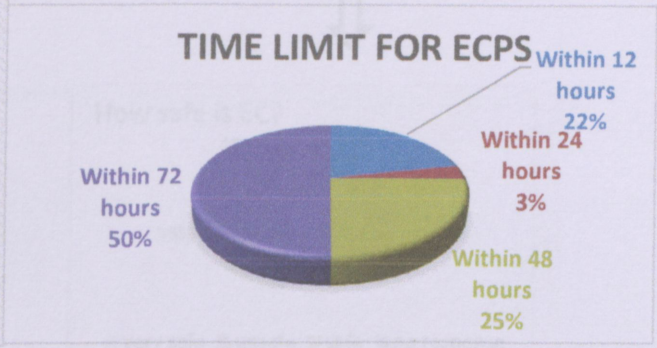
4.3.2 Knowledge regarding the time limit of using EC

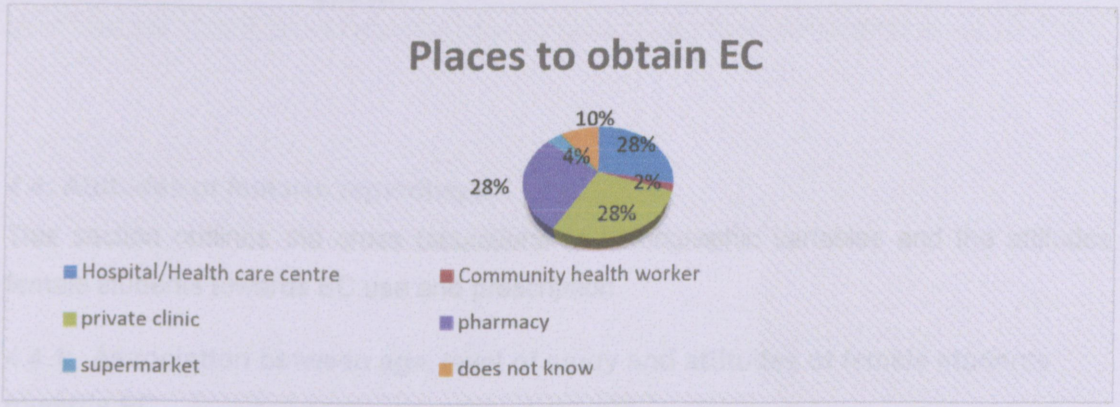
Figure 3 below shows the findings on the time limit of EC and places to obtain it. The respondents indicated a fair varying knowledge on the time of IUDS insertion with 22% identifying the exact time (within 5 days) with only 29% not knowing the time limit. Fifty percent of respondents indicated that ECPs can be taken within 72 hours, 22% indicated 12 hours with 25% suggesting 48 hours respectively. However, a small percent of 3% indicated ECPs can be taken within 48 hours. The study findings indicated the pharmacy (28%), private clinic (28%) and hospitals (28%) as places were most people obtain EC with few indicating supermarket and community health worker and 10% did not know where to obtain EC. See figure 3 below for details.

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Figure 3: Knowledge regarding time limit of EC and places to obtain EC







4.3.3: Knowledge regarding the effective level of EC

The figure (4a & b) below reveals the findings on the effective level, where in 46% revealed that they are not sure of the effective level, only 21% indicated 75-85% effective levels with 18% suggesting it is greater than 75% and 15% revealed it is less than 85%. A larger percentage, 36% and 12% respectively assured that EC is safe whereas 37% indicated that it is unsafe with 15% did not have an idea.

Figure 4a: Effective level of EC

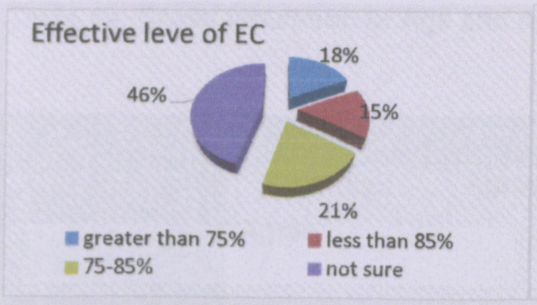
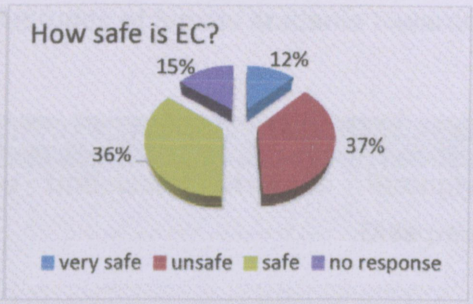


Figure 4b: How safe is EC?



4.4: Attitudes of females regarding EC

This section outlines the cross tabulations of demographic variables and the attitudes of female students towards EC use and prescription.

4.4.1: Association between age, level of study and attitudes of female students towards EC

Table 1.4a indicates the attitudes of females towards EC wherein a majority of 42.6% strongly agreed and 28.5% agreed too that EC encourages promiscuity while the minority strongly disagreed (5.3%) that it does not promote promiscuity. The cross tabulation with chi square test indicates a significant association between age and attitudes towards EC where it concluded that 19-24 years female students are not likely to use EC due to the idea that they perceive EC as promoting promiscuity (P-0.000, x^2-456.596, df-28). As shown on table 1.4b the study revealed that EC discourage compliance to other contraceptives as indicated by 6% strongly agreed and 55% agreed respectively. However, the minority of 4.4% and 2.8% strongly agreed that EC does not discourage other contraception method compliance with 9% undecided. The cross tabulation indicated that unlike postgraduates, the 2nd and 3rd year students are more likely to deny EC pointing out to the factor of discouraging adherence to other contraception (P-0.000, 131.628, df-16). Table 1.4c illustrates a large percentage of the view that the EC if repeated can pose a serious health risk. This was supported by 27.3 who strongly agreed with 32.6% agreed. The 25.1% of the participants indicated that they did not have an idea on what to say (undecided). The cross tabulation and the chi-square test yielded significant association between attitudes towards EC and

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marital status (P-0.003, x^2-129.840, df-4), concluding that single female students are more likely to deny EC as they perceive it as a health hazard.

Table 4a: Cross tabulation of Age and Attitudes of female students towards EC

Age of Respondents	EC encourages promiscuity					Total
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
19-21 Years	64	61	0	12	0	137
22-24 Years	70	30	7	19	17	143
26-27 Years	2	0	0	37	0	39
Total	136	91	7	68	17	**319**
%	42.6%	28.5%	2.2%	21.3%	5.3%	**100%**

Table 4b: Cross tabulation of level of study and Attitudes of female students towards EC

Level of Study	EC discourages compliance to other contraceptives					Total
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
1st Years	11	48	0	0	0	59
2nd Years	3	94	0	0	0	97
3rd Years	0	60	0	0	0	60
4th Years	5	31	3	9	4	52
Post-graduate	0	41	0	0	10	51
Total	19	274	3	9	14	**319**
%	**6%**	**85.9%**	**0.9%**	**2.8%**	**4.4%**	**100%**

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Table 4c: Cross tabulation of marital status and Attitudes of female students towards EC

Marital status	Repeated EC poses a health risk					Total
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
Single	87	104	75	22	9	297
Married	0	0	5	2	15	22
Total	87	104	80	24	24	319
%	**27.3%**	**32.6%**	**25.1%**	**7.5%**	**7.5%**	**100%**

4.4.2: Association between religion, place of residence and attitudes of female students towards EC and prescription

Table 1.5a illustrates the study findings on the attitudes of female towards EC, out of 319 participants 64.9% and 1.3% disagreed respectively that EC should not be prescribed to a client to have on hand prior to unprotected sex. While 10.3% were undecided, a combined percentage of 14.1% and 9.4% agreed that the EC should be prescribed on hand before unprotected sex. The cross tabulation and the chi-square test was statistically significant, as it shows that religion influences attitudes towards EC with a conclusion that all religions are more likely to develop negative attitudes towards EC with an exception of small number of Christians (P-0.000, x^2-150.967, df-12). Table 1.5b revealed the findings of the idea of having EC over the counter without prescription was denied by 40.1% strongly disagreed and 16.9% disagreed. Only a minority (5.6%, 17.2%) agreed that EC should be over the counter without prescription with a considerable percentage of 20.1% undecided. The cross tabulation employed on the collected data indicated that female students from China City and Ruzivo residencies are more likely to deny EC without prescription (P-0.001, x^2-366.345, df 16). Below are the tables outlining the cross tabulation between attitudes towards EC, religion and places of residence.

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Table 5a: Religion and Attitudes of female students towards EC and prescription

Religion	EC should be prescribed on hand prior to unprotected sex					Total
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
Christian	45	3	33	4	105	190
Muslim	0	0	0	0	13	13
Catholic	0	0	0	0	46	46
African tradition	0	27	0	0	43	70
Total	45	30	33	4	207	319
%	14.1%	9.4%	10.3%	1.3%	64.9%	100%

Table 5b: Place of residence and Attitudes of female students towards EC and prescription

Residence	EC should be OTC without prescription					Total
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
Ruzivo	0	0	0	0	39	39
Rutendo	8	38	0	0	6	52
Wadzanai	7	0	30	23	0	60
China City	0	0	0	3	56	59
Runyararo	3	17	34	28	27	109
Total	18	55	64	54	128	319
%	14.1%	9.4%	10.3%	1.3%	64.9%	100%

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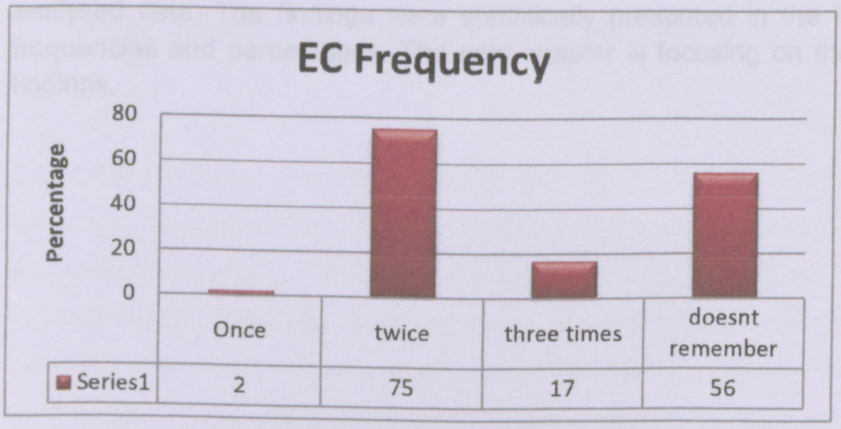
4.5: Practice of Emergency Contraception.

This section presents the frequency, reasons and challenges to EC practice.

4.5.1: Frequency regarding the use of EC

The study findings revealed that out of 319 participants, only 47% (n=150) said Yes to whether they have used EC with 53% (n=169) saying No. Figure 1.5 illustrates the study findings on frequency of EC practice. The majority of 50% (n=75) responded that they have used EC twice, 11% (n=17) used it three times with only 1% (n=2) having used it once; however, 38% (n=56) does not remember how many times they have practiced EC. Asked who recommended their use of EC, 32% indicated that their partner advised them, 31% were recommended by a friend with 29% getting the recommendation from a health professional. The finding has shown that 8% of the respondents do not remember who recommended it to them. Below is the graph indicating the practice of EC with respect to frequency and service providers.

Figure 5: Frequency regarding the use of EC (n=150)



4.5.2 EC service providers, reasons and challenges to EC practice

Figure 1.6a illustrates the reasons for using EC; the majority of respondents gave condom broke as the reason for adopting EC. The 17% participants identified the failure of withdrawal method, 14% missed pills and 6% practised EC as a result of forced sex. A small percentage of 2% identified miscalculation of timing as the reason for using EC. Figure 1.6b shows the providers of EC to women with pharmacists providing a large number of 54%, midwives 14%, nurses 15%, doctors 13% (n=20) and community health workers 4%.

The study findings revealed that women face challenges in getting EC, with 54% (n=81) indicating fear of stigma as a reason, 37% (n=56) suggested price of EC, 8% (n=12) said they lack the knowledge of EC. However, only one participant (0.7%) suggested that the challenge faced was that the EC was not available in the pharmacy at the time of need.

Figure 6a&b: EC service providers and reasons for using EC

Figure 6a: Reason for using EC

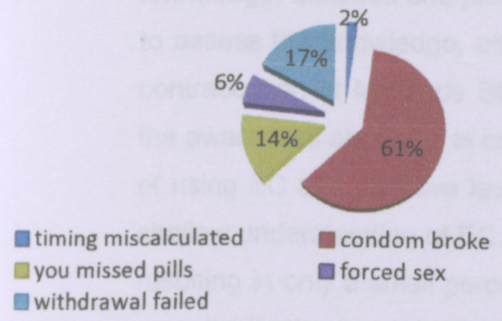
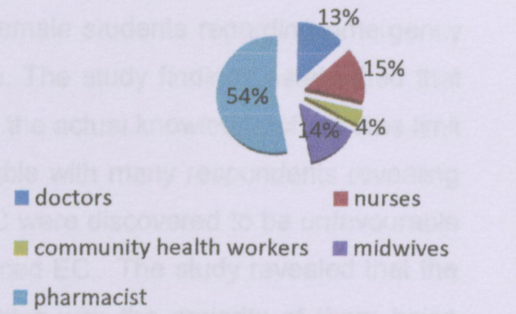


Figure 6b: EC providers



4.5.3 Summary

The chapter presented the results of the study and interpretation of the findings based on the analysed data. The findings were statistically presented in the form of graphs indicating frequencies and percentages. The next chapter is focusing on the discussion of the study findings.

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CHAPTER 5

DISCUSSION

5.1 INTRODUCTION

This section discusses the findings of the study based on literature review. The similarity, contradictions as well as practical implications of the findings will be debated. The discussions are arranged as headings based on the objectives of the study namely knowledge, attitudes and practices of EC among female students. The aim of the study was to assess the knowledge, attitudes and practices of female students regarding emergency contraception at Midlands State University, Zimbabwe. The study findings established that the awareness about EC is considerably higher though the actual knowledge of the time limit of using EC and effective level of EC is still questionable with many respondents revealing shallow understanding of EC. The attitudes towards EC were discovered to be unfavourable resulting in only a small percentage having ever practiced EC. The study revealed that the age distribution was dominated by 23 years old females with the majority of them being second-year in their level of study. The marital status distribution revealed that 93.1% were single with 6.9% married, this is can be considered appropriate to give single respondents the opportunity of being part of the study as most single people are the most likely victims of unintended pregnancy as they do not use other contraception.

5.2: Knowledge and emergency contraception among female students

Koyama, Hagopian and Linden (2013) established that successful use of emergency contraception requires accurate knowledge about the different EC methods by both providers and patients, prescriptions when necessary for obtaining ECPs, and access to the different methods. The present study revealed a fair understanding about general contraception with many pointing out to pills, injectables and condoms as being the major methods. The majority of respondents revealed a fair degree of knowledge when asked about the emergency contraception in which 81% identified pills with only few 6% indicating IUDS. However, a considerable 10% indicated that they do not know about emergency contraception. The present study findings shows a similarity to a previous study conducted in rural Ethiopia wherein among all the contraception methods in current use such as injectable/ Depo-Provera and condoms, the oral contraceptive pills, were the most frequent with a combined percentage of 82.8%. Although it was depicted that most respondents have known about pills for emergency contraception, a given 10% of people did not know about EC. This indicates a clear vacuum of health education and promotion of EC. Similarly, two

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studies conducted in Pakistan from 2009 showed an increase in the number of females aware of the method, but there remained a lack of accurate medical knowledge about the method (Abdughani, Karim & Irfan, 2009).

Despite the general awareness about the EC product, the study findings established that female students are not well informed about the actual use of EC which will include the time limit of ECPs and IUDS insertion as well as the effective level of the two EC methods. The respondents indicated a fair knowledge on the time of IUDS insertion with 22% identified the exact time (within 5 days) with only 29% not knowing know the time limit. The 50% percent of participants indicated that ECPs can be taken within 72 hours, 22% indicated 12 hours with 25% suggested 48 hours respectively. This observation was also established by Nappi et al. (2014) wherein in Europe a third agreed that they do not really know how EC works and 31% agreed that EC has an abortive effect or is like an abortion, ten percent of women thought EC could result in infertility with 46% of women not knowing if this was correct. Furthermore, the current study has found that the majority of the sample does not have the actual knowledge on the effective level of EC methods as well as its safety.

A 46% sounding majority indicated that they were not sure of the effectiveness level of EC, with 39% suggested varying accepted levels of effectiveness. The information on how safe is EC, shows that 37% said it's not safe with 15% did not know, however a combined 48% said EC is safe. Similar studies in four European countries established that more than half of respondents (53%) agreed that EC is very effective, but it may not work with 42% of the target population thought that EC is 100% effective if taken the next day, whilst 56% thought that EC is less effective after 24 hours. In addition, Rahman; (2013) study findings revealed that in India Overall, 71.9% (n = 430) of the respondents did not know the timeframe when EC should be used.

A study which was done in Nigeria, found that 75 percent of students surveyed were aware of emergency contraception, but only 12 percent knew that the first dose of ECPs should be taken within 72 hours of unprotected intercourse. In a related Ghana study it was found that only 11 percent of the students surveyed (22 of 196 surveyed) knew the correct timeframe for starting ECPs. This points to the fact that many women are inadequately informed about EC, despite almost a decade of availability. Drawn from these comparable findings it can be argued that the actual knowledge about EC is affected by the source of information. The present study has found that the majority got information through mass media (41%) and reading leaflets (32%) with few getting information from health workers (20%) while only 7%

got the information from the college. Rahman (2013) has found similar findings on the sources of EC in Sikkim, India wherein respondents had first heard about EC from the radio, television, or the internet as well as friends, spouse, and relatives (33.8%), health personnel (30.4%) and in printed media (22.2%).

Contrary to that, it is argued by many scholars that education on EC should be form part of formal sex education to reinforce the actual knowledge generation particularly contraception at school/college level rather relying on mass media. A study in Nigeria by Fasanu et al. (2014) established an association between formal sex education and emergency contraceptive use and school was the most commonly cited source of sex education information. Mass media for some time reported that EC emergency contraceptives come with an increased risk for things like blood clots and hormone-related cancers, like many traditional forms of birth control; however, these statements are factually incorrect but unfortunately are widespread and consequently, such negative and sometimes inflammatory media coverage only alarms women and may keep some away from using contraception (Srivastava et al., 2014). Thus it is important for subjects like contraception to be taught formally during sex education sessions.

The study findings revealed that the majority female students from MSU obtain EC mainly from pharmacies, private clinics and hospitals with few getting them from the supermarket and community health workers. A study by Ehrle and Sarker (2011) concurred that pharmacies, private clinics and hospitals are important providers of contraceptives for teenagers, and one in six pharmacies sold emergency contraceptive pills mainly to adolescents in Nicaragua in their efforts to avoid such pregnancies without the knowledge of parents or other family members who might disapprove premarital sexual activity.

5.3 Female students' Attitudes towards EC

The findings of the present study depicted an unfavourable attitude of female students towards emergency contraception with 42.6% strongly agreeing and 28.5 agreeing too that EC promotes promiscuity. These findings are consistent with the work of Grindlay, Foster and Grossman (2014) that a majority of respondents felt EC, would promote promiscuity, or were uncomfortable with EC for religious or ethical reasons. Trussel et al., (2014) also mentioned various reasons for non-use of contraceptive methods, as pressure from family that is from husband, in-laws, son preferences and physical pressure on the basis of promiscuity. The majority of the respondents, 59.9%, agreed that repeated use of EC can

pose health risks. In a similar study 65.1% reported that ECs cause sterility with 43.3% stated that ECs may hurt the foetus in case if it fails to work (Hemani et al., 2013). The investigation at MSU discovered that the attitudes of females are unfavourable as they feel that EC discourages other contraception compliance. This was also depicted in a similar study wherein 38% participants thought that widespread use of ECs will increase the prevalence of HIV/AIDS and other STIs due to non-consistent use of condoms (Kayama et al., 2013).

Moreover, studies on perception of spousal approval and opposition from husbands are positively associated with low emergency contraceptive use (Fasanu et al., 2014). A large percentage has suggested that the EC if repeated can pose a serious health risk. This was supported by 27.3 who strongly agreed, with 32.6 agreeing. The 25.1% of the participants indicated that they did not have idea on what to say (undecided). A combined 15% of both disagree and strongly disagree to the idea of EC posing a health risk was also revealed in study. Tilahun et al (2013) in a qualitative study findings also assured that fear of side-effects is one of the most important reasons of not using contraceptives by women. Tilahun (2010) elaborated those women's feelings about their partners and about involving men in contraceptive and reproductive decisions must always be taken into account.

Studies indicated that, attitudes towards preventing pregnancy, knowledge and different method as well as the understanding of the side-effects of different methods are among the factors related to contraceptive use. Some respondents also felt that the process of acquiring contraceptive is often embarrassing thus resulting in negative attitudes towards EC. The majority of respondents gave condom broke as the reason for using EC. The 17% of participants identified the failure of withdrawal method, 14% missed pills and 6% practised EC as a result of forced sex. A small percentage of 2% identified miscalculation of timing as the reason for using EC. In a similar study it was revealed that 75% of EC providers had prescribed emergency contraception for women who had had unprotected intercourse, and 61% for women who reported condom breakage.

5.4: Practice of EC among female students

The study findings has shown that women face challenges in getting EC, with 54% (n=81) indicating fear of stigma as a reason, 37% (n=56) suggested price of EC, 8% (n=12) said they lack the knowledge of EC. However, only one participant (0.7%) suggested that the challenge faced was that the EC was not available in the pharmacy at the time of need. Nappi et al.'s (2013) study concurred that women agreed that EC should not be a taboo

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subject or that they should feel guilty about using it, but about a quarter agreed that taking 'the morning-after pill is embarrassing and shameful. Of women who did not take EC after UPSI, 6% indicated this was because they felt embarrassed to ask for it' (Table 4). Additionally, nearly a third (31%) of those who used EC reported feeling uncomfortable, stigmatised, were lectured to, or judged by the prescribing healthcare professional. The present study found that the cost of the morning after pill is regarded as a challenge in accessing EC. For women that are aware of ECs, numerous challenges remain, including concerns about privacy, cost, and in some settings, the ability to find a pharmacy with EC pills in stock (Downing et al, 2011). Asked who recommended their use EC, 32% indicated that their partner advised them, 31% were recommended by a friend with 29% got the recommendation from health professional. The findings have shown 8% of the respondents do not remember who recommended it to them. In a similar study in rural Ethiopia of those who used oral pills as EC, 16 (64%), 6 (24%), and 3 (12%) them were recommended by their boyfriends, girlfriends, and health professionals, respectively.

5.5 Summary

The chapter discussed the findings of the study based on literature review. The similarity, contradictions as well as practical implications of the findings were debated. The discussions are arranged as headings based on the objectives of the study namely knowledge, attitudes and practices of EC among female students. The following chapter presents conclusions and recommendations.

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CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the conclusions and recommendations based on the findings, and accordingly, this section will be arranged into conclusions and recommendations. The study purpose was to describe the knowledge, attitudes and practices of female students regarding female contraception, at Midlands State University, Zimbabwe. The study revealed that the level of knowledge about a health intervention (EC) directly influence the attitudes and subsequently the practice of emergency contraception.

6.2: Conclusions

Based on the study findings, the following conclusions were drawn which are arranged below on the bases of the study areas of focus namely knowledge, attitudes and practices of EC among females' students.

6.2.1 Knowledge of female students regarding EC

- The basic awareness about EC is considerably high with ECPs being the most known method of emergency contraception.
- Students lacked the actual knowledge about the correct use and effective level of EC.
- Mass media is the most prominent source of EC information with the majority at 41.4% (n=132). The private clinics, pharmacies and hospitals have been found to be the key places to obtain EC.

6.2.2 Attitudes of female students towards EC

- Giving reasons of promiscuous, health hazard and discouraged compliance to other contraception methods due to EC, the overall attitudes of female students towards EC is unfavourable.

6.2.3 Female students EC practice

- The EC use is low with sampled 319 participants, 47% of them having practiced EC.
- The students at MSU rely on condoms as a method of contraception, with a considerable majority of 61% indicating that they used EC due to condom breakage.
- Female students faces challenges of fear of stigma and costs in accessing EC

6.3: RECOMMENDATIONS

The study explored the knowledge, attitudes and practices of female students regarding emergency contraception. Based on the study findings and conclusions drawn from this study, the following recommendations were formulated to address the issues identified and arranged as outlined by the study objective namely, knowledge, attitudes and practices of female students regarding EC

6.3.1 Knowledge regarding EC

Although this survey did not ask providers about EC awareness, the lack of actual knowledge on the use and time limit as well as effective level of EC is evident in misinformation or lack of knowledge and it calls for adequate dissemination system to change attitudes thus boosting practice. The respondents have identified mass media as the source of information; however, it is significant to include and make use of different communication systems, thus reaching a larger audience. This gap can be closed if health matters are fused in the curriculum like in modules like English Communications Skills.

The visual communications like the billboards can be useful in disseminating information to a larger university population. The peer education group can conduct a hostel-to-hostel campaign about interventions like emergency contraception. Although teachers and schools are to blame for not putting the emphasis on sex and pregnancy education the real starting point should be from within the family, therefore parents are recommended to teach their children for the benefit of their future.

Furthermore, peer educators are encouraged to offer open discussions about sex and pregnancy in a safe, non-judgmental environment which is essential to help women make educated decisions about unplanned pregnancies.

Educational campaigns on a college level can be helpful in emphasizing that no evidence indicates that this method (EC) is unsafe even when women use it repeatedly. Physicians should also be encouraged to inform all potential users about emergency contraception and be willing to prescribe the method to all women, including adolescents, in need of a post-coital contraceptive. Finally, educational interventions should be evaluated after their implementation to help identify effective ways to disseminate information.

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6.3.2 Attitudes towards EC

Health talk sessions offered by a college clinic can cast away the fear of stigma among student in getting EC, they will emphasise EC as a lifesaving procedure for female. Additionally, there should also be a mutual and collaborated relationship between the service provider and the patients in need of EC. Specific policies should guide clinical nurses about issues such as non-judgemental attitudes towards sexually active female college students and facilitating students' success with emergency contraceptive services. The providers are therefore advised to identify beliefs, attitudes, norms as well as enabling factors of female students towards EC. Some students might be having beliefs or have certain norms about EC, it is then important to health promotion practitioners to identify all these entities before they offer any health talk. The health talk should be orchestrated with the goal of changing the attitudes and beliefs which are unfavourable for EC.

The study findings recommend the health belief model (HBM) which is a psychological health behaviour change model developed to explain and predict health-related behaviours, particularly with regard to the uptake of health services. This model can be adopted in changing the attitudes of female students towards EC in combating unplanned pregnancies. The health belief model suggests that people's beliefs about health problems, perceived benefits of action and barriers to action and self-efficacy explain engagement or lack of engagement in health-promoting behaviour.

HBM in this regard of promoting EC it should aim to increase perceived susceptibility to and perceived seriousness of the consequences and health adverse effects of unplanned pregnancies. Therefore, the scope of the health education should focus on prevalence and incidence of unintended pregnancy, individualized estimates of risk, and information about the consequences of unplanned pregnancy (such as medical, financial, and social consequences).

6.3.3 Practice of EC

- Clinics providing reproductive health services only for young female university students should be available over weekends and during the evenings. It is believed that young females will be embarrassed to obtain EC services in the same queue with their parents, as they feel that their sexual activities might be questioned.
- Contraception information sessions should address full details on how the EC works and full details of how the contraceptives should be taken. Inviting medical doctors or

pharmacists will be an advantage rather than lay counsellors who might disseminate false information thus building up the negative of attitudes towards EC.

In summation, the study recommended the use of the KAP model to change the behaviour and to boost the practice of EC in preventing mistimed pregnancies among university students. The KAP model was used to assess the knowledge, attitudes and practices of female students regarding EC; it was established that the three entities are directly proportional in promoting the EC.

6.3.4 Summary

The chapter presents the conclusions and recommendations based on the findings, and accordingly, this section was arranged into conclusions and recommendations. It outlined the possible modalities for improved in the identified problems.

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APPENDICES

APPENDIX 1: QUESTIONNAIRE

A QUESTIONNAIRE INVETISTIGATING KNOWLEDGE, ATTITUDE, AND PRACTICE OF FEMALE STUDENTS REGARDING EMERGENCY CONTRACEPTION AT MIDLANDS STATE UNIVERSITY, ZIMBABWE.

1. SECTION A. DEMOGRAPHIC INFORMATION

1.1 AGE ……..

Make a tick on the most appropriate response.

1.2 LEVEL OF STUDY

1st	2nd	3rd	4th

1.3 MARITAL STATUS

Single	Married	*Divorced*	*Widowed*

1.4 RELIGION

Christian	Muslim	Catholic	African Tradition

1.5 RESIDENCE

Ruzivo	Rutendo	Wadzanai	Runyararo	China City

1.5.1 Whom do you live with?

1. with friends

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2. Alone

SECTION B KNOWLEDGE ABOUT EMERGENCY CONTRACEPTION

2.1	Among modern contraceptive methods which once do you know?	1.Pills 2. Injectables 3.Condoms 4.IUDS
2.2	Have you heard of emergency contraception that you can use after Sex?	1. *Yes* 2. *No*
2.3	If your answer for Q 2.2 is yes, from where do you heard?	1.Reading from leaflets 2.Mass media 3.Health workers 4.From college
2.4	What type of contraception can be used in an emergency after sex?	1. Pills 2. IUCD 3. Both 4. Don't know
2.5	What is the time limit for taking emergency contraceptive pills after unprotected sex?	1.Within 12 hours 2.Within 24 hours 3.Within 48 hours (2 days) 4.Within 72 hours (3 days)
2.5	What is the time limit for having an IUD (coil) fitted after unprotected sex?	1.Within 12 hours 2.Within 24 hours 3.Within 48 hours (2 days) 4.Within 72 hours (3 days) 5.Within 4 days 6.Within 5 days 7.Don't know
2.6	Places where a woman can obtain emergency contraception.	1.Hospital /health centre 2. Community health worker 3.private clinic 4.Pharmacy 5.supermarket 6. Does not know

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2.7	How effective are emergency contraceptive pills in preventing a pregnancy?	1. <75% 2. >85% 3. 75-85% 4. 4. Not sure
2.8	How safe do you think emergency birth control methods are for most women?	1.very safe 3.unsafe 2.safe 4.no response

SECTION C: ATTITUDES TOWARDS EMERGENCY CONTRACEPTION

Complete the statements according to the scale given below

Key

STRONGLY AGREE	SA
AGREE	A
UNDECIDED	U
DISAGREE	D
STRONGLY DISAGREE	SD

Q no.	Statement	SA	A	U	D	SD
3.1	The provision of EC to students would encourage promiscuity					
3.2	The provision of EC would discourage compliance to other contraceptive methods					
3.3	Repeated use of EC pose a health risk					
3.4	EC should be prescribed for a client to have on hand prior to an episode of unprotected sexual intercourse					
3.5	EC should be available over the counter without prescription					

SECTION D: THE USAGE OF EMERGENCY CONTRACEPTION

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4.1	Have you ever used emergency Contraceptive pills/devices?	1. Yes 2. No
4.2	If your answer for Q 4.1 is yes, How many times have you used this method during the last year?	1.Once 2. Twice 3.Three times 4. doesn't remember
4.3	Who recommend it?	1.A friend 2.Partner (male) 3.Health professional 4. Does not remember
4.4	Who did provide it to you?	1. Doctors 2. Nurses 3. Community health workers 4. Midwives. 5. Pharmacist
4.5	Why did you use it?	1 The timing miscalculated 2. Condom broke 3. you missed pills 4. Because of forced sex 5. withdrawal failed
4.6	What were the challenges you faced to get EC?	1. Price 2. Not available in pharmacies 3. Fear of stigma 4. Lack of knowledge

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APPENDIX 2: REQUEST LETTER AND PERMISSION TO CONDUCT A SURVEY

APPENDIX 2: REQUEST LETTER TO CONDUCT A SURVEY

University Of Venda
P. Bag X5050
Thohoyandou 0950
South Africa

To Whom It May Concern
The incumbent has been authorised to carry out his studies at MSU
12/06/15

The Director of Student Affairs
Midlands State University
P Bag 9055
Gweru, Zimbabwe
June 2015

Dear Sir/Madam

RE: REQUESTING PERMISSION TO CONDUCT A RESEARCH ON FEMALE STUDENTS OF YOUR UNIVERSITY.

I am a master's student at the University of Venda. In order to complete my degree (Master of Public Health) I am expected to conduct a research project of my choice.

As it is being observed, the number of university students who are becoming pregnant during college life is increasing and this is increasing the number of dropout of female students. So I want to study the female student's knowledge, attitude and practice regarding Emergency Contraception.

A questionnaire will be used for data collection and the information gathered will be treated with uttermost confidentiality. The summary report will be made available to MSU Student Affairs.

Therefore I am asking for your permission to conduct the study. I hope this study will help to understand status of the student's awareness about prevention of unintended pregnancy and utilization of emergency contraception to take necessary measure accordingly.

Thank you for your cooperation and assistance.

Yours faithfully

Mambanga Pfungwa
mambangap@gmail.com +27737823297

MIDLANDS STATE UNIVERSITY
REGISTRAR
12 JUN 2015
PRIVATE BAG 9055,
GWERU ZIMBABWE
TEL. 054 - 260586 FAX: 054: 260735

APPENDIX 3: ETHICAL CLEARANCE

RESEARCH AND INNOVATION
OFFICE OF THE DIRECTOR

NAME OF RESEARCHER/INVESTIGATOR:
Mr P Mambanga

Student No:
11605743

PROJECT TITLE: **Knowledge, attitudes and practices of female students regarding emergency contraception at Midlands State University, Zimbabwe.**

PROJECT NO: SHS/15/PH/12/0206

SUPERVISORS/ CO-RESEARCHERS/ CO-INVESTIGATORS

NAME	INSTITUTION & DEPARTMENT	ROLE
Dr T Tshitangano	University of Venda	Supervisor
Prof HA Akinsola	University of Venda	Co-Supervisor
Mr P Mambanga	University of Venda	Investigator - Student

ISSUED BY:
UNIVERSITY OF VENDA, RESEARCH ETHICS COMMITTEE

Date Considered: June 2015
Decision by Ethical Clearance Committee Granted
Signature of Chairperson of the Committee: .....
Name of the Chairperson of the Committee: Prof. G.E. Ekosse

University of Venda
PRIVATE BAG X5050, THOHOYANDOU, 0950, LIMPOPO PROVINCE, SOUTH AFRICA
TELEPHONE (015) 962 8816/8313 FAX (015) 962 9060
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APPENDIX 4: INFORMATION SHEET

My name is **Mambanga Pfungwa**. I am a student at the University of Venda registered for the Master of Public Health (MPH). My research focuses on the **knowledge, attitudes and practices of female students regarding emergency contraception at Midlands State University, Zimbabwe.** You are kindly requested to take part in this study because your participation can make a great difference.

In this research the data will be collected by the researcher. The researcher before data collection will explain the purpose, the ethical principles to be adhered to and giving the respondents the informed consent form, the researcher will give questionnaires to those who will form part of the sample. Data will be collected at set appointments and places as to the convenience places of the respondents. The researcher will allow the respondents to fill in the questionnaire while absent to ensuring privacy. This is to help those who feel uncomfortable to fill the questionnaire in the presence of the researcher and it reduces the level of non -responses.

The researcher is going to handle the gathered data in uttermost confidentiality, meaning that no unauthorized people are going to handle the data in any way. The data will be kept under lock and classified at all time and will be discarded right away on completion of the study

The researcher will explain the format of the questionnaire to the respondents and also urge them not to write their names or any form of identification to ensure anonymity. Instead the researcher is going to use cords rather than participants names.

In this research project participation is free and voluntary. The participants are encouraged to withdraw from the project at any time should they feel uncomfortable or threatened in any way to continue participating in the study.

In this research the researcher will ensure that the benefits supersede the risks. The researcher is going to ensure that no physical, psychological or emotional harm will be inflicted on the respondents. Other possible dangers will be looked at and the researcher shall guard against them. In addition, in case the respondent is harmed, the researcher will do follow up and refer the respondent for treatment, such as counselling. The respondent's positive response to participate in the study will enable the researcher to draw conclusions from the findings and be able to give recommendations that can be helpful to the Midlands State University and Zimbabwe Ministry of Health and Child Welfare.

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APPENDIX 5: CONSENT LETTER

Department of Public Health, University of Venda.

May 2015

I am **MAMBANGA PFUNGWA** a post-graduate student pursuing a master's degree in Public Health at the University of Venda; invite you to participate in this study. I'm conducting a research investigating the female student's knowledge, attitudes and practices regarding Emergency Contraception at Midlands State University and I'm inviting you to be part of the study. Your positive response will enable the researcher to draw conclusions from the findings and be able to give recommendations that can be helpful to the university community. As a participant on the research you will be entitled to your own privacy about your thoughts, beliefs and personal understanding. After the collection of data, the researcher will take responsibilities to maintain confidentiality of the information given by participants. To ensure anonymity on questionnaires, you are not supposed to enter your names.

Signature of researcher..... Date.....

I ..... have read and understood the contents and terms of this invitation to participate in this study. I hereby declare that I am voluntarily participating in this research.

Respondent signature..... Date.....

Witness` signature..... Date.....

For more information contact Mambanga P (Researcher)-0737823297 or mambangap@gmail.com

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APPENDIX 6: Confirmation of language editing

University of Venda
P/Bag x5050
Thohoyandou
0950

19 November 2015

To whom it may concern

RE: Editing / proofreading of Research thesis

Mambanga Pfungwa, student number **11605743**, recently approached me with a request to have his research thesis edited. The study, co-supervised by **Dr T. Tshitangano** and **Prof H. Akinsola** is titled,

"Knowledge, attitudes and practices of female students regarding Emergency Contraception at Midlands State University, Zimbabwe".

I would like to confirm that I have edited the document and would hope that all suggestions I made have been suitably effected in the finalization of the research thesis.

Kind regards

A.Z. Nengome
Department of English – Univen

Contact no.: 015 962 8293

Signature _____

Date 19/11/2015