jamk.fi

Knowledge, perception and information that Kenyan adolescents have regarding use of contraceptives.

Margaret Miano
Simbarashe Mashereni

Bachelors' Thesis
March 2014

Degree Programme in Nursing
Social Services, Health and Sports

JYVÄSKYLÄN AMMATTIKORKEAKOULU
JAMK UNIVERSITY OF APPLIED SCIENCES

JYVÄSKYLÄN AMMATTIKORKEAKOULU
JAMK UNIVERSITY OF APPLIED SCIENCES

DESCRIPTION

Author(s)	Type of publication	Date
Miano, Margaret Mashereni, Simbarashe	Bachelor´s	20.03.2014
	Pages 49	Language English
	Confidential	Permission for web publication (X)

Title: Knowledge, perception and information that teenagers in Kenya have regarding use of contraceptives.

Degree Programme
Degree Program in Nursing

Tutor(s)
Katainen, Irmeli
Garbrah, William

Assigned by

Abstract
The purpose of this study was to find out the knowledge, perceptions and information that teenagers in Kenya have about contraceptives. The aim was to provide information that can be used to increase the knowledge on the use of contraceptives amongst teenagers.

The research was carried out in a mixed day secondary school in Kenya. The target group was students in form 2 and 3, both girls and boys. Qualitative research method was used in carrying out the research. Data was collected through narrative essay writing. Data handling and analysing was done and in order to achieve a complex data, the researchers used thematic analysis method.

The results of this study showed that majority of the participants had insufficient knowledge about contraceptives. Some participants expressed that they were sexually active and using some forms of contraceptives. However, several misconceptions about use of contraceptives were also highlighted.

This research provides wide knowledge about contraceptives and also highlights how sex education amongst teenagers is still a challenge as many people tend to shy away. The results provides a platform that can be built to improve knowledge on use of contraceptives amongst teenagers including abstinence which is a method that most parents and guardians advocate for.

Keywords

Adolescents, teenagers, contraceptives, perception, knowledge, information

Miscellaneous

Table of Contents

ABBREVIATIONS

UMMC	University of Maryland Medical Center
CSA	Centre for the Study of Adolescence
PAI	Population Action International
KNBS	Kenya Natioanl Bereau of Statistics
FSRH	Faculty of Sexual and Reproductive Healthcare
AAP	American Academy of Pediatrics
IPPF	International Planned Parenthood Federation
ARHP	Association of Reproductive Health Proffesionals
NASCOP	National Aids and STD Control Program.

1. INTRODUCTION

The World Health Organization (WHO 2013) defines adolescents as the period in the human growth and development that occurs after childhood right before adulthood between the ages of 10-19 years. It is a critical transitional stage in life that is characterized by a tremendous pace in growth, change and potential. It is a period of preparation into adulthood in which developmental experiences such as physical and sexual maturation, movement towards social and economic independence and development of identity. (WHO,2013.)

According to a report by the United Nations Children's fund (UNICEF 2012), about 1.2 billion adolescents aged between 10-19 years make up 18 percent of the world's population today and the number is expected to increase by the year 2050 although with a decreased share of the total population. More than half of the world's adolescents' population lives in Asia. In Sub-Saharan Africa, adolescents make up to the greatest population with 23 percent of those aged between 10-19 years.

During adolescent stage, the sudden and rapid physical changes that adolescents go through do make them very conscious, sensitive and worried. It is normal for young people of this stage to begin to separate from their parents to establish their own identity, (UMMC, 2013). Further, as maintained by Klass, Bailey, and Bullock (2004) Just as children imitate, adolescent too imitate adults in a desire of being valued as grownups.

In sub-Saharan Africa, young people are sexually active by their late teens. The high level of sexual activity among teenagers is linked with risks such as HIV/AIDS Infections, early childhood pregnancy and unsafe abortion, economic hardship and school dropouts. There are variations however based on residence, level of education and socio-economic status. As maintained by CSA &PSI (2009), young people must be provided with skills, activities, knowledge and information that will allow them delay their sexual debut. According to previous studies Conducted by Blanc, Tsui, Croft &Trevitt (2009) the result revealed that the use of contraceptives is on the rise among the teenagers in most sub Saharan countries. In addition, it has been found that contraceptive use was on the increase amongst the teenagers in most Sub Saharan countries. However, no previous known statistics indicating the knowledge the teenagers possess in Kenya. In this regard, this thesis aims to find out the knowledge that teenagers possesses in regard to contraceptives use, their perceptions on use of contraceptives as well as find out any other information they might have regarding contraceptives. The purpose is to provide information that can be used to increase the knowledge on the use of contraceptives amongst teenagers in Kenya.

2. ADOLESCENCE AND SEXUAL SEX EDUCATION

As described by the World Health Organization, sex education amongst adolescents remains a global challenge due to its sensitivity and biases derived from attitudes and values that are either personal or related to religion and traditions.(WHO 2013). In the last decade, despite the enormous effort to improve reproductive health programs in schools, provision of sex education has in many countries faced legal, financial, cultural and religious barriers. (WHO 2008, 7).

Adolescent reproductive behavior is recognized as an important health and social concern in Kenya. In the past, studies have shown that a high percentage of young people are getting sexually active in early teenage or adolescent stages and as a result majority are in turn using contraceptives even without much knowledge about them (KNBS,2010.) Although these teenagers remain exposed to the risks associated with unprotected sexual behaviors, use of contraceptives by teenagers in the country with a very strong religious learning remains a sensitive issue. Majority especially parents are still in denial that teenagers are actually using (abusing) contraceptives and a recent debate that contraceptive education will be introduced in schools brought a wave of protest.

In Kenya, sex has been a taboo subject and it has been to the African society as a whole. Government, school's officials, religious leaders have been debating whether or not there should be formal sex education in schools. The minimum response especially from the non-governmental organizations too introduced sex education programs in schools has in the past years faced opponent and challenges especially when it comes to the choice of topics. In addition, more than 13, 00 girls drop out of school due to pregnancy accounting to 31 percent of all dropout rates.(Wanjala ,2011,1- 2.)

The United Nations Population Fund asserts that, about 14 million adolescents aged between 15 and 19 years give birth every year. Pregnancy and child -birth related complications are major contributor of death among teenagers of this age whereby nearly 70,000 adolescent girls die. In every year, about 2.2 to 4 million adolescents results to unsafe abortion, (UNFPA 2007, 2 – 3.)

Literature reveals that most adolescents indulge in sexual activities for other reasons other than seeking to become pregnant as stated by Blanc,Tsui,Croft &Trevitt (2009).In addition, Blanc et al.,(2009) indicates that a survey carried out in South and South east Asia between 1996 to 1999 showed that contraceptive use was popular amongst married adolescents ranging from 6% in Nepal and Pakistan to approximately 44% in Indonesia and Thailand.

In a study carried out in 25 European countries and Canada showed that 14 to 38% of 15 year girls and boys were experienced in sexual activities.(Godeau, Gabhainn, Vignes, Ross,Boyce and Todd 2008,68). According to Mfono,(1996), Uganda and Nigeria are African countries with adolescents who are said to be lacking sex and contraceptive education and also have high rate of adolescent childbirth.Furthermore South Africa claims to have hardships when it comes to investigating the use of contraceptives among the teenagers because of the legislation that hinders adolescent and needs consent from parents.(Mfono1996.)

2.1 Adolescence Stage

Hormonal changes and external influence increase adolescent sexual awareness, interest and feelings at the begging of puberty stage. At this stage they begin to mention some sexual terms, acts and personal values especially among their colleagues. This age group tends to be more of experimenting and may also be involved in relationships. However, it is very important to know the difference between the suitable and unsuitable sexual behaviors of adolescent. It is proven that many children engage in sexual behavior and may show sexual interests throughout their childhood way before puberty. (Rich 2013.)

2.2. Contraceptives

Contraception as defined by the oxford dictionaries is the deliberate use of artificial or other techniques to prevent pregnancy as a consequence of sexual intercourse. (Oxford Dictionaries 2013.) Over the years, family planning has been widely practiced although the methods used in those old days were not always as safe or effective as those that are used today. For instance, in the early days, Chinese women drank lead and mercury to control fertility this could result for sterility or death. In Europe, women were advised by magicians to wear to wear testicles of a weasel around their thighs. (Knowels, 2002.)

2.3 Methods of contraception

There are many different methods (types) of contraceptives available today. According to World Health Organization (2013), factors to consider when choosing a particular contraceptive method include the characteristic of the potential user, the background risk of diseases, safety and adverse effect profiles of different products, cost, availability and patient preferences.(WHO 2010).

Combined oral contraceptives (Pills)

These are pills that contain estrogen and progesterone hormones. They function by preventing ovulation through the inhibition of follicle stimulating hormone and luteinizing hormone. The progesterone hormone makes the cervical mucus impenetrable and reduces the receptivity of the endometrium

for conception.(WHO 2007, 41.) Combined oral contraceptives are said to provide almost 100% protections from unwanted pregnancies. While using them, the person experiences regular, short, light and painless bleeding at the end of each pack and this reassures protection.(Guilleband 2004, 9.)

In addition, combined oral contraceptives reduces the risk of endometrial and ovarian cancer and should not be taken while breastfeeding (WHO, 2013.) They are safe and suitable to nearly all women including those who have or have not had children, unmarried women, women of any age including adolescents and those who are over 40 years old. (WHO 2011, 5.)

Progestrone only pills

Progestogen only pills (pop) also known as mini-pill contains progestogen hormone but no estrogen. They disrupt ovulation by suppressing the mid-cycle peak of luteinizing and follicle stimulating hormones. Progesterone only pills also reduce the amount and increase the viscosity of the cervical mucus hence preventing the penetration of sperms. The failure rate of progesterone only pills is slightly higher than that of combined oral contraceptives. Pops's are safe for almost all women including those who have contradictions with estrogen. (Shoupe 2011, 40-41.) Progestrone only pills are taken daily with no pill-free days interval. They should be taken at the same time to every day to maintain efficacy.

Progestrone only pills are however known to cause altered bleeding patterns. The patterns associated with pop's may depend on the progestogen used, the dose and the circulating endogenous progestogen concentrations. (FSRH 2008, 3.)

Emergency contraceptive pills

Emergency contraceptive pills are pills that contain hormones similar to those in oral contraceptives but in higher doses. They are also known as morning after or post-coital pills. They can be used to prevent pregnancy up to three days after unprotected sex. Emergency contraceptive pills are not a regular family planning method and are intended for emergency use only. Emergency contraceptive pills work by preventing implantation by altering the inner lining of the uterus (endometrium), prevent fertilization and as well prevent transport of the sperm and ovum. The mechanism depends on the time of the menstrual cycle when emergency contraceptive pills are used. However, emergency contraceptive pills do not interrupt of abort an already established pregnancy. Once a pregnancy has occurred, they are not any more effective. They must be taken within 72 hours of unprotected sex. (Hossaian, Khan, Rahman & Sebastian 2005, 21-24.)

Progestogen only injectables

Progestin -only injectables contain progestin similar to the natural hormone progesterone found in a woman's body. They do not contain estrogen and they can be used throughout breastfeeding and by women who cannot use methods that contain estrogen. There are two types progestin only injectablables , medroxyprogesterone acetate (DMPA) and nonetheristerone enanthate (NET-EN). DMPA, also known as depo-provera,the shot, megastron , is the most widely used .(IPPF 2013.)

Progestogen only injectables are injected into the muscle (intramuscular injection).The hormone is then released slowly into the skin and works by

preventing ovulation. The effectiveness depends on the person getting injections regularly and the risk of pregnancy is greater when an injection is missed. With DMPA, a person may take an average of about 4 months before returning to fertility while NET-EN month longer than other methods. NET-EN however affects bleeding patterns less than DMPA and users have fewer days of bleeding in the first six months and are likely to have no monthly bleeding after one year as compared to DMPA. This is however, According to IPPF, (2013) is not harmful and it is considered similar to not having monthly bleeding during pregnancy,

Combined injectable contraceptives (CIC))

Combined injectable contraceptives are a group of hormonal contraceptives that are administered through intramuscular injection. As the name indicates they contain both progestin and estrogen. They provide protection against pregnancy for a period of 30 days hence the name monthly injectables. There are some similarities of CICs and progestin-only injectables in the sense that the new CICs contain exactly the same progestin as the two most widely used progestin-only injectables (Depo-provera and Noristerat) but the dose received over this time is lower with combined injectable contraceptives. Although the difference between progestin-only injectables and the combined injectables contraceptive is the presence of estrogen, the estrogen was incorporated mostly to improve of the menstrual cycle. (Population Reports 1996, 12.)

Combined injectables provide contraception mainly by preventing ovulation. They also thicken the cervical mucus as well as suppressing the endometrial growth. (Population reports 2005, 9.)

Implants

These are small flexible rods or capsules that are placed just under the skin of the upper arm. They are barely visible but can be felt under the skin. They are one of the most effective contraceptive methods and provide long-term protection of up to 3 to five years depending on the type. Implants do not affect future fertility and fertility returns immediately after they are removed. They work by thickening the cervical mucus and this blocks the sperm from meeting the egg. They also disrupt the menstrual cycle including preventing ovulation. The most common side effect with implant is changes in the bleeding pattern although it is usually not harmful. (Population Reports 2007, 1-3.)

Copper-bearing intrauterine device (IUD)

This is a device that is inserted into a woman's uterus by a specifically trained health care provider. It is a safe and very effective contraceptive and once inserted the user benefits from up to 12 years of effective protection against unintended pregnancy although the recommended years of use may vary according to guidelines and policies of a particular country, (World Health Organization, UNFPA, UNAIDS and FHI 2011, 10). The copper IUD acts by preventing fertilization in the sense of the copper ion being toxic to the sperm. (Bhathena & Guillebaud 2008, 262.)

According to World Health Organization, UNFPA, UNAIDS and FHI (2011, 10) studies have shown that copper bearing IUD is nearly effective as male or female sterilization. It is safe and suitable to nearly all women including those over 40 years, adolescents, those who have had pelvic inflammatory disease and are currently free from infection as well as those who are HIV infected and are on antiretroviral therapy and doing clinically well.

However, just like with most other contraceptives, copper-bearing IUD has some possible health risks which may include longer, heavier and sometimes painful menstrual periods especially during the first 3-6 months of use, risk of perforation of the wall of the uterus during insertion and occasionally an IUD can be expelled from its rightful place and if not noticed the woman becomes pregnant. This method is reversible immediately upon removal.

Levonorgestrel Intrauterine Device

This is an intra-uterine device just like copper-bearing IUD. It is inserted into the uterus by a trained health professional. It contains levonorgestrel hormone. Levonorgestrel hormone is a hormone similar to the hormone progesterone produced by the body. As a hormone, levonorgestrel is used to prevent pregnancy, reduce blood loss for women with heavy menstrual periods and in preventing endometrial hyperplasia (abnormal proliferation of the endometrium). It works by preventing the release of eggs from the ovary and increases the thickness of vaginal fluid hence preventing the sperm from reaching the egg .Levonorgestrel also changes the lining of the uterus hence making it difficult for the egg to develop. Levonorgestrel intra-uterine device is only suitable for long term use and is usually replaced after every five years. It however may increase chances of developing breast cancer and

women using it need to regularly examine their breasts for any changes or lumps, (EMC Medicine Guide, 2010.)

Female sterilization

This is a method of contraception that permanently prevents women from getting pregnant. It works by blocking the fallopian tubes such that the sperm cannot meet with the egg for fertilization. The procedure for female sterilization can be surgical or non-surgical. Through a surgical procedure, the fallopian tubes are cut, sealed or tied using tiny incisions made around the abdomen. This procedure is also known as tubal ligation and it works to prevent pregnancy right away. With the non-surgical procedure, a small spring-like coil is placed into each fallopian tube through the vagina and uterus using a thin tube. The coils cause scar tissues to form in the tubes thereby blocking them. It may however take up to three months for the scar tissue to block. U.S Department of Health & Human Services (2000)asserts that sterilization cannot be undone and it is only recommended for women who are sure they never want to have a baby or who do not want to have more children.

Vasectomy

Vasectomy is an operation that makes a man permanently unable to get a woman pregnant. In the male reproductive anatomy, sperms are made in the testicles and they travel through the vas deferens to mix with the seminal and prostrate fluids. The sperm, seminal fluid and prostate fluid makes up the semen that goes through the penis to outside the body during ejaculation. Vasectomy involves cutting the vas deferens on each side such that the sperm can no longer get into the semen. This procedure may be done through a

small opening that is made on the side of the scrotum. A part of the vas deferens is pulled and cut, the ends are then sealed either by stitching or searing with heat and the opening in the scrotum is closed using stitches. The other type of vasectomy procedure is called the no-scalpel vasectomy. It involves working through a small puncture in the scrotum. This puncture (hole) is so small and heals without stitches. (Ohio State University,2013.)

Condoms

There are both male and female condoms. The male condom has a covering that fits over a man's erect penis and forms a barrier to prevent contact of sperm and egg. With correct and consistence use, male condom effectives to prevent pregnancy is about 98 %. It also protects against sexually transmitted diseases including HIV. On the other hand, female condom is made of a thin transparent and soft plastic film. It contains linings that fit loosely inside a woman's vagina hence forming a barrier to prevent sperm and egg from meeting. Effectiveness of a female condom is rated 90% when used correctly and consistently. Similar to the male condom, according to the World Health Organization (2013), female condoms also protects against sexually transmitted infections including HIV.

Spermicides and Diaphragms

Diaphragm is a cup made of latex or silicone. This device is coated with a gel and is folded for insertion into the vagina. It is placed deep in the vagina before sex and needs to cover the cervix for proper protection. On the other hand, Spermicides is a jelly cream that is designed to prevent fertilization by killing or inactivating sperm and preventing passage of sperm to the cervical canal during contact. It dissolves the lipid component in cell membrane of the

sperm. However, spermicides are not highly effective when used alone and are commonly used in combination with other barrier methods such as diaphragm for effectiveness.(Shoupe 2011, 103 and 109.)

Cervical cap

Cervical cap is a small, bowl-shaped device that fits over the cervix. It has a strap that makes it easy to remove. Like the diaphragm, the cervical cap is designed to use with the spermicide. It prevents pregnancy by creating both physical and spermicidal barrier at the opening of the cervix. After an intercourse, the cap should be left in place for at least six hours. The Association of reproductive health professionals (ARHP) maintains that the cervical cap should not be worn for more than 48 hours. (ARHP, 2011.)

Fertility awareness method

Fertility awareness based method (FAB) involves identifying the fertile days of the menstrual cycle either by observing fertility signs such as cervical secretions, basal body temperature or by monitoring menstrual cycle days, MMWR Recommendations Report (2010). According to Family Planning association (2010), it is difficult to tell the efficacy of this method and pregnancy rate vary depending on the method used or a combination of methods. Fertility awareness method is more effective when used consistently and correctly with no sexual intercourse during the fertile phase. If the person decides to have intercourse during the fertile period, other barrier methods may be used to reduce chances of pregnancy.

Withdrawal method

Withdrawal means pulling out the penis out of the vagina and away from the woman's external genitalia before ejaculation during an intercourse. It is also known as coitus interrupts or the pull out method. It can be used to prevent pregnancy when no other method is available although it requires great experience and trust. Withdrawal method has no medical or hormonal side effects and when combined with other forms of contraceptives such as the cap, condom or diaphragm it is more effective. It is however not recommended for teens, sexually inexperienced persons or men who ejaculate prematurely because a considerable experience is needed for man to be able to tell exactly when he is going to ejaculate. (Freundl, Sivin & Batar 2010, 120-121.)

Lactitional amenorrhea method (LAM).

This is a temporary contraception for new mothers whose monthly bleeding has not returned. It requires exclusive breastfeeding day and night for infants less than 6 months old. It prevents the release of eggs from the ovaries hence preventing pregnancy. It is however a temporal family planning method based on natural effect of breastfeeding on fertility. (WHO 2013.)

2.4 Adolescent use of contraceptives

According to World Health Organization (2010, 12), adolescents are eligible to use any method of contraception and must have access to a variety of choices. Age alone does not make a medical reason for denying adolescents any

method of contraception. Over the years, concerns have been raised regarding use of contraceptives. Most studies show that perceptions are a major factor influencing use of contraceptives among adolescents. Even though there is inadequate literature on perceptions and environment factors that influence adolescence use of contraceptive, perceptions about contraceptive use are influenced by information adolescents receive from family school and media. (Kinaro ,2012.)

According to Jaccard (2000, 1426), interest in the role of parents influencing the sexual behavior of adolescents has increased. Many parents adopt abstinence orientation but also discuss birth control with them to ensure they will use protection if they decide to engage in sexual intercourse. Some other parents are reluctant to adopt such approach with the fear that approving birth control may encourage adolescents to engage in sexual intercourse. Contrary to believes and perceptions, providing adolescents with information about contraception does not result in increased rates of sexual activity, earlier age of first intercourse or a greater number of partners . Instead, if adolescents perceive obstacles, they are more likely to experience negative outcome related to sexual activity. (AAP, 2007.)Social and behavioral issues should be important considerations in the choice of contraceptives methods by adolescents. Proper education and counseling before and at the time selecting a method of contraceptive can help adolescents address their problems and as well make informed and voluntary decisions, (WHO 2010, 12.)

2.5 Perception of the society regarding adolescence sex and use of contraceptives

Very often, gender stereotypes and role expectations of the society often put adolescents in various risks and limits. For instance, in some society men are taught that being sexually active is very important part of being a "man". Some may be ridiculed for not being sexually active or are teased for being homosexuals. There are those who may be encouraged to have unprotected sex and in this case sexually transmitted infection may be regarded as a rite of passage for masculinity. On the other hand, female adolescents are often encouraged to be non-aggressive and to abstain from sexual activity until marriage. A female adolescent is more respected for being quiet, innocent and unaware of any sexual matters and this places them in difficult positions and may reduce their ability to refuse unwanted sex or to even negotiate safer sexual practices when sexual intercourse is desired. In the same way, in the societies where females/girls are married early to older men, marriage confers them to the status of adulthood. However, by virtue of age difference, education, income generating capacity and the non-assertive role expectations of the young woman and her older husband, it creates an imbalanced relationship. This makes it even more difficult for the adolescent wife to discuss matters such as desired timings and number of children to have, contraceptive use or any means of protection from sexually transmitted infections. (WHO 2004, 6-7).

According to Ikamari &Towet (2007), there are theoretical patterns that have been used to explain sexual activity among adolescents in today's society. These are the social disorganization model and the rational model. The social disorganization model observes that adolescent's sexual behavior is seen as a failure of social control over the young people by the elders and the rise of behavior is directed towards personal satisfaction and emotional pleasure rather than family responsibility. Urbanization and the increased influence of

the western cultural practices to the young people are said to be responsible for the breakdown of traditional customs in the sense that the increased premarital sexuality and unmarried teenage pregnancies are seen as consequences of introduction of the western values and ways of conduct.

On the other hand, with rational adaptation model, young people exchange sexual favors for clothes, gifts or schools fees while others may opt to become pregnant as a way of proving their fertility and fitness for marriage or to gain financial benefits thereafter. This suggests that young people becoming sexually active may be a rational decision based on the benefits such as money or getting a husband verses the costs such as pregnancy and dropping out of school, abortions or even abandonment by a potential husband, (Ikamari & Towet, 2007, 1-2.)

When it comes to use of contraceptives, research have shown that very few sexually active adolescents especially in the developing countries do use modern contraceptives such as oral contraceptives or condoms although the statistics may vary with country. Among the identified limits to contraceptive use by adolescents include lack of knowledge, limited sex education and access to services, risk misperceptions and negative social norms around premarital sex and pregnancy. (Willliamson, Parkes, Wight, Petticrew & Hart 2009, 2.)

In addition, the environment for contraceptive by young people in both school and at home is not always that favorable and mostly the perceptions of contraceptives are generally negative. Majority of parents or guardian would object contraceptive use by unmarried adolescents and have negative opinion

of unmarried adolescents using contraceptives. Most parents and teachers have negative perceptions and they focus their messages on negative effects of contraceptives. Moreover, in many schools sexuality education is left to unskilled teachers who give negative messages on contraceptive use hence the information given is inadequate while as parents lack confidence to discuss sexuality issues with the young people. (Kinaro, 2012.)

Religiosity which is simply defined as religious beliefs, practices, moral values and guidance and involvement in a faith community is also another factor when it comes to use of contraceptives. As part of moral guidance most religions have traditionally taught that sexual intercourse is between a man and woman who are within the context of marriage. There are those that teach that abortion and artificial means of contraceptives particularly the abortifacient types (those that are likely to cause abortion) are morally unacceptable. For instance, the Roman Catholic is clear on its opposition to both uses of contraception and abortion while as other faith systems such the Lutherans, Evangelicals, Jews and Muslims do prohibit abortions and may have limits on the use of some birth control methods that might cause an abortion as it is the case with the Lutherans. Parental religiosity has highly been linked to adolescents' behavior in the sense that adolescents whose parents are religious, they are likely to acquire the same. Research on adolescents shows that a higher level of religiosity (which could be more frequent attendance to church and self-report of religious importance) is associated with delay in the onset of sexual activity, lower number of lifetime partners, increased conservative sexual attitudes as well as decreased likelihood of having an abortion among pregnant adolescents, (Fehring and Ohlendolrf 2007, 402-405).

3. PURPOSE, AIM AND RESEARCH QUESTIONS OF THE STUDY

The purpose of this study was to find out the knowledge, perception and information that teenagers in Kenya have about contraceptives. The aim was to provide information that can be used to increase the knowledge on the use of contraceptives amongst teenagers. To carry out this research, the researchers used the following questions to obtain information.

1. What perception do adolescents have about the use of contraceptives?
2. What knowledge do teenagers in Kenya have about contraceptives?
3. Where do teenagers get information about contraceptive use?

4. IMPLENTETION OF THE STUDY

4.1 Research Methodology

The researchers used qualitative method in achieving this thesis objective. Ritchie & Lewis (2003, 2-3) defines qualitative research as any research that uses data but does not indicate values whilst for other authors, the defining criteria is the type of data generated. Qualitative research is a situated activity that locates the observer in the real life situation. Further, it consists of a set of interpretive, material practices that transforms and makes the world visible. They transforms the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the

self. Moreover, qualitative research involves an interpretive, naturalistic approach to the world.

This entails that the researchers study things in their natural settings, attempting to create sense from them, or to interpret the phenomena in terms of the meanings people bring to them. (Norman & Yvonna 2005, 637-687.) Typically qualitative research methods are flexible since they consent to greater spontaneity and adaptation of the interaction between the researcher and the study participant. For example, qualitative methods ask mostly open-ended questions that are not necessarily worded in exactly the same way with each participant. (Mack, Woodsong, Macqueen ,Guest & Namey , 2005.)

In an attempt to understand and find out how Kenyan teenagers feel about the use of contraceptives this method of research fitted this research. As maintained by Ritchie & Lewis, (2003) the method assist researchers in understanding the perception and people in the region of study have constructed.

4.2 Study site

The study was conducted in one of the secondary school located in Nairobi area Kenya. For the purpose of anonymity, privacy and confidentiality of the participants, the researchers choose not to disclose the name of the school. We choose the school because we felt that being a mixed day school, the participants might have increased chances of accessing contraceptives as compared to those in boarding school. A day school in Kenya means that students go to school in the morning from home while a boarding school means that students stay in the school and only goes home during the

vacation which is usually after 3-4 months. The other reason was also that we estimated that adolescents in a mixed school may also have increased chances of being sexually active or are likely to develop sexual attractions amongst themselves given that they are studying together.

4.3 Participants and Recruitment

To conduct this study, the researchers used a volunteer sampling approach to gather the participants. This approach consists of people who volunteers into a survey. However, Jupp (2006) states that sometimes these volunteers might need some form of remuneration in order to participate. As for this research, there were no incentives given to participants.

The target population for this study were teenagers of ages between 13 to 17 years. The study was conducted among form 2 and 3 students since majority would range within the targeted years. The participants included both boys and girls and for proper sampling they were requested to indicate their gender and age as well.

A formal request for permission to collect data from the students was first sent to the school and after approval the recruitment was done. A letter of information (Appendix 2) explaining further the purpose and aim of the study was also sent to the participants and those who agreed to take part signed the consent forms to indicate that they agree to the terms of participation which was purely voluntary(Appendix 3). A total number of 20 students agreed to take part. Those that did not want to participate were exempted. Also as stated by Rich, (2013) this age group (13 to 17) year has increased experimentation and romantic relationship that develops during the early adolescent years.

4.3 Methods of data collection

Data was collected through narrative essay writing. As a way of structuring these experiences into meaningful units, one way of expressing them could by the use of a story/ a narrative. Narrative research method therefore captures both the individual and the context. (Moen 2006, 1-5.) In addition, Mitchell and Egundo (2003), affirms that with the narrative method of data collection, the story becomes an object of study focusing on how individuals or groups make sense of events and actions in their lives. The researchers in return capture the informant's story through techniques such as observation and interviews. This method is said to be well suited to study subjectivity, influence of culture and identity on the human condition. (Mitchell & Egundo 2003, 3.) In this research, participants were provided with a case of a young couple in school (Appedix 1), they were then required to answer a few open ended questions that were related to the case. Open ended responses provide a direct view into a respondent's own way of thinking. They respond to the attitudes that are on the respondent's mind at the time of the interview, attitudes that were presumably present before the question and perhaps remain so afterwards. (Roberts, Stewart, Tingley, Lucas, Leder-lewis, Gadarian, Albertson, & Rand 2013, 2-3.)

According to Reja , Manfreda L, Hlebec , & Vehovar (2003, 161) open-ended questions allow the respondent to set alternatives being offered and they as well allow the respondent to express an opinion without being influenced by the researcher. There is a possibility of discovering the responses that individuals give openly and therefore avoiding any biasness.

Miller, Lynn and Whicker (1998, 105), further explains that open ended questions allow unanticipated answers to be obtained and the respondents are free from any constrains. The response to open ended questions suggests the respondent's level of knowledge regarding a given topic or idea. In addition, open questions are useful when the researcher wants to give the respondents a sense of involvement in the study process hence allowing them to freely answer questions. This approach was very essential in this study since the researchers needed the participants to express themselves freely. It took only one day to collect the data. Everyone taking part in the survey was asked to use English or Swahili languages in the essay writing. The advantages of using the two languages were that it helped the researchers to carefully analyze data without any language barrier. It also made it easier for participants to express themselves much more easily with either of the language that they were comfortable with.

4.4. Data Analysis

Taylor & Gibbs (2010) defines qualitative data analysis as methods and means of moving collected qualitative data into some form of, interpretation consideration or clarification of the people and situations that are being examined. In addition Taylor and Gibbs (2010) stresses that qualitative data analysis frequently depends on an interpretative philosophy. The main aim is to analyze and come up with a meaningful and symbolic content of qualitative data.

Data handling and analysing was done and content analysis was used. Content analysis is a tool used to describe communication processes. For example this tool can be used in visual media, personal documents as well as open ended questioner. (Stambor ,2005.)

In order to achieve a complex data from this research the researchers used thematic analysis. In other views Gibson (2006) claims that thematic analysis is a way of dealing with data and the method includes creation as well as application of codes to data. Furthermore, Boyatizis (1998, 1) describes thematic analysis as a way of seeing and making sense from materials that seems different. In addition the literature asserts that the process is used for encoding qualitative information.

In order to synthesize the findings the researchers began by summarizing all the contents in all papers. Differences and similarities were taken into consideration. Main findings from all papers were coded and then grouped according to their similarities. After developing themes and comparing codes the final parts were to intently scrutinized so as to come up with accurate findings, (Aveyard 2010, 128-132)

5. RESULTS

Perception about contraception use

According to most participants who responded to the essay, there were three different perception opinions from each group. The first group had those who were against the use of any means of contraceptives amongst teenagers. These participants suggested that it was better to abstain from sex before marriage and to be patient. Other said adolescents should try to seek for counseling whilst others stated that it even better stay away from their girlfriends or boyfriends rather than engaging in sexual activities.

The second group was for those who were not against the use of contraceptives. From these participants some were even admitting that they even do it.

> *''I changed my school clothes and asked my mother for 100 bucks and she didn't ask what was the money for. I went to the clinic only to purchase some condoms. When I went to girl's home the girl asked if I had ever had sex and I said no. There after we had sex and used protection and no disease got us and everyone was happy very very happy''*

Most participants in this group emphasized on the use of contraceptives like condoms rather than pills to avoid a girl getting pregnant and also to protect themselves against STD's. From those who were against the use of pills claimed that they had a lot of adverse effects to girl's health.

> *''I have seen a girl in our school of which she even told us that she had taken some pills in order to avoid pregnancy and after that she was in trouble because she was bleeding heavily''*

The third group had participants who had mixed feelings towards contraceptive use by teenagers. This group preferred that adolescents should try to abstain from sex until they get married; on the other hand they stated that if they cannot abstain they should make use of contraceptive.

> *''First they should try to control themselves, Secondly use protection''*

"If possible they should try very hard to abstain from sex because is committing a sin. If they can't take it anymore they have to use the proper instrument like a condom"

Knowledge about contraceptives

Based on the collected data almost all the participants had an idea what contraceptives were but it showed that they did not have clear picture on how to use them. Most of them had only knowledge on the use of condoms and pills and at the same time they also knew about the adverse effects of some contraceptives.

"Condoms help in preventing unwanted pregnancies even though there are different types of contraceptive eg pills family planning etc"

There were some participants who thought condoms were not part of contraceptives as they thought that contraceptives only meant pills, injection and others.

"They can use protection condom and contraceptives to prevent pregnancy"

There were some teenagers who also stated that use of contraceptives could be harmful to young adolescents in future. Some stated that use of pills and injections could lead to inability to conceive a baby in future.

"In this case they can visit a doctor and seek help of which the girl can be given pills but according to me I think it is not right choice since I really

fear because I once attended a seminar and I heard they can lead to big problems"

"With my boyfriend, I prefer us using condoms while having sex because I hear pills are not good. I may not be able to have a child in future and I don't want that".

According to the given data it clearly showed that teenagers' knowledge about contraceptive use is limited and mainly focuses on condoms and pills.

Source of information

Majority of the participants knew where to get information about contraceptives. Most of them suggested guidance and counseling as the suitable source of information. They knew where to get information for instance from the doctors, teachers, friends and older person. Some suggested specific places where information about sex and HIV counseling services are offered. They were however those who had reservations about discussing issues about sex and contraceptives with parents and only suggested that one could do so if they are free and open with the parents.

"They should first consult a counseling center and be taught on the effects of having sex during their teenage stage, what is going to happen after having sex and they should be checked for any disease so that they may not pass to each other"

"They could go to seminars for youths and even attend motivational sermons in churches and schools. They can also seek guidance and counseling from their teachers"

"Stecy and Frank could also go for guidance and couselling and visit VCT for more information".

In this case VCT (Voluntary Testing and counseling) is a center where people go for free HIV testing (NASCOP 2001).

Some participants also suggested that one could find information online or by watching television. They are few also who suggested use of internet as well but the cited the challenges getting funds.

"They can goggle information from the internet. Also issues about contraceptives are aired on television so many times and they can ask their parents for money if they are free with them"

A few suggested that one could find information from the hospitals or in the pharmacy as well.

"They can visit a hospital or chemist and ask for help or they can as well consult their friends who knows more about contraceptives and that can help them"

"They can visit any clinic to gather information or get help from trustworthy people who can guide them"

Some suggested seeking spiritual help on what to do.

> "*Be speaking to God through prayer and He will guide you, in short go to church or seek help from a pastor.*"

6. DISCUSSION

Participants in this study expressed different view and knowledge regarding use of contraceptives. Majority of them mentioned that pills and condoms are among the available contraceptive methods to use. Some participants knew much about abstinence and were against sex before marriage. However, even though some participants advocated for abstinence, there were those who openly stated that they were already sexually active.

From these results, the there was no clear information as to how the participants learnt about contraceptives but from the discussions on the essays, majority seemed to know where to find information. They however did not clearly state how they learnt about the sources. Guidance and counseling, hospitals, friends, teachers and internet were among the most suggested sources of information. Majority of the participants however had reservations regarding consulting use of contraceptives and sex from parents citing fears and only suggested one could only consult a parent only if they have a free or open relationship. From this study, we compared a fact that has been described by World Health organization (2013) that stated that sex education amongst adolescents remains a global challenge due to its

sensitivity and biases derived from attitudes and values that are either personal, regional or are related to traditions.

It was also evident that the participants had less knowledge regarding contraceptives and the types of contraceptive methods available. As earlier stated, there were those who thought condoms and contraceptives are two different things. As stated by the KNBS (2010) in our literature review, it clearly showed most adolescent lacked insufficient knowledge about contraceptives and as a result they end up using them the wrong way.

Williamson et al (2009, 2), states that among the identified limits to contraceptive use by adolescents include lack of knowledge, limited sex education and access to services and negative social norms around premarital sex and pregnancy. Several participants in this study expressed negative perception on use of contraceptives. Most participants described use of contraceptives by the teenagers as harmful and those using them are exposed to risks such as excessive bleeding or may not be able to have children in future. On the contrary, World Health Organization (2004), states that with the exception of male and female sterilization, all the other methods of contraceptives that are fit for healthy adults are potentially appropriate for healthy post-pubertal adolescents. Once a teenage has reached puberty, methods that are physiologically safe for adults, they are physiologically safe for adolescents. However, the decision making consideration of more than just medical safety just like it is with adults and before discussing contraceptives options, adolescents must be given an opportunity to express their needs and to freely decide whether they want protection against pregnancy, HIV-Aids or even other sexually transmitted diseases (STDs). Once they have decided, sexually active adolescents should be presented with options that if used consistently and correctly, will cater for individual needs and circumstances, (WHO 2004,10.)

Based on the findings of this study, there is need to improve sex education amongst teenagers. This is in regard to the curricular of subjects and things that our society, religion and traditions demands that should be taught or not taught. As recommended by the World Health Organization, teenagers should be provided with sufficient knowledge regarding sex. They should also be given an opportunity to decide freely on methods of contraceptives including abstinence based on accurate knowledge and not misperceptions.

6.1 Credibility, Transferability and dependability.

Trochim (2006) claims that credibility can be utilized in proving the reliability of the outcome. Additionally, using tactics that assists in the certification of honesty or trustworthy of the study, participants were given a free choice participation in the study in order to remain with willing participants. Participants were clearly informed that there were no correct or wrong answers on this study research so they were free to share their experiences without fear of losing the credibility of the study, (Shenton (2004). The participants were given an opportunity to respond to the interview by either writing the essays in English or and in Swahili language which increased the credibility of the study.

According to Trochim (2006), transferability refers to the extent to which the results of qualitative research can be comprehensive or transferred to other contexts or settings. Furthermore the author claims that in order to enhance transferability the research was done in a clear and comprehensive way. Thus, the findings of study can be used focusing teenagers behaviours on contraceptive use. According to (Cuba 1981 Cited by Krefting 1991) the literatures recommend that the dependability criterion deals with the

uniformity of findings. In order to enhance the dependability of our study open ended questions were used.

6. 2 Ethical consideration

The research was conducted under the ethical guidelines described in the 2005 ethical conduct of biomedical research which involved human subjects in Kenya. In this document, informed consent is highly emphasized to ensure that individual privacy is maintained whether or not they participate. These guidelines states that to provide informed consent the participants must be informed of the purpose, methods, risks, benefits and alternatives to the research, National Council for Science and Technology Nairobi, Kenya (NCSTN,2005).

A request to carry out the research was sent to the school administration before start of the study. The purpose and the aims of the study were explained and participants were informed well informed of the study and volunteering in advance before being engaged. This was done through letters sent to both the school administration and to the participants. To ensure confidentiality and privacy, no names were required. The participants were required to sign consent forms before taking part in the study to ascertain that they voluntarily agreed to take part. The researchers also followed the Ethical guidelines defined by Jyvaskyla University of Applied Sciences (JAMK) to ensure credibility and liability of this study JAMK (2013)

7. CONCLUSION AND RECOMMENDATIONS

Sex education amongst teenagers remains a great challenge globally. Kenya National Bereau of statistics (2010), Due to its sensitivity and biases derived from attitudes and values related to different societies' norms and traditions as well as religion, most adolescents do not receive adequate information and guideline regarding sex. The rising number of teenage pregnancies, abortions and risk of HIV-AIDs infections are a clear indication that a high number to young adolescents are sexually active.

In Kenya just like it is in other parts of Africa, sex remains a taboo subject and most parents and young people tend to shy away from discussing it. In cases where sex is discussed, abstinence until marriage is highly advocated. In this study, most participants had reservations regarding consulting their parents about sex and use of contraceptives. However, from the information they gave, some of them admitted that they are or have been sexually active and they have used some forms of contraceptives. In this case, it would be easy to assume that their parents or guardians may have a perception that these young people know nothing about contraceptives or they are not sexually active. On the contrary, the participants seemed to know much even though they seemed to have insufficient knowledge regarding contraceptives.

While the aim of this study was to provide information that can be used to increase the knowledge on use of contraceptives amongst teenagers, the main goal was not to promote use of contraceptives by teenagers. Instead, the purpose of the study was to find out the knowledge that teenagers in Kenya have about contraceptives. Based on the results, the participants had

insufficient knowledge regarding contraceptives and with evidence from our literature review misperception regarding contraceptive use was also evident. There were those who knew about different methods of contraceptives while there some who for instance described condoms and contraceptives as two different things. There were also those who stated that some forms of contraceptives may be harmful to the young adolescents in future.

Based on the findings of this study, there is really great need to broaden sex education program in the Kenya and in the entire globe as well. In regard to statistics of young adolescents dropping out of school due to early pregnancies, cases of unsafe abortions or mis-use of contraceptives, there is need to broaden sex education curricular and not shy away from discussing some topics with the young people. Adolescents should be provided with enough information to be able to make concrete decisions and not just restrict them to some choices that to some extent they end up misusing or might mislead them. We would however recommend further research targeting adolescents in other groups and institutions since we only dealt with one school.

8. REFERENCE

American Academy of Pediatrics 2007.Contraception and adolescents.Accessed on 27.11.2013. http://pediatrics.aappublications.org/content/120/5/1135.full

Association of Reproductive Health Professionals (ARHP) .2011. Choosing a birth control method. Accessed on 8.12.2013. http://www.arhp.org/Publications-and-Resources/Quick-Reference-Guide-for-Clinicians/choosing/Cervical-Cap

Aveyard H., 2010. Doing a Literature Review in Health and Social care. A practical guide 2nd Edition.

Bhathena ,R,K.& Guillebaud,J.2008. Journal of Obstetrics and Gynaecology vol. 28 issue 3. Accessed on 6.11.2013. http://web.ebscohost.com.ezproxy.jamk.fi:2048/ehost/pdfviewer/pdfviewer?vid=4&sid=dc7fec8e-de3c4e55b3ebed84036b2dd0%40sessionmgr4002&hid=4106

Blanc, A, K. Tsui, A, O. Croft, T, N. & Trevitt, J, L. 2009. International perspectives on sexual and reproductive health. Accessed on 9.12.2013 http://www.guttmacher.org/pubs/journals/3506309.html

Boyatzis,R,E.1998. Transforming Qualitative Information: Thematic Analysis and Code Development. http://isites.harvard.edu/icb/icb.do?keyword=qualitative&pageid=icb.page340897

Centre for the Study of Adolescence (CSA) & Population Action International (PAI). 2009. Accessed 8.11.13 http://www.populationaction.org/wpcontent/uploads/2011/12/Measure_if_Commitment.pdf

EMC guide. 2010 pdf. Levonorgestrel. Accessed on 7.12.2013.
http://www.medicines.org.uk/guides/levonorgestrel/blood%20clotting

Faculty of sexual and reproductive Healthcare .2008. Faculty of Sexual and reproductive Healthcare clinical guidance. Progestogen only pills. Accessed on 5.12.2013.
http://www.fsrh.org/pdfs/CEUGuidanceProgestogenOnlyPill09.pdf

Family Planning Association .2010. Fertility awareness method. Accessed on 8.11.2013.
http://www.fpwa.org.au/resources/Infosheet_FAM-web.pdf

Fehring ,R,J & Ohlendorf,J.2007. The influence of religiosity on contraceptive use and abortion in the United States. Accessed on 14.01.2014.
http://epublications.marquette.edu/cgi/viewcontent.cgi?article=1051&context=nursing_fac

Freundl,G. Sivin,I & Batar,I. 2010. The European journal of contraception and reproductive Health care. State of the art of non-hormonal methods of contraception:Natural family planning. Accessed on 8.12.2013.
http://web.ebscohost.com.ezproxy.jamk.fi:2048/ehost/pdfviewer/pdfviewer?vid=16&sid=46dea3cb-236a-4d77-bdcc-cf9dec93807b%40sessionmgr4002&hid=4209

Gibson,W. 2006. Thematic analysis. Accessed on 17.12.2013
http://avetra.org.au/wp-content/uploads/2011/09/Thematic-analysis.pdf

Godeau ,E., Gabhainn ,S, N.,Vignes ,C., Ross, J.,Boyce ,W & Todd ,J.,2008. Contraceptive Use by 15-Year-Old Students at Their Last Sexual Intercourse Accessed on 17.02.2014.
http://www.nuigalway.ie/hbsc/documents/godeau_2008_contraceptive_use_apam_1621_6673.pdf

Guilleband, J. 2004. Contraception today. A pocketbook for general practioners .Fifth edition. E-bray book Accessed on 11.11.2013.http://site.ebrary.com.ezproxy.jamk.fi:2048/lib/jypoly/docDetail.action?docID=10054173&p00=contraceptives

Hossaian,S,M,I,. Khan,M., Rahman M & Sebastian,M,P. 2005.Emergency contraceptive pills. South East Asia regional training manual. Accessed on 5.11.2013.
http://pdf.usaid.gov/pdf_docs/pnadk426.pdf

IkamariL,D,E.,Towett ,R .2007. Sexual initiation and contraceptive use among female adolescents in Kenya. Accessed on 3.01.2014.
http://www.bioline.org.br/pdf?jh07002

International Planned Parenthood federation. Progestin only injectable Accessed on 05.12.2013
http://ippf.org/our-work/what-we-do/contraception/progestin-only-injectables

Jaccard, J. 2000. Adolescent perceptions of maternal approval of birth control and sexual risk behavior. Accessed on 27.11.2013.
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447630/pdf/10983201.pdf

Jupp ,V.2006. The sage dictionary of social research methods. Accessed on 05/12/2013.
http://srmo.sagepub.com/view/the-sage-dictionary-of-social-research-methods/n223.xml

Jyväskylä University of Applied Sciences 2013. Ethical principles for JAMK university of Applied Sciences. Accessed on 20.1.2013.
http://opintooppaat.jamk.fi/Global/Tietoa%20JAMKista/Esittely/Ethical%20Principles%2020130513.pdf

Kinaro J, W. 2012. Advances in sexual medicine .Vol 3.no. 1(2013). Accessed on 27.11.2013.
http://file.scirp.org/Html/1-1990020_27120.htm

Kinaro,J,W. 2011.Perceptions as a barrier to contraceptive use among adolescents: A case study of Nairobi Kenya. Accessed on 10.1.2014. http://uaps2011.princeton.edu/papers/110662

Klass, A. Bailey,S,J.,& Bullock J 2004. Adolescence: Supporting the journey from childhood to Adulthood. Montana State University Journal MT200407 issued 8/04. Accessed on 1.11.2013. http://msuextension.org/publications/HomeHealthandFamily/MT200407HR.pdf

Krefting,L .1991. Rigor in Qualitative Research: The Assessment of Trustworthiness. Accessed on 05.12.13. http://portal.limkokwing.net/modulemat/rigor%20in%20qualitative%20research%20trustworthiness%20test%281%29.pdf

Kenya National Bereau of Statistics.2010. Demographic and Health Survey Accessed on 10.11.2013 http://apps.who.int/medicinedocs/documents/s17116e/s17116e.pdf

Knowles, J.2002.A History of birth control .Accessed on 11.10.2013 http://www.plannedparenthood.org/files/PPFA/history_bc_methods.pdf

Mack,N.,Woodsong,C.,Kathleen,M.Macqueen,K,M.,Guest,G.&Namey,E.2005. USAID , A Data Collector's Field Guide. Accessed on 05.12.2013. http://youthsextion.files.wordpress.com/2011/04/06fhiqualitative-rm.pdf

Mfono ,Z. 1998. Teenage Contraceptive Needs in Urban South Africa: A Case Study. Accessed on 8.11.2013 http://www.guttmacher.org/pubs/journals/2418098.html

Miller J, Lynn M, and Whicker G ,1998. A handbook of research methods in public administration. E-bray book . Accessed on 19.2.2014. http://site.ebrary.com.ezproxy.jamk.fi:2048/lib/jypoly/docDetail.action?docID=10051312&p00=open-ended%20questions

Mitchel, M & Egundo ,M. 2003. A review of Narrative Methodology. Accessed on 20.01.2014.
http://www.webpages.uidaho.edu/css506/506%20readings/review%20of%20narritive%20methodology%20australian%20gov.pdf

MMWR Recommedations & Report 2010. Vol 59, issue RR. Accessed on 8.12.2013.
http://web.ebscohost.com.ezproxy.jamk.fi:2048/ehost/resultsadvanced?sid=46dea3cb-236a-4d77-bdcc-cf9dec93807b%40sessionmgr4002&vid=11&hid=4209&

Moen, T. 2006. Reflection on the narrative research approach. Accessed on 20.1.2013.
http://www.ualberta.ca/~iiqm/backissues/5_4/pdf/moen.pdf

National AIDS and STD Control Program (NASCOP). 2001. Accessed on 27.1.2014.
http://www.who.int/hiv/topics/vct/KenyaNational%20Guidelines%20for%20VCT.pdf

National Council for Science and Technology Nairobi Kenya.2005. Guidelines for Ethical conduct of biomendical research involving human subjects in Kenya. Accessed on 20.1.2014.
https://webapps.sph.harvard.edu/live/gremap/files/ke_NCST_guidelines.pdf

Norman ,D,K. & Yvonna, L, S.2005 . The Sage handbook of Qualitative research 4th edition.
http://books.google.fi/books

Ohio State University, department of urology. Vasectomy. Accessed 07.12.2013
http://urology.osu.edu/20946.cfm

Oxford University press .2013 .Oxford Dictionaries. Accessed 10.11.2013.
http://www.oxforddictionaries.com/definition/english/contraception

Population reports 1996. Academic Journal. Vol 24 issue 2. Combined injectable contraceptives. Accessed 5.12.2013. http://web.ebscohost.com.ezproxy.jamk.fi:2048/ehost/detail?sid=ad599f82-50a5-414a-a56c-667fe8da902e%40sessionmgr4003&vid=1&hid=4207&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=afh&AN=480836

Population reports .2005. Combined injectables. Academic journal vol. 32 issue 3. Accessed on 5.11.2013. http://web.ebscohost.com.ezproxy.jamk.fi:2048/ehost/pdfviewer/pdfviewer?sid=b03cb8a2-0214-4b66-a9e4-db31c47d9f16%40sessionmgr4003&vid=2&hid=4207

Population reports 2007. Implants: Tools for providers. Academic journal Issue 15. Accessed on 7.12.2013. http://web.ebscohost.com.ezproxy.jamk.fi:2048/ehost/pdfviewer/pdfviewer?vid=8&sid=46dea3cb-236a-4d77bdcccf9dec93807b%40sessionmgr4002&hid=4209

Reja U, Manfreda L, Hlebec V, and Vehovar V 2003. Open-ended vs. close-ended questions in web questionares. Accessed 19.02.2013

http://www.stat-d.si/mz/mz19/reja.pdf

Rich, P. 2013. Recognizing Healthy & Unhealthy Sexual Development in Children. Accessed on 05.12.2013. http://www.mnadopt.org/Factsheets/Recognizing%20Healthy%20&%20Unhealthy%20Sexual%20Development%20in%20Children.pdf

Ritchie, J & Lewis,J. 2003. Qualitative Research Practise: Accessed on 13.02.14. http://196.29.172.66:8080/jspui/bitstream/123456789/1231/1/122.pdf

Roberts E, Stewart M, Tingley D, Lucas C, Leder-lewis J, Gadarian S, Albertson B, and Rand G 2013. Structural topic models for open-ended survey responses. Accessed on 19.02.2014
http://scholar.harvard.edu/files/dtingley/files/topicmodelsopenendedexperiments.pdf

Shenton ,A, K. 2004.Strategies for ensuring trustworthiness in qualitative research projects. Accessed on 05.12.2013.
http://www.crec.co.uk/docs/Trustworthypaper.pdf

Shoupe D. 2011. Gynecology in Practice. Contraception. Ebrary book. Accessed on 18.02.2014.
http://site.ebrary.com.ezproxy.jamk.fi:2048/lib/jypoly/docDetail.action?docID=10510609&p00=spermicides%20diaphragms

Stambor, Z. 2005. Content analysis: Accessed on 19.12.2014

http://psychology.ucdavis.edu/faculty_sites/sommerb/sommerdemo/content/intro.htm

Taylor, C & Gibbs, G, R., 2010. What is Qualitative Data Analysis? Accessed on 06.12.2013.
http://onlineqda.hud.ac.uk/Intro_QDA/what_is_qda.php

Trochim ,W,M,K.,2006.Research Knowledge Base. Accessed on 05.12.2013
http://www.socialresearchmethods.net/kb/qualval.php

Trochim ,W,M,K., 2006.Research Knowledge Base. Accessed on 06.12.2013.
http://www.socialresearchmethods.net/kb/dedind.php

UNICEF .2012. Progress for Children. A report card on adolescents. Accessed on 1.11.2013.
http://www.unicef.org/media/files/PFC2012_A_report_card_on_adolescents.pdf

University of Maryland Medical Center. Adolescent development. 2013. Accessed on 1.11.2013.
http://umm.edu/health/medical/ency/articles/adolescent-development

U.S Department of Health & Human Services. Female sterilization fact sheet.2000. Accessed on 7.12.2013.
http://www.hhs.gov/opa/pdfs/female-sterilization-fact-sheet.pdf

Wanjala ,J. 2011. Kenyans Clash in debate to bring sex education into schools. Global press journal. Accessed on 7.11.2013.
http://www.globalpressjournal.com/africa/kenya/kenyans-clash-debate-bring-sex-education-schools

WHO.2008.Department of child and Adolescent Health and Development Geneva. Accessed on 7.11.2013
http://whqlibdoc.who.int/hq/2009/WHO_FCH_CAH_ADH_09.03_eng.pdf

WHO .2011.John Hopkins Bloomberg School for Public Health Center for Communication Programs Knowledge for Health Project. Family Planning. A global handbook for providers. Accessed on 10.11.2013.
http://whqlibdoc.who.int/publications/2011/9780978856373_eng.pdf

WHO.2013. Family Planning. Factsheet no. 351. Accessed on 10.11.2013
http://www.who.int/mediacentre/factsheets/fs351/en/

WHO .2007. International agency for research on cancer. Volume 91. Accessed on 10.11.2013.
http://site.ebrary.com.ezproxy.jamk.fi:2048/lib/jypoly/docDetail.action?docID=10255175

WHO.2013. Maternal, newborn, child and adolescent health .Accessed on 1.11.2013.
http://www.who.int/maternal_child_adolescent/topics/adolescence/dev/en/

WHO.2010.Medical eligibility criteria for contraceptive use 4th edition. Accessed on 27.11.2013
http://whqlibdoc.who.int/publications/2010/9789241563888_eng.pdf

WHO.2013. Sexual and Reproductive Health. Accessed on 29.11.2013 http://www.who.int/reproductivehealth/topics/family_planning/coc/en/

WHO.2013. Sexual and Reproductive Health. Accessed on 7.11.2013. http://www.who.int/reproductivehealth/topics/adolescence/education/en/index.html

WHO.UNFPA, UNAIDS & FHI.2011. The TCu380A intrauterine contraceptive Device (IUD): Specification, Prequalification and Guidelines for procurement.2010. Accessed on 6.11.2013 http://www.unfpa.org/webdav/site/global/shared/procurement/07_resources/IUDbook_finalwlinks_042911.pdf

WHO.2004. Contraception. Issues in Adolescent health and development. Accessed on 03.01.2014. http://whqlibdoc.who.int/publications/2004/9241591447_eng.pdf

WHO.2004 department of Child and Adolescent Health and Development Geneva, Department of reproductive health and research Geneva. Accessed on 29.1.2014 http://whqlibdoc.who.int/publications/2004/9241591447_eng.pdf

Williamson,L ,M., Parkes ,A., Wight .D, Petticrew, M & Hart, G J. 2009. Limits to modern contraceptive use among young women in developing countries 2009 .A systematic review of qualitative research. Accessed on 3.01.2014. http://www.reproductive-health-journal.com/content/pdf/1742-4755-6-3.pdf

APPENDIX 1

Essay Cases

Before answering the following please write your age and tick your gender.

- o MALE
- o FEMALE

AGE……

Case 1:

Stecy and Frank are form 3 students in a certain mixed secondary school. They also live in the same neighborhood. Stecy is Frank's girlfriend and they love each other so much. They both want to complete their studies but at the same time they are not able to resist the urge to have sex even though they are not yet married. Stecy is afraid of getting pregnant and Frank is also not ready to be a father. They both do not want to acquire any sexually transmitted disease either (STD).

Write an essay considering the following:

- What do you suggest Stecy and Frank should do in this situation?

……
……
……
……
……
……
……
……
……
……
……

……

- What options are available for Frank and Stacy to avoid unwanted pregnancy

……
……
……
……
……
……
……
……
……

- How can Stacy and Frank get information or support about contraceptives?

……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……

APPENDIX 2

Letter of information and consent form for the participant

Margaret Miano & Simbarashe Mashereni

Jyväskylä University of Applied Sciences, Finland,

Degree Programme in Nursing.

Dear participant,

We are students of Jyvaskyla University of Applied Sciences in Finland. You are requested to take part in a research study for our Bachelors thesis in nursing. This study seeks to find out the knowledge and perceptions that teenagers have about contraceptives. The aim is to provide information that can be used to increase the knowledge on the use of contraceptives amongst teenagers. Once you have agreed to take part on this study you will be requested to write an essay on some topics that you will be provided for. You are free to write using English or Swahili or both. You will not be required to write your name or any other personal information on the essays.

If you agree to take part in this study, your personal information will be kept confidential. Data received will only be used for the purposes specified and will not be distributed to anyone else. We will destroy the data after publishing the outcomes. Participation to this study is voluntary and no rewards will be received by students for participating. Should you have any questions, please ask.

If you agree to participate, we kindly request you to sign the consent form attached to this letter to confirm your consent to participate in this study.

We thank you in advance for your participation.

Yours sincerely,

Margaret Miano and Simbarashe Mashereni

Emails:f5475@student.jamk.fi , f8077@student.jamk.fi

APPENDIX 3

STATEMENT OF CONSENT:

I have clearly read and understood the purpose and aim of the study. I recognize that my participation is voluntary and that I can pull out from the study at anytime without prejudice. Signing this form below means that I am indicating that everything is clear and has been explained to me. I am indicating that I understand how the study data will be used and how my privacy will be protected. My institution knows that I am taking part in this study.

Name_____

Date _____

Signature_____