# From adolescents own perspectives:

# Perceptions of contraceptives and contraceptive use.

**A qualitative study in Arusha, Tanzania.**

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# ABSTRACT


**From adolescents own perspectives: Perceptions of contraceptives and contraceptive use. A qualitative study in Arusha, Tanzania.**

*Live Storehagen*

**Introduction:** Adolescents represent a large and fast growing demographic group where sexual activity brings serious consequences for today's generation of adolescents. In Tanzania, 5.1% of the adult population (>15) is living with HIV, and 23% of girls (15-19) have begun childbearing. Increased use of modern contraceptive can be one important factor among others, in terms of improving adolescents' sexual and reproductive health in Tanzania.

**Research aim:** The aim of this study was to explore adolescents' perceptions of contraceptives and contraceptive use in Tanzania.

**Methods:** This study entailed 22 individual interviews and 4 focus group discussions with unmarried boys and girls aged 15-20. Most of the participants were secondary highs school students, both from an urban and a rural area. The data obtained was analysed using Systematic Text Condensation.

**Findings:** The participants perceive modern contraceptives as family planning methods, with the word "family planning" taking on a literal meaning. Unmarried adolescents using contraceptives are stigmatized, and as a consequence they have problems with accessing contraceptive health services. Adolescents have basic knowledge of modern contraceptives, and know they are effective in terms of protecting against unwanted pregnancies. However, use seems to be limited by misconceptions, especially fear of infertility. Uncertainty related to condoms' effectiveness exists, and the perception that condom use is not "sweet" seems to have established itself as a truth regardless of personal condom experience. Adolescents are worried about teenage pregnancies, but do not seem to be worried about getting HIV or other STIs. Strong cultural norms and religious beliefs influence adolescents' perceptions of contraceptives, and gender imbalances make young girls vulnerable to HIV and unwanted pregnancies. Talking about sexuality and contraception is regarded as taboo, and critical socialization institutions, such as families and schools, seem to focus on discouraging the use of contraceptives and tell them abstaining is the right "method" to use. Adolescents seem to desire more comprehensive sexual health education, and all the participants want a small family size in the future.

**Conclusion:** Increasing the use of modern contraceptives requires cultural-sensitive and youth-friendly interventions that focus on what adolescents are concerned with. In addition, adolescents need more information to counter negative perceptions.

# ABBREVIATIONS

| | |
|---|---|
| AIDS | Acquired Immunodeficiency Syndrome |
| CIOMS | Council for International Organizations of Medical Sciences |
| DHS | Demographic Health Survey |
| FGD | Focus group discussion |
| HIV | Human Immunodeficiency Virus |
| NGO | Non Governmental Organization |
| NIMR | National Institute for Medical Research (Tanzania) |
| NSD | Norwegian Social Science Data Services |
| REK | Regional Ethical Committee (Norway) |
| STC | Systematic Text Condensation |
| STI | Sexually transmitted disease |
| WHO | World Health Organization |

# DEFINITIONS OF TERMS

**Adolescence**: Means the period of life between childhood and adulthood (WHO).

**Adolescents**: WHO defines adolescents as those aged 10-19. Early adolescence means those aged 10-14, and late adolescence means those aged 15-19. In this study the term "adolescents" or "young people" are used to represent the participants in the study who were aged 15-20.

**Contraception:** Contraception means preventing a pregnancy with either artificial methods or using other techniques.

**Culture:** Culture is "*the total of the inherited ideas, beliefs, values, and knowledge, which constitute the shared bases of social action*" and "*the total range of activities and ideas of a group of people with shared traditions, which are transmitted and reinforced by members of the group*" (Collins' English Dictionary). In this study, culture refers to cultural beliefs, values, ideas and practices in relation to contraception and contraceptive practices, and the cultural practice of sharing knowledge of contraception with others.

**Family planning:** The term "family planning" usually implies a couples' ability to get the desired number of children, and the preferred spacing and timing of the births. Family planning is sometimes used as a synonym for birth control, and may also include treatment of involuntary infertility. For this study family planning is equivalent to contraception, and the latter will be used wherever feasible in this study.

**Family planning services**: Family planning services include education, counselling, information and provision of different family planning methods.

**Gender:** Gender refers to socially constructed characteristics of males and females (WHO, 2002).

**Norms**: Norms are "*an established standard of behaviour shared by members of a social group to which each member is expected to conform*" (Collins' English Dictionary).

**Reproductive health**: Reproductive health is *"a state of complete physical, mental and social well-being - and not merely the absence of disease or infirmity - in all matters relating to the reproductive system and to its functions and processes"* (Cairo definition, UN. Report of the International Conference on Population and Development, 1995).

**Sexual health:** Sexual health is "*a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled*" (WHO, 2006a).

**Modern contraceptives:** Modern contraceptives refer to contraception introduced to Tanzania by Western, and are usually being prescribed by medical practitioners, nurses or pharmacists. Modern contraceptives comprise contraceptive pills, IUDs, injections, implant, condoms and sterilization.

**Condoms:** Condoms are sheaths or coverings worn around an erect penis. Prevent sperm and egg from meeting. (WHO, Fact sheet N°351, 2013). In this study condoms refer to male condoms.

**Female sterilization**: Permanent contraception. The fallopian tube is blocked or cut. Eggs are blocked from meeting sperm (WHO, Fact sheet N°351, 2013).

**Implant:** Rods or capsules containing progestogen. Placed under the skin. Prevents ovulation and thickens cervical mucous to block sperm and egg from meeting (WHO, Fact sheet N°351, 2013).

**Injections:** Two types. 1) Injections with progestogen every 2 or 3 months. Prevents ovulation and thickens cervical mucous to block sperm and egg from meeting. 2) Monthly injections with estrogen + progestogen. Injected into the muscle. Prevents ovulation. (WHO, Fact sheet N°351, 2013).

**IUD:** Interauterine device. Two different types: One contains copper that is inserted into the uterus. Damages sperm and prevents it from meeting the egg. The other type contains levonorgestrel hormone that is steadily released in small amounts and suppresses the growth of the lining of uterus (WHO, Fact sheet N°351, 2013).

**Male sterilization:** Permanent contraception, also called vasectomy. The vas deferens tubes that carry sperm from the testicles are cut or blocked. Prevents ejaculation (WHO, Fact sheet N°351, 2013).

**Oral contraceptives**: "The pills" are combined oral contraceptives containing two hormones (estrogen and progestogen) that prevent ovulation. "The minipills" are progestogen-only pills that prevent ovulation and thicken cervical mucous to block sperm and egg from meeting (WHO, Fact sheet N°351, 2013).

**Traditional contraceptives:** Traditional contraceptives refer to measures or techniques obtained outside the formal health care sector to prevent a pregnancy. This study focus mainly on three different traditional contraceptives:

**Abstinence:** Means abstaining from sex.

**Rhythm method:** A calendar-based method where fertile days in a women's menstrual cycle are monitored, and (unprotected) sex is avoided on the most fertile days. Also called periodic abstinence, fertility awareness methods or natural family planning (WHO, Fact sheet N°351, 2013).

**Withdrawal:** The man withdraws his penis from the partner's vagina before ejaculation. Also called coitus interruptus (WHO, Fact sheet N°351, 2013).

# 1 INTRODUCTION

## 1.1 Background for the study

About one billion of today's population is adolescents between 10 and 19 years of age, and 70% of them live in developing countries (1). Globally, young people represent a large and fast growing demographic group, where the environment they grow up in is rapidly evolving. In addition, adolescence is a vulnerable time in life where youths are particularly vulnerable to sexual and reproductive health issues. During adolescence people start to become more experimental, and potentially high-risk behaviour begins. Sexual debut often takes place in this period, especially during late adolescence (15-19 years) (2).

Sexual activity brings serious consequences for today's generation of youths, such as early pregnancies and sexually transmitted infections (STIs), including HIV, where adolescents in sub-Saharan Africa seem to be more heavily affected than any other region in the World (3). Abortion is mainly illegal and unsafe in sub-Saharan Africa. However, data suggests that a high number of abortions occur among adolescents in sub-Saharan Africa, especially where contraceptive use is low (4).

Historically, health services for adolescents have not been differentiated from services for children or adults, although adolescents are developmentally different. Health services for unmarried adolescents are offered as part of child health care which do not include sexual and reproductive health (3). Family planning services have been provided in sub-Saharan Africa since their introduction in the late 1970s, provided as a part of maternal and child health services (4). As a consequence, these services have been perceived as services for adults, creating barriers for young people to access contraceptive services. A small proportion of unmarried, sexually active adolescents use modern contraceptives, and contraceptive use among adolescents is assumed to be significantly lower compared to adults (3, 5).

## 1.2 Adolescent sexual and reproductive health in Tanzania

Tanzania, the largest country in East Africa, faces the same challenges as the rest of sub-Saharan Africa. About 9.9 million adolescents, between the age of 10 and 19 years, live in Tanzania. This represents about 23 % of the total population (6). Therefore, investing in young people is essential as it may determine the future course of Tanzania.

Teenage pregnancies are a big problem facing adolescent girls in Tanzania. Twenty-three percent of girls between the age 15-19 are already mothers or pregnant (6), making Tanzania one of the countries in the world with the highest adolescent pregnancy and birth rates. Some of the pregnancies are planned and wanted, but many are not. Adolescents also bear a much higher risk of dying during pregnancy or childbirth compared to elderly women. Pregnancy related complications and childbirths are the main cause of death in girls aged 15-19 years globally. Moreover, children born to young mothers face a higher risk of dying and their children are more likely to be of low birth weight (7).

In Tanzania the maternal mortality is 454 per 100 000 (6), assumed to be one of the highest in sub-Saharan Africa (8). Among young mothers (below 20 years), the neonatal mortality rate is 41 per 1000 live births, compared with 22 per 1000 when the mother is older (20 to 29 years) (6). A high adolescent fertility will also contribute to a rapid population growth. The total fertility rate in Tanzania fell from 6.3 births per women in 1991-92 to 5.4 births per women in 2010 (6).

Abortion is illegal in Tanzania, unless the pregnancy threatens the woman's life. The solution for many young pregnant girls will be to terminate the pregnancy by inducing an abortion, using a procedure that is extremely unsafe. Previous research has found that high numbers of abortion correlate with low use of contraception. Abortion is being used as a substitute for contraceptives, and this will most likely continue as long as the use of modern contraceptives remains low (4).

The other alternative for young girls who become unwanted pregnant is to keep the baby. However, teenage pregnancies are associated with girls dropping out of school (8). According to the Ministry of Education and Vocational Training, 5000 girls dropped out

of school in Tanzania due to pregnancy in 2011. Young mothers' right to education in Tanzania has gained a lot of attention in local and international media. The Ministry of Education and Vocational Training produced guidelines in 2010 stating schools must allow girls back to school after delivery. However, schools may expel girls as soon as their pregnant status is known, because their presence at the school is regarded as being disturbing. Moreover, after delivery girls face challenges in returning due to the strong stigma associated with premarital sex, as well difficulties in finding care for the baby while attending classes (9).

As in many other African countries, the HIV/AIDS epidemic in Tanzania has been devastating. Tanzania continues to be severely affected with 5.1% of the adult population aged 15-49 living with HIV (based on data from the Tanzania HIV and Malaria Indicator Survey 2011-12) (10). In general, STIs are more prevalent among adolescents compared to adults, with most of the HIV infections occurring among Tanzanians under the age of 25 (6).

Family planning services have been provided for a long time in Tanzania, where UMATI[1] played a key role both in providing contraceptives as well as information and education. The public sector has also been actively involved from the mid 70's, and today contraceptive health services are provided by both public and private facilities coordinated by the Ministry of Health and Social Welfare (11). For a long time, family planning services were primarily for married couples used for child spacing. However, after research highlighting that many young people are sexually active without using contraception in sub-Saharan Africa, young people's sexual and reproductive health began to get attention. In Tanzania, the policy guidelines were changed in 1994, acknowledging young and unmarried people's need of contraceptive health services. The 1994 policy guidelines state that all sexually active persons should have access to family planning services, information and education, including adolescents irrespective of their marital status and parity (12). Despite support of young people's need for access to sexual and reproductive health services in national policies, there are many gaps in its implementation. Adolescents in Tanzania have found it difficult to access the services

[1] National NGO providing sexual and reproductive health services in Tanzania.
See: http://www.umati.or.tz

due to negative responses from health providers, and there have been little affords in changing health providers attitudes (13).

Despite a slightly increase in contraceptive use during the last decade, contraceptive use among adolescents is still low and much lower compared with adult women (5, 14). Based on data from the Demographic Health Survey (DHS) in Tanzania from 2010, only 12% of married girls aged 15-19 years use modern contraceptives. Furthermore, about 65% of sexually active unmarried girls in the same age group are not using any contraceptive method at all (6).

Even though contraceptive use among adolescents is not common and STI rates are high, many adolescents are sexually active. Results from previous studies show that more than 40% of adolescents are sexually active, and girls start being sexually active from the age of 11 years. An increased proportion of sexually active adolescents in Tanzania has been reported, and unmarried adolescents engage in several sexual practices and have multiple partners (8, 15, 16).

## 1.3 Statement of the problem

By reviewing the background information surrounding young people's sexual and reproductive health challenges, the data suggests that adolescents' sexual and reproductive health in Tanzania seems to be severely threatened by high rates of teenage pregnancies, STIs and unsafe abortions in combination with low use of modern contraceptives. The need to respond to young people's sexual and reproductive health challenges is emphasized given the fact that reproductive and sexual rights embrace certain basic human rights (WHO, 2006).

An increased use of modern contraceptive can be one important factor among others, in terms of improving adolescents' sexual and reproductive health. Contraception is unique due to its ranges of benefits. Modern contraceptives protect against unwanted pregnancies and STIs, but can also provide long term outcomes such as reduced maternal and child mortality, a more stabilized population, reduced poverty and help empower women (17).

Many sexually active young people in Tanzania do not use modern contraceptives, such as oral contraception and condoms, and uptake is generally lower compared to adults. Successful uptake of contraceptives among adolescents requires a better understanding of the target group's mind-set. Therefore, a need for a better understanding of why uptake remains low among adolescents in Tanzania was identified.

## 1.4 Objectives of the study

This study intends to explore adolescents' perceptions of contraceptives and contraceptive use, in order to help address the continued low contraceptive prevalence in Tanzania.

It will be guided by the following specific objectives:

- To explore adolescents' understanding of modern contraceptives
- To understand adolescents` views of modern contraceptives in relation to traditional methods of contraceptives
- To explore adolescents' motivations to use contraceptives
- To explore adolescents' reflections on access to modern contraceptives
- To assess how cultural values/norms affect young people's use of contraceptives
- To identify how their perspectives are influenced by their parents, family, friends and teachers

## 1.5 Significance of the study

It is hoped that the findings from this study will provide valuable information that can help to understand why utilizing of the available contraceptive services remains low in Tanzania. By understanding adolescents' perceptions regarding contraceptive use, gaps and opportunities in addressing adolescents' needs for contraceptive health services can be identified, information that might be helpful to develop public health strategies that can increase adolescents' use of modern contraceptives.

This chapter has sought to create a framework for the study, and a more comprehensive review of existing literature is presented in the next chapter.

# 2 LITERATURE REVIEW

## 2.1 Introduction

The following chapter will review the relevant literature in order to map what is known regarding adolescents and contraception in Tanzania. The focus of the literature review has been articles addressing contraceptives and contraceptive use in Tanzania where adolescents have been participants of the study. Young people today grow up in a rapidly changing environment, and young Tanzanians have become better connected through mobile phones, the Internet, radio and television during the last years. This was the rationale for focusing on research not dating more than 15 years back in time. After a comprehensive review of the existing literature in Tanzania, a search for qualitative studies assessing perceptions related to contraceptive use in other countries in sub-Saharan Africa was carried out, in order to lay a foundation for the discussion of the findings for this study, as well as getting a better understanding of the current knowledge about the topic.

Keywords used for the literature search were *contraceptives*, *adolescents*, *Tanzania*, *sub-Saharan Africa, unintended pregnancies* and *sexual behaviour*. Different combinations and different synonyms of the keywords were used, and it was sought for literature in different databases.

## 2.2 Studies within Tanzania context

### *2.2.1 Studies addressing youths use of contraceptives*

Much of what is known regarding current use of contraceptives is based on national demographic data. Based on the most recent national Demographic Health Survey (DHS), current use of modern contraceptives for all females between the age of 15 and 19 is 9.2%, where 12% of married girls and 35% of unmarried sexually active girls in the same age group reported current use (6). Current use among unmarried sexually active girls has increased from the 2004 report from 30% to 35% in 2010 (18). The percentage of young unmarried women and men (15-19) who reported use of condom at last sexual intercourse has also increased during this period, where 50.2% of the girls

and 46.1% of the boys reported to use a condom at last sex in 2010 (6), an increase from 38.2% and 39.3% respectively from 2004 (18).

Marchant et al. did a study in 2004 in southern Tanzania (rural areas) where the aim was to describe fertility and to identify women's concerns related to family formation including assessments of how they would like to be served (19). This study used a mixed-method approach. However, the qualitative part of this study did not include teenagers as participants, and will therefore not be discussed here. The quantitative part of the study obtained data from 1018 women between the age 15 up to 55 years old using a questionnaire. From the results from this study 16% of all non-pregnant women were currently using a modern contraceptive method, while only 5% in the age group 15-19 reported currently use, including both married and unmarried women. Moreover, half of the teenagers (15-19) considered abstinence to be an acceptable method of contraception, and the acceptance of modern methods, such as pills and injection, was low compared to women in the 20-29 year age group. The most important factor for choosing a method, for all the different age groups, was safety.

### *2.2.2 Adolescents' sexual behaviour and use of condoms*

As described in the previous section, an increase in the number of adolescents who use contraceptives has been observed during the last decade. However, different studies in Tanzania have shown that risky sexual behaviour has not leveled during the same time period (15, 16, 20).

A study conducted by Baumgartner et al. in 2005 assessed how Tanzanian adolescents think about and understand the concepts of faithfulness and partner reduction (the "B" in the ABC approach to prevent HIV) and how pregnancy prevention is integrated in this HIV prevention approach (20). This was a qualitative study where data was collected through focus group discussions with a total of 158 participants (14-20 years old). The majority from this study, both married and unmarried adolescents, reported that the "being faithful" message was important and faithful relationships were perceived being the ideal, despite recognizing that practicing fidelity is complex. Condoms were considered the most common method used to prevent pregnancy among youths. However, faithfulness usually precludes condom use, because youths consider condoms

as an evidence of not being faithful. Therefore, this article demonstrates that attention to pregnancy prevention still needs to be addressed if youths are using the faithfulness approach to prevent HIV.

Kazaura et al. (2009) conducted a study among unmarried adolescents aged 10 to 19 and assessed premarital sexual practices (16). The data were obtained from a cross-sectional survey which was part of a baseline study for the planned Local Community Competence Building and HIV/AIDS Programme that was based in five dioceses of the Evangelical Lutheran Church in Tanzania, all characterized by a high HIV prevalence. Both out-of-school and in-school adolescents were included as participants. The results showed that adolescents experience several premarital sexual practices. 32 % of the participants were sexually active. All of the sexually active participants reported vaginal sex, but masturbation (29.4%), oral sex (8.1%) and anal sex (7.5%) were also reported. In general, more boys were sexually active compared to girls. About 15% of sexually active adolescents reported to have more than one current partner, with significantly more boys than girls having more than one partner. However, less than half (nearly 42%) reported having used a condom during most recent sexual intercourse. This number does not differ much from the national estimates (6, 18), and similar findings of low condom use have been found in other countries in sub-Saharan Africa (2).

Another quantitative study assessing sexual practices among adolescents was conducted by Exavery et al. (2011) and focused on how multiple sex partners influence condom use amongst adolescents aged 10-19 years (15). This was a cross-sectional study using data from a larger household survey conducted in 2008. Based on these findings, 23.4% reported being sexually active with 42% of these having multiple partners. The number of participants having multiple partners is significant higher compared to the study by Kazaura et al. However, the two studies defined multiple partners differently. Kazaura et al. measured current number of partners, whereas this study measured multiple partners as having more than one partner in the last 12 months. Moreover, this study did not differentiate between married and unmarried adolescents. Thirty nine percent reported that they had used a condom during most recent sexual intercourse, but no association was seen between condom use and multiple sexual partners.

These studies show that a significant proportion of adolescents engages in risky sexual behavior, and are therefore at risk of getting both STIs and unplanned pregnancies.

### *2.2.3 Studies addressing condom attitudes and beliefs among adolescents*

Worldwide, many studies have been carried addressing people's attitudes and beliefs regarding condom use, especially in the context of the HIV epidemic in sub-Saharan Africa. In Tanzania, three different studies assessing young people's perceptions of condoms were identified (21-23).

A cross-sectional questionnaire study was conducted by Maswanya et al. (1999) and evaluated the relationship between HIV-risky sexual behaviour and anti-condom bias, as well as with AIDS-related information, knowledge, perceptions and attitudes (21). In this study, 1041 students (age range 16-24) from secondary high schools and colleges in Dar es Salaam were included. The findings showed that students had negative attitudes towards condom use. As many as 66% reported that condoms reduced the sensation of romantic sex, and about 50% of the students felt condoms were not safe or that they could bring disease. Some (37%) also said that their sexual partner hates condoms.

Similar findings were found in a study conducted by Plummer et al. based on data collected through participant observations from 1999-2002 in rural Mwanza (22). Six researchers accompanied young people, including both adolescents and young adults, in their daily activities in nine villages. The findings from this study revealed that condoms were negatively perceived for different reasons. One strong belief was that condoms reduced sexual pleasure, particularly for men. Another reason for holding a negative attitude towards condoms was the belief that condoms were not safe or infected with HIV. In addition, misbeliefs related to the risk of getting HIV were revealed, and the cultural importance of having meaningful sex (for example to ejaculate inside the partner) discouraged condom use.

An article published recently by Exavery et al. (2012) assessed factors affecting acceptability of condom promotion and distribution among adolescents aged 10-19 years in two rural districts in Tanzania (23). Data were collected as part of a larger cross-sectional survey on condom use. The findings from this study demonstrated a low

acceptance of condom promotion and distribution. However, being sexually active and aged 15-19 was a strong predictor for acceptance. Other factors, such as living arrangements (living with a parent compared to a guardian), confidence when accessing condoms and perceptions about condoms' safety also influenced the acceptance of condoms. The most common reasons reported for why condom promotion and distribution were not accepted, were being too young and that it would influence those who never had sex before to use condoms.

As demonstrated by these articles, negative attitudes and beliefs about condoms seem to limit use of condoms among young people in Tanzania.

### *2.2.4 Factors influencing use of contraceptives among adolescents*

A study conducted by Arends-Kuening and Kessy (2005), estimated how quality of care of family planning services could affect contraceptive use after controlling for individual factors such as age and religion (24). This study used a mixed-method approach and was not targeted for adolescents especially. However, participants down to 14 years old were included. The results showed that access and quality of care are important factors for contraceptive use, also for adolescents. Lack of information was one important barrier identified for contraceptive use, consistent with both the quantitative analyses as well as the focus group discussions carried out.

A survey study by Babalola et al. from 2005 examined gender variations in the factors influencing consistent condom use among single adolescents aged 14-24 years (25). The results showed great gender differences. Perceived self-efficacy for correct condom use and discussions with friends about condom use, were the most significant factors for consistent condom use among males. For females, discussing condom use with a sexual partner and the perceived self-efficacy to refuse sex, if the partner refused to use condoms, were the most significant factors affecting condom use.

No other research was found that addresses factors influencing use of contraception among adolescents in Tanzania. However, two articles that assessed cultural and religious barriers towards contraception among adults in Tanzania were found. A qualitative study conducted by Keele et al. (26) examined cultural barriers to family

planning on Zanzibar by interviewing community leaders, health care workers and couples. This study identified different cultural factors to influence contraceptive use, including strong Muslim beliefs, male dominance in decision-making and limited exposure to modern ideas. Another qualitative study conducted by Keefe, aimed to investigate why adult women are choosing sterilization in a cultural context conventionally considered intolerant to such procedures (27). Keefe argues that religious beliefs' influence on contraceptive use, in this case Islamic, is inconsistent. Some religious people find arguments to justify contraceptive choices that are not considered acceptable by their religion.

### *2.2.5 Studies addressing youths' perceptions of contraceptives*

Rasch et al. (2000) conducted a study among adolescent girls with illegally induced abortion in Dar es Salaam. The aims of the study were to understand who those girls and their partners are, to assess their sexual behaviour and to understand why they were not able to prevent an unwanted pregnancy (28). This study used a mixed-method approach where data was collected in 1997 from girls who became hospitalized due to an induced abortion. This study demonstrated that only 7% of the girls had used modern contraceptives. The main reason given for not using contraception was because they believed they were too young to access contraceptive health services. They were also afraid of side effects, especially that hormonal contraception would cause infertility. Some of the girls relied on getting an induced abortion if they become pregnant. This study also showed that most of the participants were aware of modern contraceptives, but misinformation on how to use them properly existed. Girls also said that male partners often refused to use condoms, with a common excuse being that it reduced sexual pleasure. This view was also shared by some of the girls in the study. The majority of the girls had a relationship with an older man.

Tanzania has attempted to set up youth-friendly family planning centers. Rasch's study also demonstrated that adolescent girls are not reached with the family planning services, due to fears of being perceived promiscuous. Moreover, youths were not aware of their right to access contraceptive services (28).

The study conducted by Marchant et al. presented earlier, also addressed family planning fears among women aged 15-55 years (19). From this study it became evident that women were afraid that modern contraceptives would impair their health and affect their future fertility or their menstrual cycle. A fear of method failure (condoms) was also revealed. However, these results cannot be transferred directly to adolescents as a group, as the participants were ranging from 15 and up to 55 years of age, and the majority of the participants were already mothers.

## 2.3 Similar studies within sub-Saharan Africa

### *2.3.1 Introduction*

This section of the literature review will review studies within sub-Saharan Africa with a similar research design and objectives as our study. Therefore, a presentation of qualitative studies aiming to assess and explore young people's perceptions of contraceptives will be presented in order to get a better understanding, as well as to lay a foundation for the discussion of this study and its findings.

### *2.3.2 Presentation of studies*

A systematic review of qualitative research specific to contraceptive use was published by Williamson et al. in 2009 (29). The aim of this review was to examine factors limiting modern contraceptive use among young women in developing countries. This review included seven different studies where six of the seven articles were studies from sub-Saharan Africa, and focused on females in the age group 11-24 years. From this review, a lack of sexual and contraceptive education was demonstrated resulting in inaccurate perceptions of the risk of getting pregnant. Access to contraceptives was shown to be limited by fears of being received in a negative way, because girls perceived contraceptive services to be catered mainly for married women. Condoms were perceived more accessible, but were believed to be for HIV/STI prevention and not pregnancy prevention. From all the studies included in the review, concerns over experienced or perceived side effects of hormonal contraceptive methods were found. Fear of infertility was the most frequently reported side effect. Another theme that derived from all the studies included in the review was partner control. Young women reported that male partners could manipulate, force, threaten and use violence to get

girls not to use contraception (especially condoms). Social disapproval of premarital sex was also found to limit contraceptive use among young women. This review also demonstrated a high reliance on traditional contraceptives, such as periodic abstinence, withdrawal or herbal mixtures, and abortion was recognized as a fertility control option.

Besides the studies included in the review conducted by Williamson et al., a few qualitative studies addressing young people's perceptions of contraceptives in sub-Saharan Africa were identified. A study conducted by Kanku et al. (2009) in South Africa explored attitudes and perceptions regarding teenage pregnancy among adolescents. In addition, their understanding of sexuality and contraception were explored, in order to find factors that may influence the risk of teenage pregnancy (30). Three focus group discussions were carried out (one with pregnant teenagers, one with young men and one with young mothers who had a baby as a teenager), in addition to 13 in-depth interviews with pregnant teenagers. The findings showed a poor understanding of contraceptives, because they were lacking correct information. Condoms were the contraceptive method most known by the participants.

Another qualitative study assessing perceptions of contraceptives among young people (15-24) was conducted in Uganda by Nalwadda et al. (2010) (31). This study explored reasons for low contraceptive use among young people through focus group discussions and identified both obstacles and enabling factors to contraceptives use. Misconceptions related to fertility and condoms' safety were found to hinder contraceptive use as well as fear of partners' and parents' reactions. In addition, gender power relations and socio-cultural expectations of not having premarital sex, including contradictive messages from different sources, were obstacles for using contraceptives among young people. Young people also faced barriers at the health centers, and condoms were often abandoned after a while because the couple had built trust. However, the participants also recounted different enabling factors, such as secret use of contraceptives among females. Moreover, both male and female participants reported an increasingly fear of pregnancy as well as showing a changing attitude towards a smaller family size.

Another qualitative study conducted in Uganda by Flaherty et al. (2005) also documented some of the same perceptions as previously described. Results based form

data obtained through focus group discussions with secondary high school students (14-20) revealed several barriers to assess of contraceptive health services and information. Misinformation and anxiety about the consequences of modern contraceptives, such as infertility, were significant, and participants stated that trusted information was lacking. They were afraid to ask informed individual, such as their parents and health workers at health units, because they feared being perceived promiscuous or being refused treatment. They also felt there were little privacy and confidentiality during family planning counseling. Moreover, they were not aware of the available contraceptive services in the community.

## 2.4 Limitation of previous research and research gap

Results from the literature review point to a research gap where more knowledge about young people's perceptions of contraceptives is needed. Studies within Tanzania have mainly been quantitative, and have therefore relied on predetermined assumptions due to its nature to be structured. In addition, much of what is known regarding adolescents' perceptions about contraceptives in Tanzania is related to condoms, with limited information regarding other contraceptive methods including traditional methods. Rasch's study represents only views from girls who have experienced an abortion, and the study used a mixed method approach. Other studies have not focused on adolescents and conclusions can therefore not be directly transferred to adolescents. To the researcher's best knowledge, no other qualitative study exploring perceptions of contraceptives, including both boys and girls, has been carried out in Tanzania recently. Therefore, a need for a more in depth understanding of young people's views, in their own words, was identified.

Even though a few similar studies have been carried out elsewhere in Africa, qualitative studies cannot be generalized to apply for a wider population or in a different context, due to samples with different social, cultural and historical backgrounds, even though some of the findings might be transferable to Tanzania. Based on the fact that no such study has been carried out in Tanzania recently, including young boys and girls, we argue that there is a need to fill this knowledge gap in this particular area.

## 2.5 Theoretical perspectives

A sophisticated theoretical perspective was not applied as a complete framework for this study. However, different theoretical perspectives have influenced the study for which the study draws upon. These theoretical perspectives have merely provided us with some understanding of adolescents' perspectives, meaning that they are only serving as tools to gain a broader perspective in order to address the research question.

There are probably many different theoretical perspectives which can be useful to understand adolescents' perceptions related to contraceptives. However, literature reviewed in relation to this topic found few qualitative studies guided by theories or stating that theoretical perspectives had influenced the study.

### *2.5.1 Reasoned action theory*

Different health related behaviour theories have been developed, which can help understanding young people's use and non-use of contraceptives. One such theory is the reasoned action theory proposed by Fishbein and Ajzen (1975 and 1980). This theory was developed specifically to understand the relationship between attitudes and behaviour. According to this theory the strongest predictor of a person's voluntary behaviour is predicted by one's behaviour intention. A person's behaviour intention is the result of both the person's attitude and subjective norm towards performing the behaviour (32).

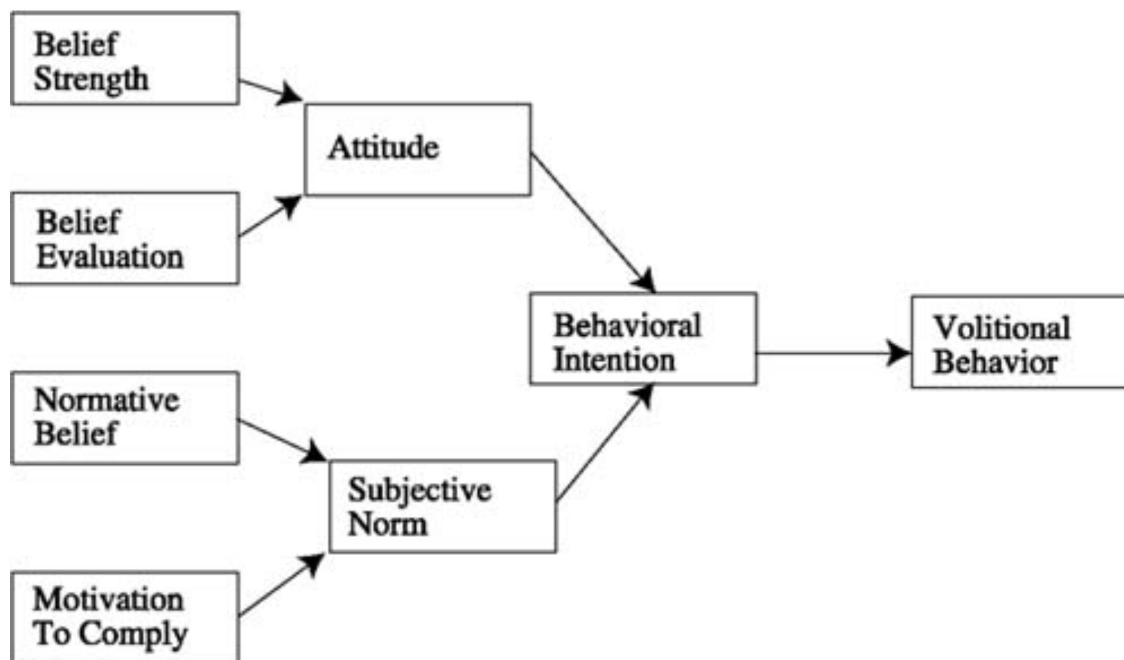


**Figure 1: Components of the theory of reasoned action.**
**Source: Hale (2002).**

Based on this theory, the person's attitude consists of a belief that the behaviour leads to a certain outcome as well as an evaluation of that specific outcome (32). Therefore, according to this theory, adolescents would have to believe that using contraceptives would prevent unwanted pregnancy and STIs. Moreover, this outcome (becoming pregnant or getting a STI) will be judged to be positive or negative, and how we evaluate this outcome will influence our decision to use contraception or not.

The subjective norm is a person's perception of what others think the person should do. The subjective norm is a type of pressure, real or imagined, that a person might feel in order to comply with perceived expectations of others (32). Others can for example be friends, parents, spouses, teachers, school and religion. Applied to this study, adolescents' decisions to use contraceptives are therefore not only based on a belief that it will prevent unwanted pregnancies and STIs and how negative/positive we perceive this. The fact that others, for example parents, would not want unplanned pregnancies and STIs will also influence their behaviour, and the person might feel a motivation to comply to those wishes of others.

The reasoned action theory has also been useful to understand how others influence adolescents' behaviour and perceptions, and how the strength of their own belief and its evaluation may discourage or courage contraceptive use. However, the reasoned action theory only explains volitional behaviour. In 1980s Ajzen added "theory of planned behaviour" to this theory of reasoned action, in order to explain behaviour of a less volitional nature as well as accounting for factors outside the individual's control. The planned behaviour theory added "perceived behaviour control" as a component, along with attitude and subjective norm. Perceived behavioural control consists of control beliefs and perceived power (32). For example, adolescents may believe that they have the knowledge or correct information to use a certain contraceptive method (control belief) and that will motivate or facilitate use (perceived power). As such, correct information about how to use a contraceptive method will motivate adolescents to use contraception.

### *2.5.2 Gender and cultural perspectives*

Gender perspectives and its relation to power have also been relevant for this study, as they are important aspects of sexual behaviour and contraceptive practice. According to WHO, the term "gender" refers to socially constructed gender roles, where a gender role is a set of social and behavioral norms that a society considers appropriate (33). For the purpose of this study, we also operate with an understanding that gender refers to socially constructed roles that can change, whereas sex refers only to the biological reality of males or females. According to this perspective, we learn to behave in a certain way that is considered appropriate to our sex in the society we live in. As such, appropriate behavior according to our sex can vary from one culture/society to another. However, in most cultures and societies, especially in developing countries, men have more power than women.

Previous studies have found that expectations to socially and culturally shaped gender roles influence sexual decisions. Men are expected to be proactive and approach women for sexual pleasure, while women desiring sex can be perceived promiscuous. Moreover, gender norms may encourage boys to have many partners because this can give them status, while girls are expected to be in an exclusive relationship with the boy (34). Such expectations of gender roles may increase the probability that young girls fail to

negotiate safe sex practice and cause power imbalances in decisions related to contraceptive use. Previous studies have found that gender differences make men the primary decision makers. As a consequence, girls find it difficult to ask their boyfriend to use condoms or to refuse sex, despite knowing that there is a risk of getting pregnant or being infected with HIV (35-37).

For this study, we have also operated with an understanding that it is important to acknowledge the importance of culture and traditions. The family has a strong influence on young people's perceptions, and adolescents inherit values and beliefs from an early age from their parents and the environment they grow up in (38).

# 3 METHODOLOGY AND RESEARCH DESIGN

This chapter presents the design and methods used to carry out the study on which the results are based. It begins by presenting the design of the study, followed by describing the study site, study period, study population and sampling strategies. Thereafter, the different tools used to collect the data are described as well as how the data was analysed. Finally, working with a research assistant and the researcher's preconceptions are discussed.

## 3.1 Study design

A qualitative study design was used to collect data for this study. The research design is determined by its purpose, and as this project´s aim was to explore perceptions of contraceptives, a qualitative study design was considered most suitable.
Qualitative research technics are methods used to obtain knowledge about the characteristics and qualities of the phenomena we are studying based on text or observation materials. It allows us to gain insight into why people act in a certain way, and allows the researcher to ask questions of an explorative nature (39). The objective of this study sought answers to questions such as "what are adolescents' perceptions of modern contraceptives?", rather than answers to questions such as "how much?" and "to what extend?". Moreover, when looking for perceptions there is no absolute truth to be found, and human beings are complex with different social and cultural beliefs.
Qualitative research technics were considered essential to obtain different subjective perspectives in order to understand the complex reality of how adolescents in Tanzania think about contraceptives and make contraceptive choices. A quantitative study design would not have given the opportunity to collect such information, as it would have required making assumptions about the perceptions beforehand.

A qualitative study design allowed the researcher to adjust questions to fit to the cultural setting after arriving in Tanzania, and to add new questions during the process of data collection. This was important because it allowed us to be open to new themes

that emerged during the interviews, and to adjust questions based on participants' reactions and what we had already learned from the previous interviews.

## 3.2 Study setting

Fieldwork was conducted in Arusha Region. Arusha region is located in the northern part of Tanzania and consists of six districts. For this study, data was collected from two different districts in Arusha Region; Arusha City Council (urban area) and Meru District Council (rural area). Arusha City Council contains the Regional Capital of Arusha, and according to the 2012 Tanzania National Census it has a population of 323 198. Meru District Council's population was estimated to be 268 144 (2012 Tanzania National Census). One government school within each district was selected for recruitment of participants. The schools were selected because of previous research collaboration carried out by my supervisors with these schools.

## 3.3 Study time line

This study was carried out within the timeframe of the Master of Philosophy degree in International Community Health at the University of Oslo. A literature review of the current knowledge within the field of interest was conducted in March 2012 followed by an oral exam. In May 2012 an application for ethical clearance from the Norwegian Regional Ethical Committee (REK) was sent, and after receiving the conclusion the process of getting ethical clearance in Tanzania was initiated.

I arrived in Tanzania the 3rd of September and had initially planned to have 4 months for data collection. However, since getting ethical clearance in Tanzania turned out to be a lengthy process, my data collection period was shortened. I conducted my first interview late November 2012, and ended my fieldwork in mid-January 2013. During the period of waiting for ethical clearance I took a 3 weeks language course in Kiswahili and devoted time to interact in the study area to get to know the place and the people. I also used this time to find a research assistant and spent 2 weeks training her.

## 3.4 Study population

The study population for this study was adolescents, because young people are at the risk of engaging into unsafe sex that can lead to consequences such as acquiring STIs and unplanned pregnancies. The participants were both young girls and boys between the age of 15 and 20, with a focus on students at a government secondary high school.

In total 43 participants were included in the study; 22 participated in a semi-structured interview and 21 participated in a focus group discussion. The characteristics of the participants are presented in table 1.

**Table 1: Characteristics of the participants**

| Participant characteristics | N | % |
|---|---|---|
| **Age distribution** | | |
| 15 | 5 | 12 |
| 16 | 19 | 44 |
| 17 | 8 | 19 |
| 18 | 3 | 7 |
| 19 | 7 | 16 |
| 20 | 1 | 2 |
| **Gender distribution** | | |
| Boys | 21 | 49 |
| Girls | 22 | 51 |
| **Geographical distribution** | | |
| Urban | 19 | 44 |
| Rural | 24 | 56 |
| **Marrital status** | | |
| Married | 0 | 0 |
| Unmarried | 43 | 100 |
| **Education status** | | |
| Currently in school | 41 | 95 |
| Currently out of school | 2 | 5 |
| **Religion** | | |
| Christian | 39 | 91 |
| Muslim | 4 | 9 |
| **Pregnant or already a mother** | | |
| Yes | 3 | 14 |
| No | 19 | 86 |

I had initially planned to include both unmarried and married adolescents, moreover to have a dual focus on secondary high school students as well as out-of-school adolescents. However, since limited time was available for data collection and

recruitment of out-of-school adolescents was more time demanding than recruitment through schools, this was not achieved. Therefore, I decided to only include unmarried adolescents and to have a focus on participants being in school.

## 3.5 Sampling strategy

Participants were recruited using a purposive sampling strategy. A purposive sampling strategy means that participants were selected with a purpose in mind about who, how and where the participants were recruited (40). Using a purposive sample strategy made it possible to include adolescents with different characteristics, such as age and gender, in order to get a diverse group that represents different perspectives.
The following sections describe in practice how the different participants were recruited.

### *3.5.1 Selection criteria*

The criteria for inclusion to participate were that the adolescent must be currently between 15 and 20 years of age and should be willing to talk to us about their perspectives of contraceptives and contraceptive use among young people. The exclusion criteria were adolescents not within the specified age range or adolescents below 18 years of age without parental consent.

### *3.5.2 Recruitment of adolescents from schools*

Most of the participants for this study were recruited from schools. In total 39 participants were recruited from their school. Recruitment of students was conducted through two different government schools, where one was located in a rural area and one in an urban area. A purposive sampling strategy was used to find these 39 participants. However, even though judgments were used to select a representative sample, in practice it also became a matter of convenience. When we started data collection, some of the classes had already finished for the semester. As a consequence, students were purposively chosen among those students who were available at the school, leaving out some classes.

The process of recruitment started with talking to the headmasters at the schools we were doing research. We explained what type of participants we were looking for, and

the headmasters then delegated the responsibility to some of the teachers who helped with recruitment. Some days prior to when interviews at the schools were planned to take place, the teachers distributed parental consent forms to the targeted students to bring to their parents at home. When we came back to the school a few days later, the students had the parental consent forms with them. Almost all parents agreed to let their child participate in the study, with the exception of 2 students.

We gathered all the students that were recruited and had parents who allowed them to participate in a class room, and explained a bit about our research as well as organizing a suitable time for the interview with the different students. During this gathering we also selected some students to participate in a focus group discussion, instead of participating in an individual interview. For the focus group discussions we chose to make single sex groups, because we wanted participants to feel at ease with each other. The topic is sensitive and sex mixed groups could have made it difficult for participants to talk freely. We did not mix students with students from another school for the focus group discussions, but chose to have a group consisting of girls or boys at the same school.

If we needed more participants, we went through the same procedure as described above. One time it happened that we got students who were not within the recruitment criteria for this study because they were older students, and we therefore chose to exclude these students. Moreover, initially it was planned to have an age range from 15 to 19, but as one of the students who came for an interview was 20 years old, we chose not to exclude this participant, but rather extend the age range.

### *3.5.3 Recruitment of out-of-school adolescents*

After the schools closed for holiday, we went to the village leader in the rural area we collected data who helped us with recruitment. A purposive sampling strategy was also used to recruit these participants, with a more specific group in mind; adolescents who were parents or who had dropped out of school. Two participants where recruited by the help of the village leader, and thereafter we used snowballing to recruit two more participants. The reason why we chose to do this in the rural area was because we were

told it was more likely to find teenage mothers/fathers or out-of-school adolescents in this area compared to the urban area.

### *3.5.4 Recruitment of participants for test interviews*

Two participants were recruited to test the interview guide, and they were not recruited by a purposive sampling strategy. They were selected using a convenience sampling, which mean we chose those participants that were most available. In a convenience sampling no judgements are being made to select participants that are representative of the population we are studying. For our test interviews, we had one female and one male participant, and both of them were a bit older than our target group. However, for the purpose of testing the interview guide, this age difference was not considered to be of significance.

## 3.6 Data collection methods

Qualitative interviewing was used to collect data for this study, which is based in interacting with people by talking to them. In a qualitative interview the researcher and the participants have a conversation where data is generated by the researcher asking questions and listening to what the participant tells (41).

Kvale (1996) describes the qualitative researcher as a traveller on a journey who holds conversations with people along the way: *"The interviewer wanders along with the local inhabitants, asks questions that lead the subjects to tell their own stories of the lived world, and converses with them in the original Latin meaning of conversation as 'wandering together with' "* (p. 4). The goal of the journey is to describe and analyze the information obtained during this journey, in order to tell it to other people upon return (41).

Two different qualitative interview techniques were employed in this study; semi-structured interviews and focus group discussions. Semi-structured interviews consist of open-ended questions, and the researcher guides the conversation in order to cover specific themes. An interview guide is made in advance, and can either consist of a list with themes that should be covered or be more specific where all the questions are listed. Questions that are not included in the guide may be asked to follow up on things said by the interviewees in order to generate more information. Semi-structured

interviews allow the researcher to be more in control of the conversation compared to unstructured interviews (42). Focus group discussions (FGDs) are methods where discussions are used as the platform to gain insight into people's experiences, attitudes and views. Each group consists typically of 5-8 participants, and are useful for identifying group norms and varieties within a group (43). Combining focus group discussions with individual interviews gives both a greater breadth and depth of the data (44). In details how the two different qualitative interviewing techniques were carried out is described in the following sections.

All the interviews were carried out in the local language Kiswahili with the help of a research assistant. Initially I had planned to conduct the interviews myself in English, but after I came to Tanzania I realized that this would be challenging, as young people in Tanzania were not so comfortable with speaking English. Therefore, I trained a research assistant to help me with the interviews. The participants had the choice to do the interview in Kiswahili or English, and everyone chose to conduct the interview in Kiswahili. This gave me time and possibility to observe the participants during the interviews.

Before actual data collection started, we did a pre-test of the interview guide. In addition, we visited a reproductive health clinic within Arusha City.

### *3.6.1 Pre-test of interview guide*

This study started with testing the interview guide used for the semi-structured interviews. The purpose of doing a pre-test was to see if the questions were well understood and accepted by the participants, and whether I received the information I was aiming for. In addition, doing a pre-test gave me the opportunity to test the research assistant and to examine the success of the training. Two participants were included in the pre-test, and the interviews were carried out as if they were normal interviews. However, we explained to the participants that it was for the purpose of testing an interview guide, and that the data would not be included as results in the research project. After the test-interviews we asked the participants for feedback regarding the interview situation and the questions we asked. We also asked them for suggestions for other themes that should be covered. The time it took to carry out each interview was

also recorded. Finally, the test-interviews were translated and transcribed. Based on the results, the interview guide was revised where some questions were changed, deleted or added, and the order of some of the themes was changed. For example, more personal questions were moved towards the end of the interview guide, and some of the questions related to access and need of contraceptives for youths were deleted because they were too many. I also used this opportunity to give feedback to the research assistant regarding interview techniques and transcribing procedure.

### *3.6.2 Visit at a reproductive health clinic*

Among the preparations before actual data collection started, was a visit at a reproductive health clinic within Arusha City. The purpose of this visit was two-folded. Firstly, it was part of the training of the research assistant. Secondly, I wanted to get an idea of health workers' perspectives related to adolescents' use of the available contraceptive health services. The information we received from this visit has been useful for us both during the interview situations, as well as for the analysis afterwards.

### *3.6.3 Semi-structured interviews*

22 participants were interviewed in a semi-structured interview. All of the interviews were carried out by the research assistant in the local language Kiswahili in my presence. The research assistant followed an interview guide. The original interview guide is provided in appendix A. Probing was done when considered necessary, for example when something was unclear or if the participant brought up a new theme. The research assistant was increasingly encouraged to ask her own follow-up questions. New themes and questions were added to the original interview guide while we were in the field. For example, abortion emerged as a theme based on the first interviews, and questions were therefore added to the interview guide in order to get a deeper understanding about how abortion was related to contraceptive use among young people.

All interviews were digitally recorded. Before we started the interview we explained the purpose of the interview and made sure we had consent from the participants as well as the parent/guardian if the participant was below 18 years of age. We also gave the participants something to drink, and snacks were available at the table. The interviews lasted from half an hour to one and a half hour. After the interview the research

assistant shared with me in brief what had been said, especially if new or interesting information had been revealed during the interview. Due to time constraints, we were not able to transcribe each and every interview before we conducted the next one.

Individual interviews with students took place in an empty classroom at their school. The other individual interviews were carried out at the village leader's office or in the participant's home. None of the participants who participated in an individual interview were part of a focus group discussion.

### *3.6.4 Focus group discussions*

Initially it was planed to start the study with focus group discussions (FGDs). I felt it would be useful to use FGDs in the beginning of the study in order to get a better understanding of the local context and to identify local terminologies that would help in preparations for individual interviews, since I was not familiar with the language, culture and place from before. Conducting FGDs before individual interviews are typically used in order to identify a range of experiences and perspectives that can be added more depth in individual interviews. In the opposite way, conducting FGDs after individual interviews, is a very helpful method to test the data from the individual interviews (44). However, for this study the FGDs were carried out simultaneously with individual interviews. The reason for changing my plan was two-folded. Firstly, since I used a local research assistant for the interviews and spent time training her, we were able to find local words and terminologies used for contraception. Moreover, these terminologies were tested during the test-interviews. Secondly, time was a big concern for us as the schools were soon closing for the summer holiday. Therefore, it was not time to wait with the FGDs until all the individual interviews were conducted.

All the participants who participated in FGDs were recruited from the schools used for recruitment of participants. Altogether, we had 21 participants for FGDs, divided in groups as presented in Table 2.

**Table 2: Focus group discussions; composition of groups**

| FGD number | Gender | Urban/Rural | Number of participants |
|---|---|---|---|
| 1 | Female | Rural | 7 |
| 2 | Male | Rural | 5 |
| 3 | Male | Urban | 6 |
| 4 | Female | Urban | 3 |

As shown in table 2, the FGDs were single sex groups and the number of participants in each group varied from 3 to 7 people. There were a few participants who did not show up for the FGD, as in the case with the last FGD conducted with girls in the urban area. We were told they might be out conducting a student project, and therefore could have forgotten about it. We decided to conduct the FGDs with the three girls who came, since the school was closing for the holiday in a couple of days. This turned out to be successful, because each participant got more time to discuss.

The focus group discussions lasted from one to two and a half hours and were digitally recorded. The research assistant was the moderator directing the discussions in Kiswahili, while I took notes. Half way during the discussion we had a brake, where the participants got something to drink and a snack. This also gave us the opportunity to have a small chat with the participants.

### *3.6.5 Other sources of data; observations in the field*

Observation was not one of the main methods used for data collection in this study, and I also did not plan to do observations. However, since I was present during all the interviews while the research assistant carried out the interviews, this gave me the opportunity to observe the interview situation and its surroundings. I decided to use this opportunity to observe and capture impressions, and wrote them down in a notebook that I had with me. I also took notes on thoughts and impressions throughout the days in the field. These observations have been useful in order to remember the participants and the interview situation during the period of analysing the materials.

A youth's magazine called Fema[2] produced in Tanzania, which deals with topics within adolescent sexual reproductive health, was read while I was in Tanzania. This magazine is distributed four times a year and given out for free to adolescents. One of the magazines produced in 2012 had a special focus on contraceptives, and it was useful to read this to see what type of information is given to youths about contraception. Some articles are written in English, while others are written in Kiswahili, something that limited my possibilities to understand everything.

## 3.7 Data analysis

### *3.7.1 Transcribing*

Since the interviews were recorded in Kiswahili, there was a need to translate. We chose to translate before transcribing. For about half of the interviews the research assistant and I transcribed the interviews together. The research assistant translated the recorded interviews verbatim and orally while I was typing. Doing the translation and transcribing together gave me the opportunity to ask the research assistant for clarifications and explanations of certain words and topics. This helped me to contextualise and understand the findings better. For rest of the interviews, the research assistant transcribed on her own where she first translated orally and verbatim and then typed. We were not able to transcribe all the interviews before I went back to Norway. The research assistant transcribed 6 interviews after I had left Tanzania.

The interviews that were transcribed in the field gave me possibilities to adjust and evaluate the interview guide. Based on these transcripts, a few new themes were added, such as perceptions related to abortion and questions related to sexual behaviour and contraceptive use among adolescents.

Due to time constrains, back translation or letting someone else transcribe one interview to assess the quality of the transcripts were not possible. However, after transcribing many of the interviews together with the research assistant, I was quite

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[2] See http://www.feminahip.or.tz.

confident that no sort cuts had been taken and that she had translated as best as she could.

### *3.7.2 Data analysing procedure*

Malterud's four steps of analysis guided the analysis of this study. This method of analyzing is called Systematic Text Condensation (STC), and the four steps are described by Malterud as follows: 1) to get an overview and total impression, 2) to identify meaning units, 3) to abstracts the contents of individual meaning units and 4) to summarize the significance (43).

Immediately after the transcript of an interview was finished, I read through and asked my research assistant for any clarifications I felt was needed. When all the interviews were transcribed, I read through all the transcripts once again, and this gave me a good overview of the material. At this stage, I also had a good understanding of the most important main themes. Then I started the second step, where I read through all to the transcripts in order to identify meaning units in the text. The meaning units were highlighted in the text by using color pencils. During this process I exchanged some of my transcripts with a fellow student, were we coded each other's interviews and discussed afterwards. This made me see other emerging themes as well contesting my coding. After all the transcripts were coded using color pencils there was a need to gather all the different text elements with the same code. I then decided to use NVivo (45), a qualitative data software, to code all the text once again to help me organize and systematize the data. During this second round of coding some categories were changed and a few new categories were added. For example, a few more cultural and local factors were identified as important categories in this second round, where for example "trust" and "force" were added. Thereafter I started the third step, where contents of the different meaning units were summarized. In total 29 meaning units were identified. Then, analytical texts for the different meaning units were written which finally resulted in the findings chapter presented in this thesis, where the 29 meaning units were categorized into six main themes.

## 3.8 Research assistant

As mentioned earlier, the work of this study made use of one local research assistant. A female research assistant was hired to conduct the interviews in Kiswahili, to transcribe and translate the recorded interviews and help with arranging interviews. She was compensated for a full-time position throughout the fieldwork period including the weeks with training. The research assistant position was advertised using a local mailing list in Arusha, and I interviewed several candidates for the position.

The person I hired had English skills of good quality, and we connected well on a personal level. She had the experience and qualities I felt were needed, and her previous qualitative research experience had a great impact on my decision to choose her for the job. She had worked as a social scientist for more than 5 years for an organization doing community health research. Through this job she had gained experience with conducting individual interviews and FGDs, as well as to translate and transcribe interviews. Her educational background was a postgraduate diploma in community development. She was in her early 30s and had lived in Tanzania all her life. She was not from Arusha region, but lived in the neighbouring region to Arusha, about a 2-hour bus drive from Arusha city.

Before we stared to collect data, thorough training was done for two weeks. During this period I gave her comprehensive information about my project and we discussed personal views on contraceptives. She was trained on the interview methods used in the study, interview skills and transcribing. We also visited a reproductive health clinic where she was shown and explained all the different types of contraceptives. During this period we also spent time to get to know each other, and discussed how we should carry out the study in practise.

After the period of training, I felt she was well suited to conduct the interviews. I therefore decided to let her carry out the interviews without her translating every question I posed, for then to translate back to me. I felt this would give a better flow of the interviews, and make the participants talk more freely. After every interview she told me in brief what had been said and we discussed the findings together.

The research assistant's comments and insights have provided important information for the study and helped me understanding the meaning of what the participants really meant by introducing me to their culture and make me understand their way of thinking and talking. In general, I believe that the research assistant has contributed more to the study than set limitations. However, situations where more probing would have given more in depth information have been missed out, and a few more sub-themes would probably have been added to the interview guide if I had been able to conduct the interviews myself.

## 3.9 Reflexivity

In qualitative research it is acknowledged that the researcher´s pervious experience, background, personal beliefs, motivation and perspectives influence the study throughout the process. The researcher will affect which topic is studied, as well as methods applied and how the findings are interpreted on which the conclusions finally are drawn (46). Reflexivity is about recognizing this role of the researcher and to share the researcher's preconceptions with others.

### *3.9.1 Professional background and previous experience*

My previous education and work experiences have influenced my motivation for doing this specific study, as well as my questions, reflections and reasoning during and after the fieldwork. Being educated as a pharmacist, I have a special interest in medicine related issues, which was a strong motivator for my choice of topic. Since I graduated as a pharmacist over 5 years ago, I have become especially interested in global health issues related to medicine use in developing countries. In 2011 I worked in Zambia at different hospital pharmacies, and this experience probably increased my interest for this part of the world as well as for medicine related issues.

During my work experience as a pharmacist in Norway, I have come across a lot of youths at the pharmacy with prescriptions of contraceptives. This experience has given me a brief insight into what type of questions, thoughts and views young people in Norway have about contraceptives. After reading a bit about sexual and reproductive health in sub-Saharan Africa when I was preparing for my choice of topic for this master,

I became interested in understanding why contraceptive use among adolescents is lower compared to Norway. This has most likely influenced the focus of this study.

Moreover, previous research experience also influenced the focus of this study. Before I started my master in international community health I had some knowledge and experience with quantitative methodology from before, as I had used quantitative methods for my master in pharmacy. I knew very little about qualitative research. During the first year of the master programme I became increasingly interested in this type of research. I am sure this has affected my choice of topic, as well as methodology applied. I know that it is the research questions that should decide the methodology, and not the other way around, and I am confident that I have chosen the right methodology for the objectives of this study. However, I am not so confident that I was just as open minded to themes that would have needed a quantitative research design, as I was for exploring issues of a more explorative nature.

As a pharmacist, I also have a strong conventional medicine belief. This could have affected both the research questions developed before I entered the field, as well as the questions written in the interview guide. For example, one of the aims for this study was to assess how adolescents think of modern contraceptives compared to more traditional methods. My educational background as a pharmacist has probably influenced both my interest in this topic as well as my own understanding of different types of contraceptives.

I never presented myself as a pharmacist to any of the participants, but rather as a researcher and a student. This was something I decided on beforehand, because I believed that if I explored perceptions of contraceptives as a pharmacist it would strongly affect my data. I was worried I would get more favourable viewpoints towards modern contraceptives than what they actually meant, and perhaps less favourable viewpoints towards traditional contraceptives, since pharmacists are associated with selling modern contraceptives.

### *3.9.2 Perceived as someone else*

Since I am a white female coming from a rich country, I am sure I was perceived as someone else than a student doing a master's project. In addition, my research assistant was an educated and independent woman. She was also a "Chagga" woman, which is an ethnic group in Tanzania associated with doing well in business. The research assistant's background and preconceptions are presented in more details in the previous section *3.8 Research assistant*.

One thing became very evident, and that was the participants' interpretation of our interviews as education. We did not at any point indicate that we had other "agendas" besides doing research, but at times I believe the participants thought we were representing a NGO or a program that came to the school to give adolescents education about contraceptives. I have several examples of this from my transcripts, for example in the end of the interview with this young boy:

> *I: We have discussed a lot of things, do you have any comments or advice you can give us?*
>
> *M5: What I can say is that what you are doing is good and helps in the family, because many students and youths like me are the ones who get all these problems. And there are those who do not have any information about contraceptive methods, so they end up into unexpected pregnancies. It helps also to educate us and show us the right way, although you don't teach us deeply, but we get an idea. So personally I can now know where to start.*
>
> *I: What else can you add? (…)*
>
> *M5: Just continue to have projects like this, to educate more people.*

Almost all of the participants said something that alluded to that we were giving them some sort of education or information. A few years earlier, a collaboration project called LASH[3] aiming to improve the evidence base for effective health promotion among school-aged adolescents in sub-Saharan African settings, had been carried out at these

[3] See http://www.uio.no/english/research/cooperation/international/programmes/nufu/nufu-2007-12/NUFUPRO-2007-10051.pdf

schools. Therefore, there is a possibility that the participants thought we were part of this project.

We became aware of this during our first week in the field, and we thought maybe we had not explained clearly our reason for interviewing them. We therefore tried to highlight and emphasize more on why we interviewed them. During the interviews we did not give them any information about the different type of contraceptives, we just mentioned names of the contraceptives they had not mentioned themselves, and told them about how they are grouped as modern or traditional methods, if they did not know that from before. Other than this, no information was given, and we were the ones asking all the questions. Despite this, participants kept indicating that we were giving education, and even on our last day of data collection a participant said this at the end of the interview:

> *I say thank you and continue to have a heart of teaching people. (F44)*

The participants' interpretation of us being something else than we were has probably influenced the findings. Our perceived identities are something I have continuously had in mind during the process of analysing the data.

### *3.9.3 Gender*

Since the research topic is personal and sensitive, the fact that both the research assistant and myself were females could have made it easier for girls to open up and talk compared to boys. We did not feel this was the case while we were collecting data, but again it is impossible to know if answers would have been different if I had used a male research assistant. Moreover, being a woman makes it easy to relate more to girls, with a possible pitfall to emphasize more on the perspectives of girls.

### *3.9.4 Language barriers and using a research assistant*

Working with a research assistant throughout the fieldwork period has definitely influenced the data material, both positively and negatively. The translation of the material from Kiswahili to English has created possibilities of misunderstandings and misinterpretations. We cannot be sure we have the same understanding of the words that are used. Moreover, the research assistant's interpretation of the questions and

themes, as well as her own preconceptions, may have had an impact. In addition, using a research assistant to carry out the whole interview makes the material to be very much dependent on which follow up questions she asked. A research assistant will always have an own perception about which themes are important to probe on and not.

### *3.9.5 Research setting*

We conducted most of the interviews at the participants' school, and this has probably affected how freely the participants talked. Students were not allowed from the schools to have a sexual relationship, and the participants in this study revealed to us that students could risk suspensions or other punishments if they had a boyfriend/girlfriend. Therefore, the fact that we conducted many of the interviews at the school probably affected how much the participants were willing to share or how honest they were. Participants could be afraid that we would share the information to the school board, and therefore be reluctant to talk. However, the fact that neither my research assistant nor I was from the area, could have made participants feel it was safe to share information with us.

## 3.10 Dissemination of findings

After completing the thesis, a presentation of the work will be given with public access at the University of Oslo. A copy of the thesis will be given to the Department of International Community Health, and will be available in the University of Oslo's library with public access. A copy will also be sent to the collaborating institution in Arusha, Centre for Educational Development in Health Arusha (CEDHA), and the National Institute for Medical Research (NIMR) in Tanzania.

# 4 ETHICAL CONSIDERATIONS

Different international guidelines have been developed in order to protect research participants. This study has been carried out according to ethical principles stated in the declaration of Helsinki (47), the International Ethical Guidelines for Biomedical Research Involving Human Subjects from the Council for International Organizations of Medical Sciences (CIOMS) (48) and UNESCO´s declaration on Bioethics and Human Rights (49). In this chapter ethical issues related to the study are discussed.

## 4.1 Ethical approvals

Ethical clearance was first sought from the Norwegian Regional Ethical Committee (REK) in May 2012. REK considered the research study to lie outside the remit of the Health Research Act, and the conclusion was therefore that the project could be implemented without REK's approval (See Appendix B). An application was then submitted for approval to the Norwegian Social Science Data Services (NSD), and the application was approved. An approval from NSD is a confirmation that personal and sensitive data in the project are handled according to formal ethical procedures (See Appendix C).

After the decision from REK was received, I started the process of applying for ethical clearance in Tanzania where the study took place. An application was sent to the National Institute for Medical Research (NIMR) ethical committee in Tanzania in July. The ethical approval was given late November (see Appendix D).

## 4.2 Informed consent

Informed consent has become an essential ethical prerequisite in all medical research today. Important aspects of the informed consent are that it should be voluntarily, adequate information about the study should be given, the participant should be able to understand the information and also to evaluate it to make an independent decision to participate or not. In addition, the participant should have the right to withdraw at any point in time without any consequences (47-49).

In this study an informed and voluntary consent was obtained from each participant. Before the interviews took place, the participants were given information about the study, both orally and written (see Appendix E). This information explained the aim of the study and informed them about confidentiality issues and their right to withdraw at any time, as well as practical information such as how the interviews were going to be conducted. The research assistant was well trained on this before we started data collection. The participants´ consents were given to us both verbal and written.

In addition a written parental consent was sought from every participant below the age of 18 (See Appendix F), an issue that is further discussed in the next section.

#### *4.2.1 Parental consent*

The CIOMS guideline 4 states that the researcher must obtain voluntary informed consent, or "*in the case of an individual who is not capable of giving informed consent, the permission of a legally authorized representative in accordance with applicable law*" (48). Similarly, the Declaration of Helsinki states in paragraph 27 that "*for a potential research subject who is incompetent, the physician must seek informed consent from the legally authorized representative*" (47).

For adults we assume capacity unless they have a mental disease or there is other evidence to the contrary, and for children we assume the opposite. The picture is much less clear with adolescents, whether they should be regarded as adults or children in terms of capacity to consent. Generally it is expected that an adolescent should reach the age of majority to give informed consent without permission from their parent or guardian. The CIOMS guidelines say that it is assumed that children over the age of 12-13 are capable to understand and thereby can give informed consent, but that the consent normally should be complemented by parental permission (48). However, the ethical principle of respect requires attention to adolescents emerging capacity to make independent and reflected decisions. We should have respect for their desire for autonomy and increased ability to make decisions. Moreover, in research with sensitive topics, such as sexual health research, parental permission might not always be the best way to protect the adolescents' participation.

A lot of considerations were done in relation to this issue, whether a waiver of parental consent or not was the right thing to do. The CIOMS guideline 14 says that ethical review committees may waive parental permission for some studies, such as studies involving sexual health beliefs and behaviour if "*parental knowledge of the subject matter may place the adolescents at some risk of questioning or even intimidation by their parents*" (48). After much reflection and a search true relevant literature about the topic when I was planning this study, I decided to plan a study with a waiver of parental consent. I believed that mandating parental consent could cause more harm than good, since adolescents wishing to participate in a research study about contraception can be interpreted by their parents as being sexually active. Moreover, sexuality is a topic that often is difficult for parents to talk to their children about and vice versa, so I was also afraid that inclusion could be difficult if requiring parental permission or that I would end up with participants of a certain characteristic.

However, based on comments from both the Norwegian Social Science Data Services (NSD) and the National Institute for Medical Research (NIMR) ethical committee in Tanzania, I changed my protocol to require parental consent from every participant below the age of 18. NSD said that I could do it without requiring parental consents, but that common practise in Norway was to have a lower age limit of 16, and they therefore asked me to change the lower age limit. NIMR said that all research in Tanzania require parental consent of participants below the age of 18, and I therefore decided to do as they recommended and did not try to convince the committee as I was afraid that the process would take longer.

For all the participants below the age of 18, an information letter with a consent form attached was given to the parents before the interviews were conducted (see Appendix F). These information letters were distributed to the parents via the schools. Getting parental consent turned out not to be a big challenge. Most of the parents agreed that their child participated, with the exception of 2 cases. The reason that the parents were willing to let their child participate can be due to the fact that most of the participants were recruited through schools, so the parents understood it as an activity already

approved by the headmaster at the school. I did not receive reasons for denying participation from the parents who said no.

### *4.2.2 Other permissions*

Before I started data collection I obtained permission from the Regional Education Officer in Arusha, as this is common practice when research involving schools and students are being conducted (see Appendix G). I also requested for approval by the headmasters at the schools. Moreover, before recruitment out-of-school adolescents started I got the village leader's permission to approach the field in that specific area.

## 4.3 Confidentiality

Confidentiality is another key safeguard in health research besides informed consent. Protection of confidentiality means ensuring that participants can never be linked directly or indirectly to the data they provide.

In this study participant confidentiality was maintained by giving each participant a code instead of using names. The participants were coded with a participant number (1-45) and according to their gender, i.e. M9 or F38. The issue about anonymity and confidentiality was addressed to all participants before we started the interview, and was also highlighted in the information letter (see Appendix E). The research assistant was trained about how we best could safeguard confidentiality, and I kept reminding her if I felt that something could have been done differently in terms of protecting their confidentiality. It happened occasionally that some of the participants shared their name with us, i.e. when we came and introduced ourselves at the schools. Their names were never recorded, either in the field notes or on the digital recorder. Only demographic data was asked for and written down, such as their age, education level, marital status, religious affiliations and whether they had children or not. It was also asked for information about how to contact them again, such as a phone number, name of the teacher or other options that the participant preferred, so we had the opportunity to contact them again in cases of doubts about the recorded data or other issues that we thought could rise. This information was stored in a password-protected document on my computer and deleted after the fieldwork period.

As mentioned previously, most of the interviews were carried out at their school in an empty classroom we gained access to by the headmaster. Most of the times, this gave us privacy and enabled us to talk undisturbed without observers. However, there were episodes where students were standing outside the classroom window or students came in the classroom during an interview. If we felt that the situation imposed a challenge to maintain confidentiality, we paused the interview. For the participants recruited outside school, the interviews were done in their home or at the village leader's office. For information shared during focus group discussions our ability to safeguard confidentiality is limited, since we cannot know whether the respondents themselves will leak information.

### *4.3.1 Data management*

All interviews were digitally recorded and immediately transferred to my password-protected laptop. The research assistant had also access to the recorded data throughout the data collection period, but was asked to keep it in a safe way and delete everything after she had finished her work. A confidentiality agreement was signed before we started the data collection. The participants' demographic data and contact information was immediately transferred to my computer in a password-protected document that was stored separately from other materials related to the study. A notebook with field notes, such as observations and comments from the interviews, were stored in a secure place. This notebook only contained ID number, and no demographic or identifiable information.

All recordings, field notes and information about the participants will be deleted after the completion of the master thesis.

## 4.4 Working with a vulnerable group

During history vulnerable people have been subjects of exploitation in health research. Vulnerable individuals and populations are attractive to include as research participants since they often are readily available and cheap to include. In order to protect exploitation of vulnerable populations ethical guidelines have been developed. The CIOMS guideline 13 states that "*Special justification is required for inviting vulnerable individuals to serve as research subjects and, if they are selected, the means of protecting*

*their rights and welfare must be strictly applied*" (48). But who are defined as vulnerable populations?

There are many "definitions" of who are considered to be vulnerable. In the Declaration of Helsinki vulnerable persons are defined to be those who "*cannot give or refuse consent for themselves and those who may be vulnerable to coercion or undue influence"* (47) and in the CIOMS guideline vulnerable persons are defined as those not able to protect their own interest (48).

Under these broad definitions many persons can be defined as vulnerable due to lack of resources, power or mental capacity. In this study, I believe there are two main factors that increased the participants' vulnerability, and which were worth to reflect upon in the field. Firstly, some of the participants were minors and defined as children under the age of majority in Tanzania (18). Secondly, the participants came from a low-income country, whereas the researcher comes from a high-income country.

As already discussed, including minors in health research raises ethical issues related to the competence to give informed consent. I paid special attention to whether the concept of informed consent was sufficiently understood for the youngest participants and that they did not feel forced to participate. Since most of the interviews were conducted at schools with the headmaster´s permission, the research project might have been viewed as an accepted activity included in the curriculum and made participants feel obliged to participate. Moreover, since I am a "white" researcher from the richer part of the world this might have given rise to a power imbalance, which further put the participants in a vulnerable position where it was difficult for them to say no to participate.

Participants´ vulnerability is also sensitive to the purpose of the study, and addressing sensitive themes such as contraception will most likely put the participants in a more vulnerable position compared to less sensitive topics. Besides reflecting on this and discussing it with my research assistant, I tried to observe signs that could tell me whether the participant was feeling at unease or not. I never ended an interview because someone looked too uncomfortable, but there was a couple of interviews were

we probed less and did not cover all the themes because the participants did not seem to be willing to share much information.

## 4.5 Benefits and risks

This study does not have direct advantages for each individual, besides that their voices are being heard. The expected benefit from this research will be to help future adolescents. Knowledge about adolescents' views can be helpful in order to increase adolescents' utilization of contraceptives, which is important to protect against excessive childbearing and sexually transmitted infections. Furthermore, that their voice is being heard can be important in terms of empowerment and the feeling of helping others, but will not be the main advantage.

There was no physical risk for the participants in this study, but there was a risk of psychological effects such as anxiety and distress. I never felt that this happened during the interviews, but on the other hand I cannot say for sure, and I cannot know how they felt after the interview had finished. I told my research assistant to refer participants who seemed to need advice or contraceptive services to the nearest reproductive health clinic. However, it never happened that participants needed professional advice or assistance. In addition, there was a risk of "over disclosure" of information that they later would regret on, especially during focus group discussions were guaranteeing confidentiality is a bit more challenging. We tried to reduce the possibility of this to happen by reminding the participants that the information being shared during the group discussion was confidential and should not be given to anyone else.

## 4.6 Ethical dilemmas faced in the field

I believe all research projects face ethical dilemmas while in the field. In this study, using a research assistant to conduct interviews in the local language made me face some ethical dilemmas I had not accounted for. For example, despite spending 2 weeks with comprehensive training before we actually started to collect data, the research assistant could not know everything. For all the interviews we mentioned different types of contraceptives, both modern and traditional, after they had told us about the methods they knew. After I got the first transcripts I saw that the research assistant had

mentioned breastfeeding after delivery as an example of a traditional contraceptives, and she had incorrectly explained how breastfeeding could work as natural birth control. I explained this to my research assistant, and for rest of the interviews such misinformation was not given. The fact that we gave the participants names of the traditional methods, also created a possibility for the participants to get an impression that traditional contraceptives are methods we vouched for, especially considering the fact that almost all of the participants perceived us as educators as described in section *3.9.2 Perceived as someone else.*

Another ethical dilemma faced in the field, happened after a focus group discussion with girls. The girls in the group started to ask questions about the different types of methods, like what are the side effects and how they are used, in their local language. The research assistant explained, and it took me some time before I realized what was going on since my Kiswahili skills were limited. I will not know for sure if the research assistant gave the girls correct information, but she involved me in the discussion when one of the girls asked something she did not know.

# 5 FINDINGS

The following chapter of the thesis will present the findings derived from this study and address each specific research objective. The aim of the study was to explore adolescents' perceptions of contraceptives and contraceptive use in Tanzania, with the specific research objectives as follows:

- To explore adolescents' understanding of modern contraceptives
- To understand adolescents` views of modern contraceptives in relation to traditional methods of contraceptives
- To explore adolescents' motivations to use contraceptives
- To explore adolescents' reflections on access to modern contraceptives
- To assess how cultural values/norms affect young people's use of contraceptives
- To identify how their perspectives are influenced by their parents, family, friends and teachers

Based on these specific aims, this study produced six main themes with different sub-themes. Each main finding will be presented and discussed. The presentation of findings will be followed by a short summary.

## 5.1 Perceptions of contraceptives as family planning methods

This theme describes how adolescents relate to contraceptives as family planning methods, and explores the consequences such perceptions have for young people's views of contraceptives. The section starts by exploring how adolescents perceive contraceptives as methods to be used within a family. Thereafter, young people's positive perceptions related to modern contraceptives are explained. Adolescents in this study had positive perceptions related to what good contraceptives can do for the family and for the country. Finally, the participants' attitudes towards family size are presented followed by young people´s barriers to access contraceptives.

### *5.1.1 Are contraceptives for youths?*

All of the participants perceived contraceptives as methods used in a family or by married couples in order to plan the number of children and the interval between them.

This was the first thing they started to talk about when we asked open questions in the beginning of the interviews, such as what they understood about contraceptives. None of the participants started to talk about contraceptives in relation to youths.

> *Contraception to my understanding is the methods used by a father and mother to plan the number of children they want in a family and also the interval between each child. (F20)*
>
> *Contraception as I understand it, is the plan between parents or married couples for the number of children they want to have. (M40)*

The quotations above represent young people's understanding of contraceptives as methods used by parents to plan their children. All of the participants had statements similar to these two. Moreover, most of the participants emphasized that contraceptives are used by two people, mostly referred to as "husband and wife", "married couples" or "parents", based on a joint decision between them. Many of the participants emphasised that parents plan and agree together on the number of children that they want in the family, and contraceptives help them to achieve their joint family plan.

> *Contraception means to plan the number of children you want, and it is discussed by both parents. (F11)*
>
> *Contraception is the situation when a father and mother discuss together the number of children that they want, in order to be able to fulfill their needs. (F37, FGD)*
>
> *Contraception means the methods that are used by those who are married… They plan a good family, because they have both agreed on the number and the type of family they want. Plans have been made from the beginning. (M5)*

As illustrated by these quotations, many young people view contraception as methods used by two people in a committed relationship when plans are being made together. This is a view distant from most young people's lives, as youths often engage in less committed relationships. Further, participants explained that contraceptives are used when you want to have children, not because you want to prevent having children, but rather as something you use when you are ready to have children and want to start planning your family. This is highlighted by what this young girl said:

*Those who want to have children are the ones who need to know the contraceptive methods... So when they want to have children they use contraceptive methods... When I grow up and get married I will use the contraceptive methods, because it will help me to get the children I want and I will know how the intervals will be. (F21)*

Many other participants had a similar view like this girl. Contraceptives are used when you want children – not to avoid having children before marriage or when young people engage in unplanned sex. As a consequence, young people do not think of using contraceptives before they have reached the stage in life where they plan to have a family.

When we started to probe and ask questions about whom they thought were supposed to use, or should use, contraceptives, many of the participants kept saying it is for married couples only. The reason why they thought contraceptives were not for youths was related to the fact that they should not have sex in the first place. These participants' answers as to whom they think are supposed to use contraceptives illustrate this perspective well. For example, they continued saying contraceptives are not for youths, even though we probed specifically for youths:

*The person who is already an adult and has completed school - and has completed everything – can use contraceptives. In the family, the mother and father can use. And other people can use, except students who are under 18 years of age.*
***I:** What if a person under 18 is engaged in a sexual relationship?*
*A person who is still in school is not allowed to have a sexual relationship, so the contraceptive methods are not applicable. (F11)*

*I think married people are supposed to use contraceptives.*
***I:** Married people only?*
*Yes, because it is difficult for a student who is supposed to concentrate on studies to start using those methods. No, it is not right; he/she has to leave them out, because it is not the right time. (M28)*

Despite the determined answers from these participants that contraceptives are not relevant or should not be used for youths when we probed, about half of the participants changed their answer and included youths among those that could use contraceptives when we probed for it. Some said that everybody is supposed to use contraceptives or that unmarried adolescents should also use contraceptives to prevent teenage

pregnancies. Here are two girls´ explanations for why they believed everybody should use contraceptives:

> *Because if we say contraceptives should only be used by fathers and mothers in a family, then students will be getting early pregnancies and they will drop out from school. (F20)*

> *I think contraceptives are for everybody. When I am saying that I mean anyone who is above 15 years of age. Because if we say parents are the only ones to use, we don't think about youths who get early pregnancies... (F19)*

Teenage pregnancies were mentioned by many of the participants, and because of this challenge many said contraceptive services are also needed for youths. At the same time, many said sexual education is sufficient at the adolescent stage, and that education could help them abstain, again illustrating youths' normative view of premarital sex. (See more in section 5.6.5). Others acknowledged that youths should use contraceptives if they were doing things they were not supposed to or if they were above a certain age, as in the case of the girl in the second quotation presented above.

A few of the participants mentioned prevention of STIs and youths' sexual behaviour as reasons for why youths should also use contraceptives.

> *What I see is that all of us can use. I mean youths and parents who are in marriage. Because contraceptive methods help a lot, especially for youths, because there are those who like to have many partners. They can get diseases and transmit to others, so I can almost say we are the ones supposed to use, although the married are also supposed to use. (M29)*

Participants, illustrated by this boy's quotation, seemed to acknowledge the existence of STIs and that contraceptives would be useful in order to prevent STIs. Some also recognized that young people often have many different partners, making young people one of the groups who should use contraceptives. Despite this recognition, the majority felt contraceptives are not first and foremost for youths, which can be explained by participants' feelings of being left out from advertisements and information about contraceptives. Some participants said they felt promotion of contraceptive use was focused on families and married people, and as a consequence youths took them as methods for fathers and mothers, and not for youths. This boy explains how

advertisements and information about contraceptives are focused on married couples, and that even condoms are called “family condoms”:

> *I think contraceptives are focused on families, people who are married, because we can even hear most of the advertisements talk of fathers and mothers. Even condoms are called family condoms. So they focus on those who are married. (M41)*

In addition to a lack of focus on young people, some of the participants explained that negative attitudes related to contraceptive use among young people, especially girls, existed in the community. This will be explored further in the next section.

#### *5.1.1.1 Perceptions of youths who use contraceptives*

First of all, unmarried adolescents who use contraceptives are perceived as failures in the community, because it is a sign of not being able to abstain from sex. Especially girls would be perceived as promiscuous if they used contraceptives, and people would think they had more than one partner. Girls explained that their friends and boyfriend would think they had more than one man if they used contraceptives. Two girls explained how others would think about them if they used contraceptives:

> *If others hear that I am using these contraceptives, for example if my boyfriend hears this, he will not value me anymore, he will feel I am not only for him - he will believe I have many lovers. (F15, FGD)*

> *If fellow girls hear that I am using, they won’t see me in a good way…(laughs). They will think the reason why I am using contraceptives is because I have many boyfriends and like to have sex all the time. They can even isolate you and talk bad words about you. (F12, FGD)*

As illustrated from the above quotations, girls were afraid of what others would think of them if they used contraceptives due to the negative perceptions related to contraceptive use among unmarried girls. Besides being perceived as promiscuous, girls could also be perceived as prostitutes. Some of the boys said they would think their girlfriend was a prostitute if they realized their girlfriend was using contraceptives. This is what one of the boys said when we asked him what he would think if he found out that his girlfriend used contraceptives:

*M 29: The first image I will get is that she is a prostitute, if I find she has used pills. I will think she has sex with many men like me, and she is therefore afraid to get pregnant…*
*I: And what if you find condoms in her bag?*
*M 29: My girlfriend?*
*I: Yes, in her handbag she has condoms.*
*M 29: That will be a disaster (laughs). I will totally say she is a prostitute, because you said many condoms.*
*I: No, just one box and you are together.*
*M 29: … Even if it is when she is with me and I find her with condoms, it can't give a good meaning.*

As illustrated here, girls who use contraceptives or take initiative to use condoms when they meet their boyfriends are at risk of being misinterpreted. In addition, other people in the community seemed to have negative attitudes towards unmarried adolescents who use contraceptives. For example, health workers would not perceive them nice, as described in section 5.1.5.

In general, the findings presented in this section reveal that to a large extent modern contraceptives are not something youths relate to. Most of them feel contraceptives are methods that should be used within a family, with the word "family planning" taking on a literal meaning. However, some acknowledged that contraceptives should and can be used by young people in order to prevent early pregnancies and STIs. At the same time, when they were asked about the advantages of contraceptive use, almost all the participants mentioned advantages for the family or for the country and did not mention advantages for youths, as presented in the two following sections.

### *5.1.2 Ensure strong and healthy families*

Almost all of the participants talked about contraceptives as something that can help parents provide basic needs for their family members. This meant that parents could have the number of children they can manage and afford to raise, and as a consequence the children will be provided with basic needs such as food, clothes, education and shelter. Many of the participants had statements similar to this participant:

*Contraceptive methods help when the mother and father sit together and plan the number of children for who they will be able to fulfill all their needs, like clothing, food and other things. (F14, FGD)*

The ability to have a reasonable spacing between the children in the family was also mentioned as a positive thing, as this gave parents time to rest and would ensure healthy mothers without them "getting old". The following statement highlights this clearly:

> *It helps increase the health, because if you look at mothers who get pregnant a short time after they have given birth, they don't have good health. When children are born in decent intervals, the mother is in good health and the children too. (M24, FGD)*

Further, some of the participants mentioned a reduced number of street children and prostitutes as a positive outcome of contraceptives. If parents would be able to provide the children with basic needs, such as education, and parents did not have more children than they could afford, it would not be necessary for children to "run to the street" in order to help fulfil the basic needs of all the children in the family. The following young girl said this about contraceptives:

> *These contraceptive methods help a lot, because the child will be getting its basic needs, like education. And if you have many, and all are in secondary school, it will be difficult for you to assist them all. And it also helps to reduce the number of street children, because in a large family the parents are unable to take care of them all, so the children decide to run to the street… They go and employ themselves… When the child sees that the father has no money and there is nothing at home, the child decides to go and steal, and it is dangerous. To the girls, they decide to go and become prostitutes, in order to get something for home. (F17, FGD)*

A few of the participants also mentioned that contraceptives were beneficial in order to keep a good harmony in the family, as you agree together as a couple on the number of children you want:

> *And it also brings peace in the family, because sometimes if a woman gets pregnant and the man does not want it, it brings problems in the family. (F10)*

As demonstrated in this section, young people's perceived advantages of contraceptives are related to benefits for the family, whereby families will be strong and healthy and children will be better equipped in order to have a good life. In addition to benefits for the family, many of the participants perceived contraceptives as tools to develop the country as will be highlighted in the next section.

### 5.1.3 Development of the country

Tanzania faces a range of different challenges due to its high fertility rate. Many of the participants talked about challenges they observed in the community related to having a big family. They said that life in Tanzania was tough because of a lack of resources, especially in rural areas, and contraceptives could therefore give better lives to people. This can explain why providing for the basic needs of a family was perceived as the major advantage of contraceptive use. They felt contraceptives were there to help the families, but also to help the country as a whole, as this participant explained:

> *In our country Tanzania, many people give birth to many children and you find that they are unable to raise them. You find the father drunk every time and the mother cannot take care of the babies. For example, if you give birth to 10 children they end up as street children, some become thieves, while others rape people. That is why these contraceptive methods were brought here to help people learn how to plan. (F42)*

The reason why participants viewed contraceptives as something to be used for married couples can be linked to the participants' knowledge about how contraceptives are used to slow down population growth. Many of the participants talked about contraceptives as a method to reduce the population growth, illustrated by this participant:

> *…They encourage people to use contraceptives, because in the future they believe we will have a high number of people. So in order for the population to decrease, they encourage use of contraceptives, so that the services the government provides will be enough for everybody. (M4)*

All of the participants regarded a reduced population as a positive outcome of the use of contraceptives; none of the participants in this study expressed a negative attitude towards decreasing the population in the country.

> *If everybody has many children, we will have a high population that is uncontrollable. So in order to have a population that a country can easily manage, there should be contraceptives… (F11)*

The main reason given for why it was beneficial to decrease the population growth was because it would lead to a development of the country with less poverty. A smaller

population would help the government to provide social services to people. One participant said this during an interview:

> *I think if we have these methods it can also help the government to plan the social services in the community. For example if a person has many children in a certain community, the government fails to give good service. But if we were having good birth control, the government would have no trouble. (M36)*

Despite positive perceptions related to a decreased population, few of the participants mentioned that other people in the community hold different views, illustrated by what this boy said when we asked him why he thought some were reluctant to use contraceptives:

> *…Some believe that contraceptive pills are not a good method, because they are brought to Africa in order to destroy reproduction by Western people. (M28)*

Participants' expressions of contraceptives as tools to help the development of the country may indicate that they are aware of the on going debate about whether contraceptives should be used to reduce population growth in overpopulated countries with limited natural resources. For this study, the participants gave the impression of favouring the side in the debate that argues that reduced family sizes will allow a greater proportion of the resources to be allocated to every child. Many of the participants explained that a smaller population would help the country to cope with the challenges of having limited resources. However, such positive perceptions related to a reduction in the population growth will probably not encourage young and unmarried people to use contraceptives in their everyday life, but can help with the acceptance and legitimization of contraceptive use in general. Moreover, when we asked participants what type of family they would like to have in the future, everybody said they want a small family.

### *5.1.4 Perceptions related to family size*

Both boys and girls declared that they would like to have a small family in the future; no one said they want to have many children. When we asked them how many children they would like, almost all of the participants said they would like to have 2 or 3 children. Many of the participants also used expressions such as "not more than 2 or 3 children". The reason why a low family size was perceived to be best was associated

with a better economic situation, which would better enable them to raise their children and give them their basic needs.

> *I would like to have two children, because then I will be able to raise them and give them basic needs. (F22)*

The majority said that they would not like to have children before they get married. However, a few of the girls said that they would like to have children without a husband, because they did not want the responsibilities being a wife would give them.

### *5.1.5 Access barriers for youths*

The view that sex is only accepted within the social institution of marriage makes young people face difficulties in assessing contraceptive health services. Participants in this study indicated several challenges for young people in accessing family planning services. This was something that the majority of the participants talked about, especially during the focus group discussions with girls. A few of the adolescents said services are too far away, especially in rural areas, but the majority mentioned other barriers that are connected to the view of contraceptives as something to be used within a family.

The biggest barrier to using contraceptive health services was related to concerns about how they would be received and perceived if they went to a clinic or health centre. Girls especially said that young people did not seek such services because they are too afraid to go. Many had stories of friends who had tried to go or had heard from others it had been difficult because they were asked a lot of questions. They said girls would be asked about their age and told they were too young to use contraceptives or they would be asked where their husband was, and be questioned abut their reasons for using contraceptives. Due to this issue, girls did not feel confident about going and seeking the service, as illustrated by what these two girls said in a focus group discussion:

> *…If you go to the hospital and you are a student and you want to get the service, maybe injection, they will start asking questions like: "Why injection?", "Why are you having sexual relationships while you are still a student?" or they may just look at you and say you are still young. So it is always difficult to get that service easily to us youths. (F18, FGD)*

> *Others don't go because they are not confident. They ask themselves: "If I go and ask the doctor that I want this and this, how will he see me and I am not even married?" (F17, FGD)*

As demonstrated by these quotations, girls were afraid of what the health care personnel would say. Some of the participants said that the health care personnel would think you had many partners or were a prostitute if you came to seek contraceptive services. Moreover, some said that you could be denied the service if you came there as a student, because they are not supposed to engage in sexual relationships yet, and thus should not use the service.

Besides being young and not coming with a partner, many of the participants, both boys and girls, expressed a feeling that these services were mainly for married couples. They said married people received the service easily, while it was difficult for unmarried people. They would need to pretend to be married, or soon to be married, if they wanted to seek services together, as this girls said:

> *For the unmarried, it is difficult. If they decide to go they have to pretend being mothers and they also look worried (laughs). You tell them; "I'm the wife and he is the husband", or you just lie we are soon getting married. So accessibility is simple for the married, for the unmarried it is a bit difficult. (F10)*

Some of the participants also said unmarried adolescents would not receive information at health centres providing contraceptive services. And if they received information, the information would not be in depth, just given briefly. A few of the participants also said they were afraid that other people in the community would know they had sought contraceptive services, because people would not understand them and think badly of them if someone saw them there. They were therefore afraid to go to those places, in case someone they knew was around.

Access to contraceptives in shops and pharmacies seemed to be easier, because they would receive fewer questions. One of the reasons mentioned why access was easier there, was because shops and pharmacies were more concerned with earning money. This perceived easier access to contraceptives in shops and pharmacies is illustrated by what one boy and one girl said about the issue:

*In the shops, nobody asks you. What they want is only money… (M3)*

*In my perception it is simpler to buy in a pharmacy, because they want money. They will not hesitate to sell. Maybe a few places will, when you meet professional pharmacists, then they can ask: "you are young, why are you buying condoms?" But most of them they do not ask. (F38, FGD)*

However, the views differed, some said they could buy without being questioned, while others said they would receive a lot of questions. Financial constraints were also mentioned by some of the participants as a reason not to use contraceptives. Some said they did not want to go to health centres, because they were worried about the cost, like this girl:

*They may feel that it is expensive, because as students we don't have money. So they decide to do it without instead of using money. (F38, FGD)*

Thus, as demonstrated by this quotation, young people have unprotected sex because they cannot afford to buy contraceptives. Some of the participants also said that youths rely on traditional methods, such as following the dates of the menstrual cycle, instead of buying contraceptives. The issue of financial constraints was related to all modern contraceptives besides condoms. We asked them specifically how much condoms cost and if they were affordable for youths, and all described condoms as being cheap and something youths could afford.

Contraceptive health services did not seem to be used by young people, because being young and unmarried make them feel out of place when accessing these services. When we asked a health worker at a reproductive health clinic in Arusha what differed between adolescents that came compared with those who did not seek the service, we got the same answer. We were told that the young girls who came to get contraceptives at the clinic usually came with a partner.

## 5.2 Knowledge and misconceptions related to contraceptives

This theme deals with participants' knowledge about contraceptives as well as misconceptions related to contraceptives use. Adolescents in this study had a lot of

negative perceptions of modern contraceptives where by they mentioned different negative consequences of using contraceptives. An interesting observation from this study is that all the negative perceptions were related to side effects at the individual level; how contraceptives can cause harm to your body or do not give you sexual pleasure (condoms). This contrasts with the positive perceptions related to contraceptives as family planning methods with positive outcomes for the society as discussed in the previous sections.

### *5.2.1 Knowledge about modern contraceptives*

Participants were asked about which forms of contraception they knew. On average the participants were able to mention three different contraceptives, and many of them had heard of more types when we mentioned them. Pills were the method mentioned by most of the participants, but intrauterine devices (IUDs), injections, condoms, implants and sterilization were also frequently mentioned.

It was not an aim of this study to assess their levels of knowledge, but by talking with adolescents about this topic we got an impression of what they did and did not know. Many demonstrated a basic knowledge about different contraceptive types, and could differentiate between how the methods are used. Some explained to us that pills are tablets you need to take every day, while with injections you have to go for an injection every certain month, but with implants and IUDs you are protected for a long time after they are inserted into the body. The existence of general knowledge among the participants and the ability to differentiate methods are illustrated by the following quotations:

> *… Implants can be used for a number of years, but pills you have to take every day and with injection you get a new one after some months. (F6)*
>
> *If I start with methods of using pills, then you are given drugs that protect against pregnancy. With the loop they insert a thing that protects a woman from getting pregnant. With the use of condoms there are of two types; male and female condoms. They are used to protect against pregnancy – they prevent the sperm from meeting the woman's egg. Withdrawing is when you are having sex and before the last point you remove it. (M40)*

Despite general knowledge about different types of contraceptives and how some of them are used, the participants felt that young people did not have enough knowledge about contraceptives, and that this was one the main reasons for why contraceptives are not commonly used. They said they did not have a detailed understanding about the advantages and disadvantages of the different methods, and they would therefore not know which method to use. As a consequence, young people chose not to use contraceptives. Moreover, a lot of misconceptions related to contraceptive use existed. These misconceptions are related to side effects from using contraceptives, as will be explained in the following sections. The high existence of such negative perceptions can probably be linked to limited knowledge about contraceptives.

### *5.2.2 Contraceptives might not "match with your body"*

Adolescents in this study had different opinions and knowledge related to the side effects of contraceptives, whit almost all participants expressing negative perceptions.

> *"I just don't like, I don't know…they have side effects" (F10)*

Side effects of contraceptives were mentioned by all of the participants as a reason for non-use among young people in general, whilst the majority of the participants expressed major concerns related to side effects. However, no one revealed that they personally experienced side effects related to contraceptive use. They had stories of people they knew or they had heard rumours. The idea that contraceptives could cause side effects was related to the perception that contraceptives might not "match with your body". If the contraceptives did not match with your body, you could get different types of diseases and become sick, and moreover not be protected against pregnancy. This view was shared with us by almost all of the participants, and especially girls talked a lot about this, as the following examples illustrate:

> *If the methods do not match with your body and you have sexual intercourse, you get pregnant. And sometimes it can bring diseases, it can make you feel sick, maybe because the pills have not matched with your body. (F8)*

> *The disadvantage is those pills. I don't have much knowledge with them, but I hear that there are people who don't match with them. And that may cause diseases, so I hear people fall sick. (F10)*

*…You may use the injection and it does not match with your body and you may not know, or you get so fat. If you ask for the reason, you are told it is the contraceptive methods. And you can believe yourself that you are ok and you want to have sex with the partner… and after sex you can find yourself pregnant. (F19)*

As shown by these examples, different modern contraceptives were associated with the concept of "not matching with your body". Pills were often mentioned as a type that did not match with your body, but injections, implants and IUDs were also mentioned. With the pills, some seemed to believe that the pills actually remained in the body and thus did not want to use them:

*Because when you take pills, for example the Flexi-P, they have side effects because they don't melt when they are in the stomach and that is bad. So to me I think I just have to take care of myself. (F42)*

Almost all of the participants were of the opinion that contraceptives could cause infertility. The reason why you could become infertile was because contraceptives destroyed the reproductive system. Therefore, if you used contraceptives when you were young and single, you would not get pregnant when you got married and girls would be at risk of ending up alone.

*If a girl uses pills, injections or the implant when she is young and she has not yet got any children, it will affect her reproductive system. So when it comes time that she wants a child, her reproductive system will be blocked. (F17, FGD)*

*When a person uses pills they have side effects and they may cause a person not to get pregnant in the future. Because if you get used to those pills, they bring problems in the reproductive system… (M29)*

Fear of infertility was the type of side effect that was most frequently mentioned. This fear is highly linked to the association of contraceptives as something that should be used after you are married, and after you have got your first child. One participant said this about contraceptive use:

*… In our area a person who has one child or two is allowed to use contraceptives and the one who has no children can't use contraceptives, because they can cause effects later when I want to have a child. I won't get, because of the pills. But those who have children can use. (F43)*

Another common perceived side effect of contraceptives was cancer, mentioned to us by both girls and boys. Many believed that modern contraceptives could cause cancer, such as the pills. Different types of cancer were mentioned, such as breast cancer, uterus cancer and womb cancer, but usually the type of cancer was not specified as in the case of this girl:

> *People say that modern contraceptives have side effects, you can become fat and some say you can get cancer…. So when youths hear those side effects, they decide not to use. (F22)*

Other side effects that were mentioned by the participants were menstrual disruption, weight gain and pain. A few of the participants also said that use of contraceptives could affect the child, illustrated by this participant:

> *… If she uses those methods for a long time, she will end up giving birth to an abnormal child. That means the implant can be a poison in the body. (F17, FGD)*

All the participants mentioned fear of side effects as a reason why youths in the community did not use contraceptives. The majority of the participants gave the impression that they would not like to use contraceptives due to this fear of side effects. However, during a focus group discussion with boys one participant disagreed with the others and said he felt contraceptives are safe and did not cause severe side effects:

> *I don't think contraceptives have any disadvantages. If you use pills or injection and then stop, you will get back to the same situation and you can get children at the time you want. These methods can be used for many years and will not have any side effects, you just have to follow the instruction and choose the right method that an expert can advise you. (M30, FGD)*

Despite this boy's disagreement with the other participants, the rest of the boys in the discussion, as well as the other participants, said contraceptives had negative effects. Interestingly, not only girls seemed to be worried about side effects, with boys also mentioning side effects related to contraceptive use for women. However, boys mentioned fewer negative effects related to contraceptive use and seemed to be most worried about infertility. Girls on the other hand, usually mentioned several side effects related to contraceptive use in addition to infertility.

### 5.2.3 *"You can´t eat a sweet with its wrapper"*

The majority of the adolescents mentioned that condoms were often not used among adolescents because it reduced sexual pleasure. Almost all said that using a condom was not "sweet" by saying condom use is like "eating a sweet with its wrapper". This was a common understanding among the adolescents, both boys and girls, even though few of them actually admitted to having had sex before.

> *I can say for the use of condom is like "eating a sweet with its wrapper", so they don't feel the real pleasure, so that discourages them to use. (F19)*

> *The reason why many do not want to use contraceptives is because they take away enjoyment. There is a saying that says you "cannot eat a sweet in its wrapper", so that makes it difficult to use. I can't use a condom to have sex with a woman (M25, FGD)*

The above quotations show that young people prefer unprotected sex in order to get the real sexual pleasure. Almost none revealed having had personal experience using condoms, and therefore many of them might not know how it feels to use a condom. The majority said they had heard other youths say it is not "sweet "to use condoms. It is interesting to note how this perception has established itself as truth regardless of personal experience with condom use or not.

Participants mentioned that condom use was not "sweet" in relation to various themes raised during the interview. Some mentioned this when we asked questions about why young people chose to not use contraceptives, while others mentioned that condoms were not "sweet" in relation to themes such as teenage pregnancy or the use of traditional methods.

> *Many of the youths prefer to use traditional methods, because most of them say, for example the use of condom, is like "eating a sweet with its wrapper" (laughs). So they prefer to use the traditional methods, because you get the real sexual pleasure. (F14, FGD)*

> *The boys say they can't "eat a sweet with its wrapper" (laughs). So they decide to do it without, and that is why many get pregnant… (F43)*

As illustrated from these two quotes, girls explained non-use of contraceptives or use of traditional methods as a consequence of reduced sexual pleasure by using condoms.

However, some of the girls indicated that it was often the boys who said it was not "sweet" to use a condom, making girls agree to unprotected sex.

### *5.2.4 Uncertainty related to condoms' safety*

Some of the adolescents expressed uncertainty about how effective condoms are. Even though all of the participants had heard that condoms were used to protect against STIs, uncertainty about their effectiveness remains as illustrated by this quote:

> *Me as a boy, I don´t like to use condoms, because sometimes I think it is not efficient. I fear that I can still get infections (M4).*

Others explained that condoms are not safe because they can easily burst. Moreover, some of the adolescents were unsure whether condoms actually protect against both pregnancies and STIs or just one of them, such as these participants:

> *… I don't know if I will be mixing up things, but condoms have a high percentage in preventing pregnancy and low in preventing diseases like the STIs. I don't remember where the percentage is high. Is it on preventing pregnancy or preventing diseases? (F10)*
>
> *… Some say condoms protect against pregnancy, but not HIV. (F19)*
>
> *I am not sure, some say condoms protect against pregnancy and others HIV. But I think it is only for HIV, not pregnancy. (F45)*

As the above quotations illustrate, uncertainty related to the effectiveness of condoms seems to exist among young people. In addition, a few of the participants mentioned that some youths believe condoms are infected with germs or HIV, and they therefore felt condoms were not safe. This was not something the majority talked about, only a few of the participants mentioned this, but it was revealed to us without probing for such misconceptions.

> *…They say condoms have germs, but I am not very sure, but they can cause effects. (M29)*
>
> *…Some say that condoms cannot prevent against pregnancy and HIV, and some have a belief that condoms are injected with HIV. (M28)*

Such uncertainty related to condom use demonstrates a lack of knowledge. Scepticism of condoms will of course discourage use, as there is little incentive to use a condom that is ineffectual, or worse, infected with a virus or germs.

### *5.2.5 Most common contraceptive method*

The participants had differing opinions related to the various types of modern contraceptives, and which modern method young people in Tanzania most commonly use. When asked, the majority said that youths usually "do it without" or rely on traditional methods. However, for those who use contraceptives, most of the participants said adolescents usually use condoms. Both girls and boys said that condoms are the modern method most commonly used, and the main reasons given for why condoms were used by youths were because they were simple and easily accessed. Participants said condoms are found "everywhere", in shops and pharmacies. Some also said this was a "normal" method for youths, so they felt less shy buying this compared to other forms of contraceptives. Price was also mentioned as an important factor, as condoms are relatively cheap in Tanzania. Another reason why condoms were the most used method amongst youths was because youths often have causal or unplanned sex, and condoms were therefore easy to use, as they don't need to be taken in advance, like this girl explained:

> *Youths prefer to use condoms because there is no specific day for you to have sex with the girl. So any day they feel like it they can have sex. But if it was pills, you might find the girl has forgotten to take it. So they use condom, because it protects from diseases and pregnancy. Condom is a simple method. (F17, FGD)*

On the other hand, youths' sexual behaviour where sex is often unplanned was also a reason why contraceptives were not used or why they rather relied on traditional methods such as withdrawal or the rhythm method. A few of the participants also mentioned alcohol or drugs playing an important role in the decision to use a contraceptive method. Alcohol would make them think of sex and when drunk they would not care about using contraceptives. A postpartum girl said this about how she got pregnant:

> *We had not planned anything and I didn't expect to do it (have sex). What caused it was alcohol. (F44)*

Even though condoms were mentioned by many of the participants as the most common method among the modern contraceptives, almost none of the participants said they had used condoms themselves. They were only talking about youths in general. Moreover, even though the majority said that condoms were the method young people used the most, a few also mentioned different types as illustrated by the following discussion with boys:

> ***I:*** *Which contraceptive methods do youths prefer to use the most?*
>
> *Contraceptive method that youths prefer to use is condoms, because they know that condoms can be found in shops and they are cheap… (M34)*
>
> *Youths differ in their thoughts about the use of these contraceptive methods. Some use condoms, but others use the withdraw method…. If youths say they will use condoms, there comes a time when youth do not use condoms anymore... (M32)*
>
> *Youths also prefer to use pills, because it is simple - you just take pills and you can have sex with any person. … Another simple method is condom, because if you go to a shop it is very cheap… It has instructions to follow on the cover, so even if you have not used it before they can read everything. (M31)*
>
> *… I agree that the method that is mostly used by youths is condoms, because it protects the girl and boy from getting HIV… (M30)*

As highlighted above all the boys mentioned condoms as a preferred method among adolescents, but some also mentioned other methods such as the pills. However, when we asked participants which methods adolescents did not want to use, oral contraceptives were the method most often mentioned, along with injections, implants and loops. Girls especially expressed a negative attitude towards using these methods, while boys frequently mentioned sterilization as a something they would never like to do.

Even though the majority of the participants mentioned condoms as a method often used by young people, almost none of the participants said they would choose to use it themselves in the future. At the end of the interview we asked all the participants which contraceptive method they would choose for future use, and the majority said they would rather choose a traditional method compared to a modern contraceptive. From

the data produced from this study, a high reliance on traditional methods such as counting safe and danger days was demonstrated and this is presented in more detail in the next theme.

## 5.3 Perceptions of alternative contraceptive methods

The following section will describe adolescents' perceptions of traditional contraceptive methods, starting with a description of young people's knowledge about such methods. Thereafter, reliance on traditional contraceptives including abortion is explored.

### *5.3.1 Knowledge about traditional methods*

Knowledge or information about different traditional methods to avoid unwanted pregnancies was widespread among the participants, where both methods to prevent a pregnancy as well as methods to induce an abortion were mentioned. The participants were quick to give details about the different types and how they were used. One traditional contraceptive method that seemed to be very well known by the participants was the rhythm method. Many of the participants seemed to have a good understanding of how this method works, and were able to describe approximately how it was used to differentiate between safe and dangerous days, like these two adolescents:

> *If you have a constant cycle, the first 8 days if you have intercourse you won't get pregnant. But the next 8 days, you will get pregnant… (F8)*

> *With the withdraw method the advantage is that it does not cost anything, but the disadvantage is that the woman depends on the man and it is not always easy for a man to know the time he is about to reach orgasm. And the calendar method depends on the days of the girl. Day 10 to 18 are the danger days. (M30, FGD)*

As illustrated by the above quotations, both boys and girls had knowledge about the rhythm method. In general, more girls compared to boys talked about this method and were able to explain to us how it worked. However, some did not give an accurate explanation about which days are considered safe and dangerous.

In addition to being aware of different traditional contraceptives, the participants also knew that traditional methods were not very safe. For example, for the rhythm method many said that changes in a girl's menstrual cycle would make it difficult to know exactly

which days that are safe or not. Despite this acknowledgement, young people seemed to prefer traditional methods compared to modern methods, as explained in further detail in the following section.

### *5.3.2 Reliance on traditional contraceptives*

In general, participants' perceptions of traditional contraceptives were more positive compared to perceptions of modern contraceptives. However, there was a general understanding among the participants that modern contraceptives were much safer in terms of preventing an unwanted pregnancy compared to traditional methods, and it was acknowledged that traditional methods were very much dependent on your own abilities to count, abstain or withdraw.

> *If I use the traditional methods, I can make a mistake sometimes. But if I decided to use the modern contraceptives, it would not be easy to get pregnant… (F14, FGD)*

As we can see from the above quotation, the participant seemed to know that modern contraceptives protect better against an unwanted pregnancy compared to traditional methods, a view shared by almost all the participants. Despite this recognition, the acceptance of traditional methods seemed to be much stronger than the acceptance of modern contraceptives. When we asked the participants which method they would like to use in the future for themselves, most of them mentioned a traditional method such as the rhythm method. Participants said that young people often relied on traditional methods, because they were "natural" without any side effects. Another reason why traditional methods were used a lot was because they were more accepted in the community, as these methods had been used for generations. Modern contraceptives on the other hand, were described as artificial or chemicals that are inserted in the body and would therefore cause problems. As mentioned before, the participants had a lot of misconceptions and fear related to the use of modern contraceptives. These negative perceptions seemed to be a strong barrier against using modern contraceptives and made young people rely on traditional methods, as demonstrated by the following quotes:

> *The good method is to use the calendar, because it does not destroy anything and it has no side effects, because you don't eat anything… IUDs are inserted in the body, and with the pills it depends on how they react in someone's body. (F39, FGD)*

*I can say that the traditional methods are best, because they do not have any side effects for human beings… The artificial methods help in terms of preventing pregnancy, but they have side effects on the human body, such as if you use pills or injections… (F11)*

Other reasons mentioned by the participants for choosing traditional contraceptives were that they are free and they are easily accessed, because you don´t need to go to the hospital or somewhere else to get it. They learned from others in the community how to use it, and they faced less barriers compared to modern contraceptives, demonstrated by what this participant said:

*Those traditional methods are close and easy to get, but to get the modern methods you have to do a follow up. The traditional methods can be provided by anyone who is elder than you – they will give you all the information you need. (F21)*

As shown by this quote, the convenience of traditional methods was one reason given as to why young people prefer such methods. Another reason mentioned was because sex among young people is mostly not planned, so when they meet and decide to have sex, they don´t have a condom with them. This makes them rely on traditional methods instead of not using anything, as this young girl highlighted:

*It is like this, when you go to the boyfriend's place, and you just went there and stayed for a while, it just happened that you needed to have sex. So now you decide to use your brain, which is to use the traditional methods such as the withdrawal, because you don't have a condom around. (F17, FGD)*

Even though the majority of the participants seemed to favour traditional methods, some expressed a different opinion. A few said modern contraceptives are better because of the difficulties with using traditional methods and the low protection against pregnancy.

### *5.3.3 Reliance on abortion*

In addition to the use of traditional methods to protect against an unplanned pregnancy, there also seemed to be a reliance on abortion. The participants described abortions as something that takes place in the community a lot, and it seemed to be an issue they were quite familiar with.

*Abortion is a problem that is really happening in the community, and … it is an issue that they speak about a lot… because you find that girls lack education and they get pregnant. (M7)*

Many of the participants had a story of someone they knew, or someone they had seen in school or in the street, that had conducted an abortion, like this girl:

*I have a friend who stays at the other side after the (…) road. She tried to abort with these normal methods, because tea leaves didn't work. She got sick, like malaria, but no abortion happened. She then used herbal medicines, but she got rashes all over the body. She was taken to hospital and they tried to abort there, but it didn´t work. So if you see her now she is weak. (F45)*

Participants also had many suggestions of traditional methods that could be used to induce an abortion if a pregnancy should occur. Different plants and herbs were mentioned. Especially girls knew of many different methods that could be used, illustrated by the following discussion between girls in a focus group discussion:

*I have heard from people if you take upper leaves and the roots of a cassava tree and chew them while under that cassava tree… that helps to do abortion. (F14)*

*I have heard that if you take tea leaves and boil it until it gets bitter and then drink it, it helps to abort. (F16)*

*Another thing that I have heard helps in abortion is a tree called "muarobaini". The tree is usually very bitter, so it destroys the pregnancy. (F17)*

*[All participants laugh]*

*There is a flower that has a white flower on top. You are told remove it and told to eat the roots. (F12)*

*There is also aloe vera, you take it and slice it into very small pieces. Then you put it in water for 24hrs and you drink the water. What I have heard, that after drinking it the boyfriend must beat you everywhere… (laughs). That makes you uncomfortable and the pregnancy goes out. (F14)*

[All participants laugh]

As illustrated from the quotations above, misconceptions related to abortion methods exist, making girls rely on methods that are both potentially dangerous and not effective. Despite the fact that abortion is illegal in Tanzania (expect to save a woman's life) and was perceived as a bad practice, induced abortion with traditional methods seemed to be an option for some girls - at least an option you could use once:

> *I think abortion is not a good thing. You can do it once because it was bad luck, but if you continue to do it, it can destroy your uterus and you can never have children. (F8)*

Participants described abortions as something dangerous with potential effects such as infertility or death. However, the barriers associated with using contraceptives could seem to be higher than the barriers to induce an abortion if a pregnancy should occur, as this girl explains:

> *… A girl might be too afraid to take pills, ashamed to buy condoms and can't ask me as a friend to bring her pills. She therefore thinks it is better not to use. Tea leaves are available any time. (F45)*

The main reason for why abortions were being conducted was because of shame. Having a child would bring shame to your family as well as for yourself. Moreover, having a baby at a young age would mean the end of your future goals in life. School dropouts are often a reality, as well as the risk of being chased from home. Therefore, abortion is sometimes seen as the only solution for unmarried youths if an unplanned pregnancy should occur.

> *What makes girls abort is shame. And that everyone will talk about her, that she is young and became pregnant. So that will always go in her mind, she can't handle words from others and decides to abort. (M23, FGD)*

> *Abortion is something that happens a lot among youths if you compare with those who are married, because youths are afraid that they will be chased from school or from home if they get a child. So abortions happen mostly among youths. (M28)*

Because of this shame, youths feel pressure to conduct an abortion if an unplanned pregnancy should occur. Many of the participants described how parents influence their

children to have an abortion. Moreover, male partners could pressure girls to have an abortion, and if the girls did not agree they would run away from the responsibility.

## 5.4 What motivates young people to use contraceptives?

This theme deals with young people's perceptions about teenage pregnancies and STIs, and whether this can be a motivator for using contraceptives among youths.

### *5.4.1 Fear of teenage pregnancy*

F42 is a 19-year young girl who got pregnant as a student. Her story is presented because it describes how she experienced getting pregnant as a student and captures the challenges girls face if they get pregnant whilst young and unmarried. She explained her story to us like this:

> *I had a boyfriend when I was in school and I think we loved each other a lot, but after I got pregnant everything changed, we couldn't understand each other. He wanted me to abort, but to my perception I refused and from there we fought and broke up and he said the child is not his… My mother could not stand the situation. I had to leave and stay far from her, because she was very sad. I left for two weeks. I came back and asked for forgiveness and she agreed…*
>
> *In school I was suspended for some time until I gave birth. They were worried maybe the pregnancy is big so I would give birth while in school...*
>
> *In the beginning when I got pregnant I felt I am nobody in the world, my wishes got lost and I was truly heartbroken. So I thought there is nothing that I can do in this life. …*
>
> ***I**: How did the community around you take it when they knew you where pregnant?*
>
> *In school, there were teachers who did not believe that I am pregnant and there were those who talked behind my back. It is always like this. If there is a problem, there are those who will be on your side and some who will not be on your side. But my friends were close to me and gave me hope…. I decided to stay with the pregnancy, but my heart was weak… It was "why me, why me," in my heart …I decided not to have a man again. I hate them now. I now concentrate on my child…*
>
> ***I**: Did you use any contraceptive methods?*
>
> *I have never taken pills, injections or implants. We were using condoms, but a bit later we left it.*

F42 ´s story illustrates how challenging it can be to become pregnant as an unmarried teenager. Girls are often left with the burden, and dropping out of school is often the reality even though it is theoretically possible for girls to go back to school. Her story also illustrates how ashamed girls can feel if they get pregnant whilst unmarried, due to the stigma attached to single mothers in the community, and how they loose hope for the future. Finally, her story demonstrates a lack of contraceptive use, even though a pregnancy was not wanted - either from her partner or herself.

It was interesting to note that other participants in this study were overwhelmingly aware of the challenges they could face if they became pregnant. Almost all of the participants said that the only reason why some youths use contraceptives is to protect against an unwanted pregnancy. None of the participants in this study started to relate contraceptives to youths in the beginning of the interview, but rather as family planning methods as discussed in section 5.1. The concern of getting an unplanned pregnancy among youths was not brought up before we asked more questions such as “what makes youths use or not use contraceptives?”. However, when this theme was discussed, the participants expressed a noteworthy worry about getting pregnant as a single youth. Young people´s reasons for using contraceptives are to protect against unwanted pregnancies so they will be able to achieve goals in life and stay away from such responsibilities while still young, and not end up like the girl in the story presented. The economic burden related to being a teenage parent was also mentioned, because getting pregnant at a young age was associated with becoming poor.

> *Most youths prefer to use contraceptive methods in order to reduce a certain amount of expenditure that can cause poverty for their life. If contraceptives are used, youths will not have responsibilities and will reach goals and therefore win in life. (M3)*

More noteworthy, many of the adolescents were worried about becoming school dropouts if they became pregnant as students. Some said there were punishments given if they became pregnant or impregnated a girl in school, while others said they would be suspended. Two boys explained why youths were afraid of making a girl pregnant:

*…Youths are afraid of pregnancy, because if you make a girl pregnant in school, there are punishments that are given. So youths use these methods in order to reach their goals, because they know if I get pregnant while still in school, my studies will end there and I will be chased from school. (M41)*

*… Teenage pregnancies destroy many people's dreams. If the girl gets pregnant, that means she will be expelled from school and no more dreams. For the boys, if it is known that he has made a girl pregnant it may also cause problems for him. He might even be taken to the police. So because of fear, he can run and leave school. (M24, FGD)*

As demonstrated here, not only girls were afraid of consequences related to teenage pregnancies, this was also a concern among most of the boys. However, girls usually used more severe expressions related to the consequences, such as this girl who said a teenage pregnancy will "destroy a girl´s life":

*There are many things that make youths use contraceptives methods. When a girl is in school and has a boy and they become partners, they use contraceptive methods in order to not destroy their lives. Because they may have sex and if the girl gets pregnant, her life is destroyed. (F19)*

Many of the participants also expressed a concern of being chased from home if they became pregnant whilst unmarried and a student. That was also the case for F42, she was chased from home, but her mother welcomed her when she came back several weeks later. However, despite significant concerns about teenage pregnancies, contraceptive use still seems to be lacking. None of the girls who had got pregnant or revealed to us that they had a boyfriend said they used contraceptives on a regular basis. Here is another girl's explanation about why she did not use contraceptives in her relationship with her boyfriend:

*I have never used protection and not even counted my days. We used to have sex for a long time and it reached a point I thought I was not able to conceive... We continued to have sex without protection for about one year… I thought I could not conceive, so I did not use protection for that reason. (F45)*

The data from this study indicates that young people do worry about teenage pregnancies and that this can be a motivator for some to use contraceptives. However, many seem to rely on the belief they will not get pregnant or rely on traditional methods

to avoid an unplanned pregnancy, and as a consequence modern contraceptives are not commonly used.

### *5.4.2 Lack of concerns about STIs*

Almost none of the participants mentioned STIs as a reason to use contraceptives. Therefore, we probed this issue to see whether they had just forgotten about STIs or whether this was not a concern for them. In this study almost all the participants claimed that youths in Tanzania were not worried about STIs such as HIV. Their main concern was becoming pregnant or impregnating a girl. The following are young people's descriptions about what makes young people use contraceptives:

> *The truth is youths of this generation think of one thing and that is to prevent pregnancy, and if it wasn´t for pregnancy they would not use. I don't think they remember about STIs… (M28)*

> *What I see, youths when they use condom it is not for STIs. We only focus on preventing pregnancy. We are worried to make a girl pregnant, but about diseases we don't care. We just look on the face and believe you are fine, that is it... Those who use condoms to prevent STIs, is when a youth wants to have sex and looks for any girl for short time, that is when they use condoms to protect against diseases, because they fear the girl has AIDS. (M29)*

> *The youths who are in sexual relations they just remember to avoid about pregnancy and not diseases. They just fear that if they are students and they get pregnant, they will be suspended from school or chased from home and that is not good for life. (F38, FGD)*

From the quotations above and the other data provided from this study, youths seemed to fear the consequences of an unwanted pregnancy, but did not worry much about getting STIs. A few participants revealed misconceptions related to STIs, such as how you can get infected, which might explain why they did not fear STIs. For example, some of the participants thought young people could not get STIs, meaning unprotected sex was only risky for adults. One participant also mentioned that some youths relied on drugs to cure it, and that there was a rumour saying a new drug had been developed to cure HIV:

> *Some of the youths that come from a wealthy family and have a lot of money think that they can just be treated if they get infected by HIV. Nowadays, we are also told there is a drug that can cure HIV. (M3)*

However, such misconceptions were not predominant among the participants. More importantly, boys seemed to judge the risk of getting HIV based on the look of a girl's face. A healthy physical appearance of the girl would mean she did not have HIV or another STI, and would therefore discourage condom use. In addition, condoms were not used when you were in a relationship with someone you trust. Boys could choose to use condoms when they looked for "*any girl for a short time*" (M29), but if you continued to see the same person you would drop it. Trust was something that both boys and girls mentioned as an important factor for not using condoms. If you trust the partner, you don´t need to use condoms. Or more importantly, if you use condoms it is a sign of mistrust and infidelity.

> *There are those who trust each other, so when they use a condom it is to protect against pregnancy. Those who do not trust each other, they use condoms to protect against diseases. (M41)*

This contradicts to a certain extent young people's concerns about teenage pregnancies, as youths will still be at risk of getting unwanted pregnancies if they stop using condoms because they trust the partner. However, participants explained that if you trust each other you can use traditional methods to prevent unwanted pregnancies and therefore there was no need to use condoms.

## 5.5 Cultural and religious values influencing contraceptive use

Gender and power imbalances, as well as religious values, are key factors influencing young people's perspectives about premarital sex and contraceptive use. This section describes how young people are influenced by such values and norms in the community when it comes to making contraceptive choices.

### *5.5.1 Gender and power imbalances*

The findings from this study suggest that gender issues and power imbalances can influence attitudes and contraceptive behaviour. Regarding decision-making, boys seem to have the power to decide whether to use contraceptives or not. The majority of the

participants said that boys were usually the ones who took these decisions. Girls said they could not disagree with boys´ decisions, because boys are strict and feel they are upper dogs. If girls disagreed, they feared consequences such as being left alone, illustrated by the view of these girls:

> *There is a saying of ladies first, but that saying is not used. The boy is the one who decides if we will use this and this. …. Boys decide everything; if you disagree you will be seen as arrogant… They just decide on their own, because men do not listen…. (F42)*
>
> *They (boys) believe they are the ones who have the right to make a girl to do anything. And they also take it as an advantage; "if a girl loves me, she can't leave me". (F8)*
>
> *Because they (boys) have the power. What I know girls are just told: "if you don't use, I will leave you". (F10)*

As demonstrated by these quotations girls indicated that boys were decision-makers, both related to contraceptive use and other issues, and this was something that was revealed to us by many of the girls. Most of the boys held the same view as the girls regarding who were the decision-makers regarding contraceptive use. They said their culture had taught them to be the one who decides, and that they would be offended if a girl disagreed with their decision, as this boy highlighted:

> *We have also inherited that a man is the one to speak and make decisions. If I say I won't use and you tell me to use, I will think you don't love me and we will end up in a fight. So for the girls to avoid that they just agree. I use force, that's why I say we are the ones who make decisions. (M29)*

A few of the boys also admitted that they used force to convince girls to have unprotected sex, such as the boy in the quotation above. They said girls are raised with the belief that they should not disagree with boys, but at the same time some of them acknowledged that this was not right as girls are the ones who will experience most of the effects related to unprotected sex and contraceptive use. Almost all of the girls also felt it should be a shared decision or a girl´s right to decide to use or not to use contraceptives, but in reality men were the ones who decided.

Some girls said boys could force them to have sex, because boys had the power to decide everything. Boys could threaten girls to leave if they did not have sex them. Girls also expressed that boys have lack of understanding and are ignorant about the importance of using contraceptives. Boys did not care since the burden falls upon the girl. Girls cannot escape from an unwanted pregnancy, but boys can always run away from the responsibility. Other girls said it was just not in boys´ minds to use contraceptives. A few boys also disclosed that boys don´t care about the consequences of unprotected sex:

> *Men don't care about pregnancy. They can sleep with you today, but tomorrow he has no plans with you. (M5)*

Since boys are the decision-makers and can force you to have sex without using protection, many of the participants said that girls sometimes used contraceptives without telling the partner.

> *...Maybe you have a boyfriend and he wants you to have sex and you don't want to because you fear pregnancy, so you decide to take pills or injections without telling him. (F19)*

However, the girls perceived using contraceptives without telling the partner as risky. The majority of the girls said they would not like to use contraceptive secretly, since this could end the relationship. Moreover, boys said they would not take it in a good way if they realized the girlfriend had used contraceptives without informing you. Almost all of the boys interpreted secret contraceptives use by girls as a sign of being unfaithful. Boys would also not like it if a girl took the initiative to use a condom.

### *5.5.2 Religious beliefs*

Religious beliefs appeared to be an important factor for choices regarding sexual practice and contraceptives use. The majority of the participants in this study referred to themselves as Christians, without specifying a particular denomination, and the following findings represent the perspectives of Christians as none of the participants with a different religious belief talked much about this topic. Based on data from this study, using contraceptives was seen as a sin, and therefore not an accepted practice.

*There are some religions that do not allow the use of condoms, because they say it is a method that goes against God's will. (M7)*

*I think there is one major reason why youths do not use contraceptives; it can be the issue of religion. Religion can make a youth not to use contraceptives, because you might find a priest or pastor who preaches in church that it is against Gods will, so it makes youths fear God. (F19)*

As illustrated by these quotations, participants said that some youths feared God if they went against God´s will, and therefore did not dare to use contraceptives. They further talked about religion in relation to where youths get information about contraceptives. Some said that churches or religious institutions sometimes had meetings or seminars that talked about the issue of sexuality among adolescents. When we asked them what they had been told, most of them said they had talked about good behaviour such as "do not have sex" and been told that they should not use contraceptives because the religion did not allow it. In church it was preached that contraceptive use was like murdering, and therefore an unaccepted practice together with abortion. Religious beliefs also made it difficult for them to talk about the issue of sexuality and contraceptives, like this boy said:

*Our family is very strong in our religious believes, which make my parents to switch of the TV if he sees a beer or condom advertisement. (M28)*

The fact that parents switch of the television if there is a condom advertisement shows that there is a significant taboo around sexuality. Later in the interview with the same boy he reveals that he has weighted the issue to stay single or not, and the following quotation illustrates how the bible can guide young people´s choices:

*I have weighed these things, I am about to decide to stay single or not… The 1 Corinthians verse 7 says that those who are not in marriage should not involve themselves in those issues. It is better to stay like how Paul was. I also think that is good for me. (M28)*

The findings from this study indicate that religious beliefs can reinforce negative perceptions of premarital sexual behaviour and contraceptive use.

## 5.6 Communication, information and education about contraceptives

This theme deals with how adolescents communicate about contraceptives and safe sex issues with friends, teachers, parents and other family members, and describes what type of information youths receive about this topic from different sources. It examines what type of parent-child and friend-friend communication that exists, and the characteristics the communication that occurs. Participants' views on education about contraceptives in school are described, followed by adolescents' preferred sources of information about contraceptives. Finally, it tries to explore how the influence from others affects unmarried adolescents' perceptions and contraceptive use.

### *5.6.1 The cultural taboo of talking about contraceptives*

Early in the data collection process it became evident that young people find it difficult to talk to others about contraceptives, and that this is a topic which is not discussed much with others. As one young participant said: "*According to our culture in Tanzania it is not normal to talk about these things*" (F10). Cultural traditions were identified as a barrier to communication as you will be perceived as abnormal and immoral if you talk about contraceptives. It is not a normal thing to do, because it is not culturally accepted. This shows that there is significant shame and stigma attached to sexuality. Cultural norms make people feel ashamed to talk about contraceptives, and adolescents are afraid of how they will be perceived. Almost all of the participants said it would be interpreted as being sexually active or planning to become sexually active. As a consequence, many of the participants felt they did not have anyone to talk to about topics such as safe sex and contraceptives, and many girls may therefore end up getting pregnant.

> *I have never tried to talk to anybody, not even my friends… (M6)*

This lack of communication about contraceptives in Tanzania also became evident in the way participants in this study perceived our interviews and our presence at the schools we visited. As explained in section 3.9.2 in the methodology chapter, almost all of the participants thought we were giving them education or information about contraceptives, something we did not do at any time during the interview. This may indicate that they have not talked much about this topic with others before.

### 5.6.2 Existence of communication

> *When it was known I was pregnant my father was angry that I was playing. My mother told me: "Why didn't you use protection?". I just wonder, because she never sat with me and discussed… (F45)*

The majority of the participants in this study, both boys and girls, said that parents are especially difficult to talk to, as their parents would be suspicious of their sexual behaviour. Some explained to us that parents are to shy to talk about such sensitive issues, so communication about contraceptives was non-existent. Parents are afraid to talk with their children, because they fear they will influence their children to have sex if they give their children safe sex advice. Others said you are not allowed to talk about such issues with your parents, and no one would therefore do that. If you asked questions, your parents would not even respond to them. A focus group discussion with girls demonstrates this shared view among many of the participants:

> ***I**: When you are with your parents or guardians you live with, do you talk about contraceptive methods with them?*
>
> *On my side I say no, because some parents take these issues to be so big and they look at us and feel we are very young to know those issues of contraceptives and relationships… (F18)*
>
> *It is no, because you find maybe a parent or guardian think if he talks about the meaning of contraceptives, you will decide to start your life and have sexual relationships… (F15)*
>
> *I think it is no, because if you as a parent talk about contraceptive methods, they will understand you, but will not be ready to talk about what contraceptive methods are. (F16)*
>
> ***I**: Why do you think they will not talk?*
>
> *They are afraid because they have a feeling that if they explain it to you, you might go and try and get pregnant and that will cause effects. (F16)*
>
> *What I see here is that parents are afraid to tell their children, if your mother starts to tell there are pills and injections you can use to not get pregnant, she will think, in her short minded brain, that she simplifies the process and you will now go and try…*
> *[Everybody laughs]*
> *… The girl will directly know if I use pills I won't get pregnant. The mother will think the child will engage in sexual relationships while young. (F17)*

> *You may ask a parent and the parent will now think: "Why do you ask me those questions, I was not asked before?" She will have a feeling that you want to go and do it. So instead of responding she will just keep asking questions. (F13)*

Some of the participants expressed a fear of initiating a conversation about contraceptives with their parents, because they feared consequences such as violence, like this boy:

> *He can even beat me… He thinks that I want to involve myself in those issues. (M36)*

Since they are afraid to talk to their parents about contraceptives, they will be even more afraid that their parents will find out that they are using contraceptives. A few of the participants mentioned that young people do not use contraceptives, because they were afraid of how their parents' would react if they found out. On the other hand, others said fear of parents would actually make them use contraceptives, because they were so afraid of what their parents would do if they got pregnant.

> *Youths fear their parents, because if you get pregnant the parents will not be happy. Therefore they decide to use contraceptive methods. (F19)*

Despite adolescents' fear of their parents, many of the participants revealed a need and a desire for more closeness with their parents. They felt parents should have more time to sit and talk, and not feel so shy. This highlights that young people see parents as important persons that can assist them in dealing with sexual issues, but fear of parents being suspicious of their sexual behaviour discourages such communication.

Contrary to the findings presented above, there were some participants who said they could talk to their parents, even though it did not seem to happen frequently.
For those adolescents, they said the parent had initiated the discussion, usually triggered by something that had happened in the community, for example if a young girl they knew had got pregnant, or parents were concerned because they had spent a lot of time away from home. However, the majority perceived parents as difficult communication partners.

As already explained in section 5.1.5, young people did not seem to have much experience with talking to health workers, because they felt contraceptive health services are for families, and they were afraid of how they would be received if they came alone. They said health workers could receive them in an unfriendly way and they were worried about how they would be perceived. Despite this, almost all of the participants said they would go to a hospital or health centre in the future to seek contraceptive services and this was also the place they would advise their friends to go if they came to them and asked for advice. Health personnel, such as doctors and nurses, were described as being the “experts”.

> *With me I will go to the hospital in order to get enough information. (F8)*
>
> *The first place I will take him is the hospital, because there he can get advice and be tested, so I think hospitals are the best. (M40)*

The majority of the participants also said it was difficult to talk to friends about contraceptives, as they feared friends would think badly of them, and that they would gossip to others about it afterwards. Girls typically said friends would think they had many boyfriends if they asked for contraceptive advice.

> *There is a tendency of being afraid of each other and telling each other the truth. It is difficult to talk about contraceptive methods with friends. She may think you want to use contraceptive methods in order to have many partners. (F18, FGD)*
>
> *People are afraid, because they will think your habits are bad, that you like having sex. (M24, FGD)*

Other reasons mentioned for not talking about contraceptives with friends, seemed to be related to the fact that it was not a priority for them. Some said they did not have time to discuss things like that, or that it was not relevant for them to talk about. However, even though communication about contraceptives with friends seemed to be minimal, friends and peers seemed to be those that were most frequently used as a commination partners in issues related to sex and contraceptives, most likely between youths who had already engaged in a sexual relationship.

From the findings presented in this section it is evident that adolescents find it difficult to talk to others about issues related to contraceptives and sexuality. However, some had experience with talking to friends or parents, and the content of such conversations is explained in the next section.

### *5.6.3 Content of communication*

For those who had talked about issues related to contraceptives or sexuality with their parents, the content of the conversation seemed to be brief. The content seemed to revolve around not having sex, but rather concentrating on studies and waiting until they are older or married. Almost none of the participants said they had been advised to use contraceptives or received information about contraceptives by their parents. This is what one boy and one girl answered when we asked them what they had discussed with their parents:

> *When I sit with my mother and my sisters at home, we don't talk directly like: "if you have a partner use contraceptive methods". No. She only tells us "take care of yourselves, this is not the right time". You are in school to study, not to have sexual relationships. (F39, FGD)*

> *I once talked to my father. He was warning me to be very careful in sex/ love issues. He said I don't have to engage myself in sex at this age, but that I should wait and finish school. These things will be there after school. If I involve myself in sexual intercourse, I can get many problems, like the diseases gonorrhea and HIV he said, and with HIV life ends there. So that was the information I got from my father. (M29)*

As illustrated above, adolescents get advice to abstain from sex from their parents, and are not given advice related to safe sex practices. Only a few of the participants said they had received information about contraceptive use, either from their parent, grandparent or a sibling. For those participants, the advice they had received varied amongst them, but for all of them it seemed that the information had been brief and of a general character. Some said they had been told about the side effects of modern contraceptives and told that traditional methods are best, while a few said they been informed that the modern contraceptives were better than traditional methods. However, none of the participants revealed that they had been given concrete contraceptive advice from their parents, just warnings like "*if you go against my advice to not have sex, there are ways to protect against pregnancy*" (F8).

Other family members, such as aunties, siblings or grandparents, seemed to be more useful communication partners for young people. The boy presented in the quotation above where his father told him to wait with sex, had also received advice from his brother, where the brother gave advice about condom use and relationships:

> *I talked to my brother about having girlfriends. I asked him what if you have a girlfriend and she has many boyfriends, how do you feel? Or what do you do for your partner so she is just attracted to you? He was telling me many different things… He also advised me not to have many girlfriends; one is enough. And he told me to use a condom when I want to have sex. (M29)*

For those who said they had talked to their friends, different themes were mentioned. Girls typically said they had discussed contraceptives in relation to a discussion about future family plans, like how many children they want and how they would deal with partner issues. Girls also shared information about how to use the rhythm method, or gave each other advice about what to do if you were afraid you had become pregnant. This is what one girl said when we asked her what she had discussed with her friend:

> *One time I discussed with my friend, it happened because we saw a certain woman who has many children and the intervals are maybe one year or just months. So we were talking: "Do you see the advantage of using contraceptives? You will be protected against having a big family like this." And so we asked ourselves; "Are we going to be like her?" If the husband says: "Don't use any contraceptive methods!", what should we do? So we discussed and my friend told me even if he tells me that, I must use, because I am the one who will be getting old. The time he goes out, I will be home with children that are crying. (F17, FGD)*

A few of the boys also mentioned talking about topics related to not having a big family, but mainly their conversations seemed to be related to discussions of condom use. Some said they discussed condoms and their benefits and drawbacks, and typically the conversation had been initiated by an advertisement they had seen together. Others said boys advised each other to use condoms, and that they learn about condom use from their friends, like this boy:

> *When we are in a group eating… one can say: "I usually have sex without using condoms". People will then help him and tell him it might cause pregnancy, so he gets scared and learns that if I want to have sex, I must use a condom… (M41)*

Some girls also mentioned that they advised each other to use protection or to tell the boyfriend to withdraw if he did not want to use condoms. Friends, both girls and boys, also encouraged each other not to have sex, but to wait until they finish school.

> *With me, people who I can talk with about contraceptives are people of my age…. we sit together and tell each other "don't have sexual relationships with girls", we can just have them as friends…. (M31, FGD)*

As demonstrated here, parents seem to warn their children not to have sex, while friends and other family members can be more informative communication partners.

### *5.6.4 Education about contraceptives and communication with teachers*

From the adolescents´ perspective they do not receive much information about contraceptives in school. Some said they did not have any education about this topic at all in school, either because they had not reached the subject yet, or they did not know if it was in the syllabus or not. Other participants said they learned a bit about family planning and reproduction in school, for example in biology classes. Almost all of the participants said this information was brief and teachers did not tell them everything they needed to know. It was also revealed to us by the participants that teachers advised students to abstain from sex, and it seemed like some teachers would guide the teaching based on personal opinions and beliefs.

> *In school we are taught very little, because they don't give us the full and true picture of contraceptives. Teachers tell us in shallow and they tell us not to do these things. That is not helpful. (M32, FGD)*
>
> *The teacher taught me about the contraceptive methods, and he mentioned to me that there are some I should not use. Like with condoms, he told me the bible says we should not avoid children, because it is against the God´s will... And he said there were some methods he could not teach us, because we are still young. (M4)*
>
> *Sometimes teachers advise us, and the method they advise us, is to abstain completely from sex. (F11)*

Participants differed in their answers when we asked them what they had been taught in school. While some said they had been told not to have sex as illustrated by the above

quotations, others said they had been told about the different types of modern contraceptives and how these can be helpful in order to plan your family and space children. Some of the girls also mentioned that their teacher had told them about the method of counting safe and danger days.

> *The teacher told us the method of counting days in the menstruation cycle, to count safe and dangerous days to have sex. (F43)*

However, a few of the participants mentioned that there had been seminars given in school by organizations or foreigners that had provided them with more information about contraceptives. Despite receiving some information in school, contraceptive use seems to be discouraged. One participant explained to us that they were not allowed to have girlfriends/boyfriends in school, and if they were found with condoms or love letters the school would punish them:

> *If I involve myself in those issues (meaning sex) as a student, my teachers won't understand me. In school we were once searched, and those who were found with condoms were suspended from school. (M28)*

From these findings it can be concluded that sexual information in school is insufficient, and that there seems to be great variation in the nature and content of the communication between students and teachers.

### 5.6.5 Are adolescents ready to receive sexual health education?

The perception that if you were told about contraceptives you would go and try them seemed to be widespread. The interesting finding in this study is that many of the participants seemed to have the same perception. They said that if youths received information at an early age, it would disturb their mind and encourage them to have sexual relationships. Even though most of the participants said that education about contraceptives is important and very much needed in Tanzania, many of them also said it can have consequences, and that education should therefore not be given at a young age. Others said that youths need education, but that it should not be thorough. The participants differed in this view, but as demonstrated by the following quotations many of the participants felt it was not right to receive information or education about these

issues before it was culturally accepted to be sexually active, because knowledge about contraceptive methods would make them engage in sexual relationships:

> *I think it is not correct if they (unmarried adolescents) know how to protect themselves, because they will start to have sexual relationships. (F9)*
>
> *I believe if much education is given to youths, it will influence them to have sex. (M41)*
>
> *Youths need to be advised, but not in deep. You can educate … but you don't have to explain a lot or teach them, and you must warn them not to try. (F44)*

While some expressed concerns related to education about contraceptives to youths, others seemed to really feel that there was a lack of information and education about the topic. Interestingly, the majority of the participants said that more education is needed, but at the same time many of them held the view that information about contraceptives to youths could influence them to do "bad things". Since the majority of the participants perceived us as educators, it is difficult to know for sure their true opinion, and whether they said education is important because they felt it was the right thing to say.

Despite this inconsistency, more education was mentioned by almost all of the participants when we asked them what type of reproductive health services are most needed for youths in Tanzania. Alternatively, they expressed a need for more education when we asked them at the end of the interview if they felt there were topics that had not been covered. Participants seemed to acknowledge that if youths knew more about the disadvantages and advantages of using contraceptives, they would not face so many reproductive health challenges in Tanzania, such as teenage pregnancies, STIs and abortions. Many of the participants mentioned lack of knowledge and awareness as reasons for not using contraceptives.

> *I think it is lack of education, or maybe they just don't know what they are supposed to do. So you find that they are new in relationships, and they don't know how it goes. So the lack of knowledge makes them not to use. (F10)*
>
> *There are youths who get early pregnancies, but if they were given the information earlier there would not be these problems. (F19)*

As illustrated above, some participants felt more education about contraceptives was needed. Others related this need to other reasons, for example that many families are poor due to a high number of children in the family. Moreover, contraceptive education was perceived as good because it would help them to plan their family in the future:

> *...If you get education about family planning in the youth stage it is good, because when you become an adult you will be able to guide your family more easily… you will be able to plan your family and provide all basic needs to the children. (M35, FGD)*
>
> *I think they should give education that helps youths know everything about contraceptive methods, but it should not make them start using them. But after being told about the advantages, they will know when they grow up. (F37, FGD)*

The last quotations demonstrate again young people's understanding of contraceptives as "family planning" and their normative perception about premarital sex.

### *5.6.6 Source of information about contraceptives*

As already described, young girls and boys seem to get limited information about contraceptives in school or from others such as their parents. The question we then asked ourselves was where do young people in Tanzania get information about contraceptives?

When we asked the participants where they get information about contraceptives, many of the participants referred to a magazine called Fema, like this girl:

> *Most of the times we get information through those "Fema" magazines, which are given out in schools…. (F11)*

It was through one of the interviews I got to know about this magazine, after one of the boys brought one for the interview and gave it to me afterwards. The magazine is produced by an organization called Femina HIP[4], and they are distributed free to secondary high school students. This magazine deals with sexuality, contraceptives, relationships, teenage pregnancy, HIV/AIDS and other topics related to sexual health important for adolescents, and seemed to be young people´s primary source of

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[4] See http://www.feminahip.or.tz

information about sexual and reproductive health. Besides this magazine, participants mentioned advertisements on television and the Internet as sources of information, typically mentioned by participants living in the city. Others also mentioned seminars and religious meetings.

### *5.6.7 Influence by others as a barrier or facilitator for contraceptive use?*

As demonstrated in this chapter, young people in Tanzania are very much influenced by traditional norms and the Tanzanian culture when talking about sexual issues. Culturally it is not common, and if youths initiate such discussions they will be perceived as having bad morals, because others will think they are sexually active. It seems like the message they get from others is that they should abstain and not have sex until they are married. Parents and religious meetings seemed to give direct advice to wait with sex. Some schools punish adolescents in sexual relationships and suspend pregnant girls. Altogether, this gives a signal to other youths that premarital sex is not accepted. Even health care personnel seem to not receive unmarried adolescents seeking contraceptive advice in a friendly way. As a consequence, young people that fail to abstain until marriage may feel they don´t have a place or a person to talk to if they need contraceptive services, and this makes it more likely for youths to rely on traditional methods:

> *She might be afraid to take pills, ashamed to buy condoms and can't ask me as a friend... She thinks is better not to use contraceptives, tea leaves are available any time. (F45)*

Young people in Tanzania inherit this perspective and for this study many of the participants stated that they would not need contraceptives because they would abstain until the right time came. Interestingly, a few mentioned that they would also use abstaining as a method when they got married to have children at certain intervals. However, many revealed that it was hard to abstain and questioned if it was the best option or not:

> *We ask ourselves if abstaining from sex is the best option or not. (M7)*

Due to the cultural belief that abstinence is the best method until marriage, youths are influenced by family, friends and school to abstain. This discourages use of

contraceptives and as a result more and more adolescents are likely to be getting sexual information from other sources in the future.

## 5.7 Summary of findings

The analysis and interpretation of the data show that unmarried youths view contraceptives as family planning methods. As a consequence, contraceptives are to be used within the social institution of marriage when you plan to have children. This perspective seems to be culturally inherited and the environment and people around them reinforce such a perspective. As a consequence, sexually active adolescents have problems with accessing contraceptive health services, because society, including health workers, view unmarried adolescents who are sexually active as promiscuous. Moreover, despite the fact that the family and school are critical socialization institutions, they focus on discouraging the use of contraceptives and tell them abstaining is the right “method” to use for unmarried youths. Parents especially seem to be afraid of giving children safe sex advice, because they think this information will encourage children to have sex. In addition, some of the participants seem to be reluctant to receive contraceptive information because they feel it will make it difficult for them to abstain. As a consequence, more and more sexually active adolescents will receive contraceptive information from other sources.

Young people’s views on contraceptives are also influenced by their religion, and gender imbalances make boys the decision-makers in terms of contraceptive use. In addition to strong cultural norms and values, misconceptions related to contraceptives seem to be noteworthy. The fear of infertility is a common misconception, discoursing use of contraceptives. However, misconceptions related to use of modern contraceptives seemed to be based on rumours. Altogether, misconceptions and a lack of proper information, as well as cultural norms, lead to young people relying on traditional methods to avoid unplanned pregnancies. Young people do not seem to be worried about getting STIs. Moreover, an uncertainty related to condoms’ protection exists, and the perception that condom use is not “sweet” seems to have established itself as truth regardless of personal condom experience. As such, condoms are not commonly used even though participants reported that condoms are the most commonly used

contraceptive methods, leaving out traditional methods. Fear of for teenage pregnancies can be a motivator for young people to use contraceptives, and participants acknowledged that modern contraceptives protect well against pregnancies. In addition, changing perceptions towards a small family size were observed. However, adolescents seem to prefer to rely on traditional methods, such as the rhythm method, because of a fear of side effects of modern contraceptives and the greater privacy of traditional contraceptives, since there is significant stigma attached to premarital sex.

# 6 DISCUSSION

## 6.1 Introduction

The results of this study elucidated a deeper understanding of adolescents' perceptions of contraceptives. The participants' perceptions revealed both obstacles and enabling factors influencing contraceptive use among adolescents, information that can be important in order to understand why contraceptive use remains low in Tanzania, among young people especially. Six major themes, with different sub-themes, reflecting unmarried adolescents' perspectives were identified during individual interviews and focus group discussions. These were "perceptions of contraceptives as family planning methods", "knowledge and misconceptions", "perceptions of alternative contraceptive methods", "what motivates young people to use contraceptives?", "cultural and religious values" and "communication, information and education about contraceptives". Key findings of each theme will be discussed and compared with existing literature.

It is important to note that the results from this study only represent the perceptions of unmarried adolescents, and that most of these adolescents were students.

## 6.2 Perceptions of contraceptives as family planning methods

The participants in this study perceived contraceptives as methods used in a family in order to plan the number of children and the intervals between them. When we asked the participants about advantages of contraceptives, almost all mentioned benefits for families or for the country as a whole. Even though most of the participants acknowledged that contraceptives could also benefit unmarried youths, by decreasing rates of teenage pregnancies, this was not their immediate perception. This is interesting considering the fact that none of the participants were married. However, their answers can be influenced by cultural norms which require them not to have sex before marriage.

In this study, all the participants viewed the ideal number of children in the family as not exceeding 3, and when we asked them how many children they would like to have the majority said 2-3. African countries have typically been associated with high fertility

rates due the cultural importance of having many children, and our findings might therefore seem surprising. However, similar findings of changing perceptions about ideal family size among young people have also been found in Uganda (31).

The adolescents' perceptions that contraceptives are mainly used within the social institution of marriage show that the policy guidelines of 1994 intended to include unmarried youths in family planning services have not been fully implemented. In addition, judgmental views by others, including contraceptive service providers, may inhibit young people's use of contraceptives. Similar findings were reported in Tanzania by Rasch et al. from data collected in 1997 (28). However, 15 years have passed since Rasch et al.'s study was carried out, and the findings from this study indicate that there has not been a significant progression in including single adolescents in family planning services. Adolescents are still not aware of their right to access contraceptive services, and they feel out of place when accessing them. Similar health service barriers have also been reported from studies in other countries sub-Saharan Africa (29, 31).

It is important to note that increased availability of contraceptive services does not seem to solve the whole issue of low utilization of available contraceptive services among youths. Why? Existing social, religious and cultural norms create resistance and opposition towards using contraceptives, especially among young and unmarried girls. Girls using contraceptives are stigmatized and perceived as prostitutes or promiscuous, which has also been reported in other studies (22, 28, 31, 36, 50). Girls fear being treated disrespectfully by health care workers, that their boyfriends would misinterpret contraceptive use as having more than one sexual partner, and they fear a negative response from their parents. As a consequence, girls are reluctant to seek information and to use available contraceptive services, because they feel they are too young. Girls in this study reported that health care workers could ask them about their age and where their husband was. These barriers, in addition to judgmental views from others, probably contribute to adolescents' reliance on traditional contraceptives. Traditional contraceptives are easily accessible and provide greater privacy, as they do not require the involvement of others. High reliance on traditional contraceptives due to difficulties when accessing modern contraceptives and stigma attached to premarital sex has also been reported elsewhere (4, 29, 51).

## 6.3 Reliance on traditional contraceptives and abortion

Despite similar findings from other studies, this study highlights a need for more emphasis on encouraging modern contraceptives. Our study demonstrates that adolescents are generally more positive towards traditional contraceptives compared to modern contraceptives. Traditional contraceptives were described as "natural" without any side effects, and seemed to be the method young people would prefer to use. Interestingly, these positive perceptions do not seem to correlate with the reported use of traditional contraceptives compared to modern contraceptives in the most recent Demographic Health Survey (DHS) in Tanzania. In 2010, 5.2% of unmarried sexually active adolescents (15-19 years old) reported to use traditional contraceptives, compared to 35% reporting to use modern contraceptives (6). However, compared to the previous national Demographic Health Survey (DHS) in 2004, an increased proportion of adolescents using traditional contraceptives in Tanzania has been observed (6, 18). Similar trends of more adolescents using traditional contraceptives have been reported elsewhere in Africa (52). This trend has not gained much attention, and our findings suggest that adolescents seem to be favoring traditional contraceptives.

This situation demonstrates that more adolescents are willing to use a type of contraception to avoid pregnancy. Our study revealed that adolescents are worried about teenage pregnancies, but less concerned about getting STIs including HIV. A high reliance on traditional contraceptives, in combination with lack of concerns for contracting STIs, is alarming. Traditional contraceptives are highly unreliable, as they are very much dependent on one's abilities to count or withdraw, and do not protect against STIs. Interestingly, the participants in this study seemed to be aware of the low pregnancy protection of traditional contraceptives compared to modern contraceptives. This contradicts the participants' concerns about getting pregnant. However, it seems like cultural barriers related to accessing modern contraceptives, as described earlier, in combination with fears of side effects of modern contraceptives, outweigh young people's concerns for teenage pregnancies.

In our study the rhythm method was frequently mentioned as a preferred contraceptive method. Successful use of this method relies on a great knowledge about the woman's menstrual cycle and fertile days. Many of the participants showed basic knowledge

about how this method works. However, the Demographic Health Survey (DHS) from 2010 showed a marked declined in women's correct timing of the fertile days and only one in three users of this method know exactly which days were safe and not (6).

Abortion substituting for contraception in countries with limited access and use of modern contraceptives is a known problem in sub-Saharan Africa (4). In addition, recognition of abortion as a contraceptive option if an unwanted pregnancy occurs, has also been described previously in different countries in sub-Saharan Africa including Tanzania (28, 29). The findings from this study also indicate that there is a tendency among young people to rely on abortion as a fertility control option, if a pregnancy should occur.

## 6.4 Knowledge and fears of side effects

The participants' perceptions clearly demonstrate that young people are reluctant to use modern contraceptives due to fears of side effects. Participants had strong embedded misconceptions related to modern contraceptives, without anyone revealing personal experiences of side effects. This indicates that young people do not receive proper and correct information about modern contraceptives, and their views seem to be based on rumors. Fear of side effects influencing people's decision to use contraceptives has also been described in a range of other studies in sub-Saharan Africa (29, 31, 50, 53).

Misconceptions related to modern contraceptive use seem to reinforce young people's perceptions about modern contraceptives as contraception only for married people. Both boys and girls believed that young girls who used hormonal contraceptives would be at risk of becoming infertile, which is also demonstrated in other studies (19, 31, 50). As a consequence, modern contraceptives are not something they will consider using before having their first child. Concerns about future childbearing play an important role in the acceptance of modern contraceptives.

Surprisingly, no one mentioned side effects that are known to be life threatening, such as blood clots. However, risk of getting cancer was mentioned, but modern contraceptives are not generally assumed to be associated with an overall risk of cancer (54). As such,

most of the fears were misconceptions, connected to an idea that modern contraceptives "might not match" with a woman's body. This demonstrates that young people know that side effects can differ from one woman to another, findings that are previously not well reported among adolescents in sub-Saharan Africa. However, the consequences of such "mismatches" were not well understood among the participants, as they believed it would cause a range of health effects.

Despite concerns related to side effects, it is important to note that participants acknowledged the reliability of modern contraceptives in protecting against an unwanted pregnancies. Almost all of the participants said that if you use modern contraceptives you could be sure that you would not get pregnant. Previous research has mainly focused on the lack of knowledge among adolescents regarding modern contraceptives, and linked limited knowledge with concerns over side effects (31, 50). However, existing knowledge among adolescents should be acknowledged and utilized in public health strategies. This study demonstrates that young people are worried about teenage pregnancies and do know modern contraceptives are effective against unwanted pregnancies. Such information should be used in efforts to increase the utilization of modern contraceptives.

### *6.4.1 Condoms*

Condoms were reported to be the most common contraceptive method used by adolescents, findings which is in line with other studies among youths in Tanzania (20). However, most of the participants in this study did not mention condoms as a method they would like to use themselves. Moreover, they had strong negative perceptions related to condom use. For example, there was a general consensus that condoms reduced sexual pleasure. Participants, both boys and girls, described condom use as "eating a sweet with its wrapper". Similar findings have been reported in Tanzania before (21, 22, 28), in addition to other places (31). Interestingly, almost all of the participants in this study seemed to base their belief on rumors or assumptions, without personally having experienced reduced sexual pleasure from condoms. Similar findings were reported by Plummer et al. in rural Tanzania (22). This calls for increased attention in sexual health interventions on how young people can retain and increase sexual pleasure when using condoms, such that they can enjoy sex and still be protected.

In addition to the perceived reduced sexual pleasure, some of the participants questioned the effectiveness of condoms. Other studies have also reported a doubt about condoms effectiveness against HIV (21-23). In our study, some did not know that condoms have dual protection and believed it was only effective against either pregnancy or HIV. This is interesting considering the massive focus on HIV prevention and condom use during the last decades. Confusion around condoms' dual protection among young people in sub-Saharan Africa is not well documented in the literature, and contradicts other studies which state that young people know condoms have dual protection (20, 22). In our study, a few also said condoms can contain worms or are infected with HIV. These findings are in line with the findings of a newly published study conducted among adults in Northern Tanzania, where almost half of the participants agreed with the rumor that condoms contain HIV or worms (55). In another newly published study conducted among youths, also from Tanzania, a perception that condoms can cause AIDS and other diseases also emerged, but among lesser number (1.1%) (23). This demonstrates a need for improving HIV prevention programs.

The reasoned action theory proposed by Fishbein and Ajzen has a potential value in explaining why adolescents choose not to use condoms (32). According to this theory, the decision to use condoms can be predicted by how likely young people believe that the sexual pleasure will be decreased and an evaluation of how negative or positive it may be. In addition, their friends might have a normative belief ("My friends say using condoms is like eating a sweet with its wrapper") and they want to do what their friends say is best (motivation to comply to your friends' expectations). Adolescence is a period in life when you might be more concerned with getting acceptance from others, such as peers and parents. As such, use of contraceptives among young and sexually active people might depend on your parents' approval of contraceptive use or premarital sex, as well as what type of values your peers have. Moreover, teachers' advice and education in school might affect the students' decision to have unprotected sex or not. However, condom behaviour is complex and requires involvement of a sexual partner. Moreover, this theory does not include all the social and cultural aspects that are important for adolescents' perceptions related to contraceptive use.

Previous studies, both in Tanzania and other African countries, have found that condom use reflects infidelity, and condoms are therefore not used when you are in a relationship with someone you trust (20, 22, 31). Similar findings were found in our study. These findings fit both to the reasoned action theory as well as to a gender perspective. Applied to the reasoned action theory, suggesting condom use to the sexual partner can make the partner not to trust you. As such, the attitude towards using condoms will depend on how you evaluate this outcome. However, as a girl the evaluation of the outcome might be more negative compared to being a boy. Socially constructed gender roles create unequal power relations where it is more accepted for men to have multiple sex partners (36).

Findings from this study also indicate that boys seem to judge the risk of getting HIV based on a girl's physical appearance. A healthy face would indicate a healthy girl. Similar misconceptions related to the risk of getting HIV, or the risk of getting pregnant, have been reported before (22, 31, 56).

Negative condom beliefs in combination with misconceptions related to the risk of getting HIV are worrying, especially the lack of concern about contracting HIV. In addition, previous research has found that many youths have multiple partners (15, 16). Altogether, this might speed the already devastating HIV epidemic seen in Tanzania.

## 6.5 Perceptions about teenage pregnancies and STIs

As already described, our results illustrate that youths were more concerned about pregnancy than HIV/AIDS. Similar findings of young people fearing pregnancy more than HIV, have been reported among adolescents in Uganda (31). Girls especially described teenage pregnancies as destroying all future plans and leading to poverty. Another consequence they feared was the risk of becoming school dropouts, or being chased out of home. Boys were afraid of punishment if they impregnated a girl. STIs, including HIV, were not a concern among adolescents. This illustrates what motivates, and does not motivate, young people to use contraceptives and should be taken into consideration when designing interventions targeted towards young people. Obviously,

focusing on HIV will not motivate young people to use contraceptives. Interventions should find other strategies, and focus on what young people are concerned with.

## 6.6 Cultural, social and religious norms

The findings from this study demonstrate that cultural, social and religious norms influence contraceptive use and create conflicting dilemmas for young people. In terms of decision-making, our findings underscore results from other studies showing that men are the contraceptive decision makers (22, 31). Adolescents adapt to socially constructed gender roles (33). Boys learn to be the ones having the power to decide, and girls adapt to roles as submissive. In addition, girls were afraid that disagreements with a boyfriend's decision would end the relationship, and boys did not seem to accept girls' initiatives to use contraception. Other studies have found that socially constructed gender roles influence sexual behaviour (34), and make girls vulnerable to HIV and unwanted pregnancies, as they do not have the courage to refuse sex including unprotected sex (35-37).

Despite conventional gender inequalities, our study also demonstrates changing perceptions towards gender roles and imbalances, findings not previously well reported. Both boys and girls acknowledged that girls should have more power related to the decision to use contraceptives, since the burden falls upon the girl. In addition, contraceptive decisions between married couples were described as based on joint decisions. This shows that young people perceive marriage as a type of relationship where you can discuss and make decisions together, while adolescents have less committed and casual relationships where gender imbalances are more prevailing.

The participants in our study were mainly Christians. The findings suggest that adolescents are influenced by religious beliefs that disapprove premarital sex and contraceptive use. Religion has a significant position in many adolescents' lives, and contraceptive use was difficult because it went against God's will. Previous studies on how religion influences contraceptive choices are not consistent. A study conducted in Uganda reported similar findings to our study, where religion was an obstacles for contraceptive use, because young people were afraid of the response from their church

(31). However, in a study from Tanzania about condom promotion, only 2.2% of the adolescents reported religion as a reason for not accepting condom promotion (23). In addition, a study conducted on Zanzibar found that strong Muslim beliefs discourage contraceptive use (26), whereas another study concluded that Muslims find arguments to justify their contraceptive choices (27).

Despite inconsistent results from previous studies, social, cultural and religious norms seem to discourage contraceptive use among young people. This situation creates conflicting dilemmas for young people, as adolescents are growing up in a rapidly evolving environment where more and more young people are engaged in sexual relationships (16).

## 6.7 Communication, information and education

The findings from this study also suggest that culture poses a major barrier to sexual communication between adolescents, parents and teachers, as there is significant shame and stigma attached to premarital sexuality. Talking about sex and contraception is regarded as taboo. Our study findings indicate that young people feel more comfortable talking to peers or other family members than their parents. Despite difficulties talking to parents, adolescents mentioned parents as preferred communication partners, which has also been reported previously in Tanzania and South Africa (57, 58). Parents are important role models in young people's lives, and adolescents inherit parents' values and beliefs.

In general, discussions of contraception and sex seem to be rare, and when they do happen they seem to be focused on abstinence. Adolescents said parents are afraid to give them safe sex advice, because parents think it will encourage them to have sex. However, previous studies indicate that adolescents who talk to their parents about sexual issues are less sexually active and have less unprotected sex (21, 59).

Interestingly, some of the participants in this study expressed concerns about receiving too much information and education about contraceptives, as they were afraid of being influenced to "behave badly". Some said they were too young, and that education should

wait until they were “ready”. This view is in accordance with another study from Tanzania, where many of those who did not accept condom promotion and distribution said it was because they were too young, and that information about condoms could encourage people to have sex (23).

However, contradicting these concerns about being influenced by “bad behavior”, almost all of the participants expressed a need for more sexual education. Most of the information they receive seems to be focused on the promotion of abstinence. Thus, young people find other sources for information. Participants in this study kept referring to the magazine Fema[5], and they also mentioned media as a preferred source of information. These findings are in accordance with a previous study conducted in Tanzania, where mass media was the most frequent reported source of reproductive health information, including contraceptives, among adolescents (58). Therefore, it seems like young people need more comprehensive information that not only focuses on abstinence and HIV prevention. Magazines such as Fema provide information about topics such as relationships and sex, in addition to providing safe sex advice. Research has found that comprehensive sexual health education can delay sexual debut, and increase the use of modern contraceptives including condoms (60).

Despite facing barriers at health facilities, participants said they would like to talk to a health care worker if they needed contraceptive services in the future, because they were the “experts”. This is in accordance with previous findings from Tanzania, where health workers were ranked as the most credible source of information (58). This suggests greater potential for including health workers in sexual education, whereby health workers can assist in topics regarding contraception.

## 6.8 Reliability and Validity

All research has its strengths and limitations, which was also the case for this study. Assessing quality of qualitative research is often a discussion of how the strengths and limitations of the applied methods have affected validity, reliability and transferability of the findings. Validity refers to the extent to which the findings are a true and accurate

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[5] See http://www.feminahip.or.tz

version of the world and the ability to verify the data. Malterud says; "*internal validity asks whether the study investigates what it is meant to, whereas external validity asks in what contexts the findings can be applied" (46).* External validity is often referred to as transferability in qualitative research. Reliability refers to the reproducibility of the findings. For quantitative research it is expected that similar results can be replicated in a different study. However, with regards to qualitative research, reliability is viewed differently and is often not expected nor possible (61).

Several measures were taken to increase the validity of the study. Triangulation with data methods helped to strengthen the internal validity of the findings for this study. The major themes derived from the data produced from this study were found both in individual interviews as well as focus group discussions. I believe this consistency strengthen the relevance of the findings; that we were able to capture adolescents' perceptions about contraceptives. Validation of the study is also strengthen by a thoroughly description of how the study was carried out and the researcher's own preconceptions.

In addition, continuously discussions with the research assistant helped to increase the validity of the findings in order for the researcher to better understand what the participants were really saying. The fact that we carried out the interviews together also increased validity, as it helped to contextualize what the participants said. However, using a research assistant was also a limitation of this study. Collecting data in language not spoken by the researcher (Kiswahili) has probably affected the quality of data. Moreover, English was neither the researcher´s nor the research assistant´s first language. This created challenges when translating the recorded data. Some of the participants' expressions might therefore have been lost or misunderstood that otherwise could have given more nuances to the findings.

The findings from this study are from a small sample in a specific geographical area collected in a specific time and are therefore not generalizable. However, given the nature of qualitative research this was not the purpose. By including two different schools, as well as recruiting some participants outside school, probably gave a broader understanding of young people's perceptions. However, some eligible young people

might not have been captured because some of the students had already finished exams and had therefore left school when we started data collection. Despites this, the findings from this study may be relevant for other youths in other districts in Tanzania.

The process of analysis was mainly carried out by the principle research alone. The findings are therefore very much dependent on the way I interpreted the data. In order to reduce subjectivity, I worked together with a fellow student for parts of the process of analysing the data. We analysed each other's transcripts and coded them without knowing which themes the other had arrived at. Afterwards we shared our interpretation of the data and discussed. I believe this has also contributed to an increased validity of the data, as well as discussions with my supervisors throughout the process.

Time constraints due to the lengthy process of getting ethical process put noteworthy limitations for this study. This meant that we had days were we conducted several interviews, with 5 interviews in one day at the most. During the first weeks in the field we did not have much time to transcribe. This has most likely given an analytical weakness of the study. If more time had been available between each interview, we could have transcribed each interview before we carried out the next one, probably providing more rich and stronger data. However, the last weeks of the data collection period we conducted fewer interviews and had more time to transcribe. In addition, I was able to discuss almost every transcript with my research assistant face to face before I went home, reducing the likelihood of misunderstandings. Time constraints also gave little time to find out-of-school participants or girls who had dropped out of school due to pregnancy, and the results of this study therefore mainly represent the perceptions of adolescents in school.

Another possible limitation of this study is that the participants in the focus groups went to the same school and therefore knew each other from before. This may have resulted in things being left unsaid, because there could have been things they did not want their friends to know. It is also likely that students have exchanged information between them, both students who were interviewed and students who participated in the FGDs, because only two different schools were included as research sites for this study.

Moreover, the fact that many of the individual interviews were carried out at the school during school hours might also have put a limitation on what the participants shared with us. For example, most of the students said they had never used contraceptives nor had sex before, and was mostly talking about other youths during the interview. This has probably made an impact on the reliability of the data.

# 7 CONCLUSION AND RECOMMENDATIONS

## 7.1 Conclusion

Our findings suggest that unmarried adolescents perceive modern contraceptives as family planning to mainly be used within the social institution of marriage, and are influenced by strong cultural norms and stigma attached to premarital sex. The environment and the Tanzanian culture do not acknowledge unmarried adolescents' sexual activity, which poses a great barrier for contraceptive use among young people. Young people feel ashamed to talk to their parents, and vice versa, and meet barriers if accessing contraceptive services. Misconceptions related to modern contraceptives exist, but these seem to be mainly based on rumors. In addition, young people desire more sexual health education. Importantly, young people do not worry about HIV or other STIs, and have negative perceptions related to condom use.

Perceptions of traditional contraceptives are more positive, possibly triggered by privacy issues and a perception of fewer side effects. However, adolescents have concerns about teenage pregnancies and do acknowledge the reliability of modern contraceptives in preventing unwanted pregnancies, which can serve as a motive for contraceptive use. In addition there are changing perceptions towards small family size.

In conclusion, increasing the use of modern contraceptives requires cultural-sensitive and youth-friendly interventions that focus on what adolescents are concerned with. In addition, adolescents need more information to counter negative perceptions.

## 7.2 Recommendations

Education and information related to sexuality and contraception should not only focus on HIV, but also focus on broader topics in sexual and reproductive health that adolescents are concerned with. A more comprehensive education on contraceptives is needed, where the different contraceptives methods' benefits and drawbacks are explained, including traditional contraceptives. Misconceptions related to use of modern contraceptives should be dealt with. In addition, focusing on empowerment of young

girls is important, in order for girls to negotiate safe sex. Health care workers can assist in topics regarding contraception in sexual education in schools.

Institutions working with sexual and reproductive health, such as NGOs and government clinics, should deal with cultural barriers. Interventions aiming to change judgmental views of adolescents' premarital sexual activity among health care providers should be carried out. Training of health care workers should focus on adolescents' reproductive needs and rights, emphasizing adolescents' rights to information, education and provision of contraceptives methods.

In addition, adolescents' motivation to use contraception and their knowledge of modern contraceptives' reliability to protect against unwanted pregnancies should be utilized when designing interventions targeted towards youths. Focusing only on HIV prevention will not motivate adolescents to use contraceptives. Other strategies, which focus on what young people are concerned with, should be designed.

### *7.2.1 Further research*

Further research should include health care workers, parents, teachers and religious leaders, in order to get their perspectives, which can help us to better understand why contraceptive use remains low. Such research could address questions such as: "How do health care providers communicate with adolescents seeking contraceptive services?", "What are religious leaders' perception about contraceptives, what is communicated in churches and how do people interpret it?" and "What are teachers' perspectives of contraceptives and how do their perspectives influence sexual health education?".

There is also a need to carry out more in-depth research where adolescents using contraceptives are included, in order to understand what motivates these adolescents. In addition, further research focusing on out-of school adolescents is needed, as their perspectives might be different from adolescents in school.

# REFERENCES


1. Hindin MJ, Fatusi AO. Adolescent sexual and reproductive health in developing countries: an overview of trends and interventions. International perspectives on sexual and reproductive health. 2009 Jun;35(2):58-62.
2. Doyle AM, Mavedzenge SN, Plummer ML, Ross DA. The sexual behaviour of adolescents in sub-Saharan Africa: patterns and trends from national surveys. Tropical medicine & international health : TM & IH. 2012 Jul;17(7):796-807.
3. Bearinger LH, Sieving RE, Ferguson J, Sharma V. Global perspectives on the sexual and reproductive health of adolescents: patterns, prevention, and potential. Lancet. 2007 Apr 7;369(9568):1220-31.
4. Lauro D. Abortion and contraceptive use in sub-Saharan Africa: how women plan their families. African journal of reproductive health. 2011 Mar;15(1):13-23.
5. Blanc AK, Tsui AO, Croft TN, Trevitt JL. Patterns and trends in adolescents' contraceptive use and discontinuation in developing countries and comparisons with adult women. International perspectives on sexual and reproductive health. 2009 Jun;35(2):63-71.
6. National Bureau of Statistics (NBS) and ICF Macro. Tanzania Demographic and Health survey 2010. Dar es Salaam, Tanzania. 2011.
7. WHO Guidelines on Preventing Early Pregnancy and Poor Reproductive Outcomes Among Adolescents in Developing Countries. 2011 [29.03.2013]. Available from: http://www.who.int/maternal_child_adolescent/documents/preventing_early_pregnancy/en/index.html.
8. Madeni FE, Madeni FE, Horiuchi S, Jitsuzaki M. Reduction of maternal mortality rate in Tanzania: development of reproductive health awareness materials to prevent unwanted pregnancy to adolescent. Bull St Lukes Coll Nurs. 2010 (36):74-85. English.
9. UNICEF. Adolescence in Tanzania 2011 [01.05.2013]. Available from: http://www.unicef.org/infobycountry/files/TANZANIA_ADOLESCENT_REPORT_Final.pdf.
10. Tanzania HIV/AIDS and Malaria Indicator Survey 2011-2012 [21.05.13]. Available from: http://www.tacaids.go.tz/hiv-and-aids-information/about-hiv-and-aids.html.
11. Kakoko DC, Ketting E, Kamazima SR, Ruben R. Provision of family planning services in Tanzania: a comparative analysis of public and private facilities. African journal of reproductive health. 2012 Dec;16(4):140-8.
12. Ministry of Health. Tanzania National Policy Guidelines and Standards for Family Planning Services Delivery and Training, Ministry of Health. Dar es Salaam, 1994.
13. Pathfinder. Integrating Youth-Friendly Sexual and Reproductive Health Services in Public Health Facilities: A Success Story and Lessons Learned in Tanzania. November 2005. [16.05.13]. Available from: http://www2.pathfinder.org/site/DocServer/Tanz_case_study_FINAL.pdf.
14. Clements S, Madise N. Who is being served least by family planning providers? A study of modern contraceptive use in Ghana, Tanzania and Zimbabwe. African journal of reproductive health. 2004:124-36.

15. Exavery A, Lutambi AM, Mubyazi GM, Kweka K, Mbaruku G, Masanja H. Multiple sexual partners and condom use among 10 - 19 year-olds in four districts in Tanzania: what do we learn? BMC public health. 2011;11:490.
16. Kazaura MR, Masatu MC. Sexual practices among unmarried adolescents in Tanzania. BMC public health. 2009;9:373. Pubmed Central PMCID: 2765439.
17. Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A, Innis J. Family planning: the unfinished agenda. The Lancet. 2006;368(9549):1810-27.
18. National Bureau of Statistics (NBS) and ICF Macro. Tanzania Demographic and Health Survey 2004-2005. Dar es Salaam, Tanzania. 2005.
19. Marchant T, Mushi AK, Nathan R, Mukasa O, Abdulla S, Lengeler C, et al. Planning a family: priorities and concerns in rural Tanzania. African journal of reproductive health. 2004 Aug;8(2):111-23.
20. Baumgartner JN, Lugina H, Johnson L, Nyamhanga T. "Being faithful" in a sexual relationship: perceptions of Tanzanian adolescents in the context of HIV and pregnancy prevention. AIDS care. 2010 Sep;22(9):1153-8.
21. Maswanya E, Moji K, Horiguchi I, Nagata K, Aoyagi K, Honda S, et al. Knowledge, risk perception of AIDS and reported sexual behaviour among students in secondary schools and colleges in Tanzania. Health Education Research. 1999;14(2):185-96.
22. Plummer ML, Wight D, Wamoyi J, Mshana G, Hayes RJ, Ross DA. Farming with your hoe in a sack: condom attitudes, access, and use in rural Tanzania. Studies in family planning. 2006 Mar;37(1):29-40.
23. Exavery A, Mubyazi GM, Rugemalila J, Mushi AK, Massaga JJ, Malebo HM, et al. Acceptability of condom promotion and distribution among 10-19 year-old adolescents in Mpwapwa and Mbeya rural districts, Tanzania. BMC public health. 2012;12:569.
24. Arends-Kuenning M, Kessy FL. The impact of demand factors, quality of care and access to facilities on contraceptive use in Tanzania. Journal of biosocial science. 2007 Jan;39(1):1-26.
25. Babalola S. Gender differences in the factors influencing consistent condom use among young people in Tanzania. International journal of adolescent medicine and health. 2006;18(2):287-98.
26. Keele JJ, Forste R, Flake DF. Hearing native voices: contraceptive use in Matemwe Village, East Africa. African journal of reproductive health. 2005 Apr;9(1):32-41.
27. Keefe SK. "Women do what they want": Islam and permanent contraception in Northern Tanzania. Social science & medicine. 2006 Jul;63(2):418-29. English.
28. Rasch V, Silberschmidt M, Mchumvu Y, Mmary V. Adolescent girls with illegally induced abortion in Dar es Salaam: the discrepancy between sexual behaviour and lack of access to contraception. Reproductive health matters. 2000 May;8(15):52-62.
29. Williamson LM, Parkes A, Wight D, Petticrew M, Hart GJ. Limits to modern contraceptive use among young women in developing countries: a systematic review of qualitative research. Reproductive health. 2009;6:3.
30. Kanku T, Mash R. Attitudes, perceptions and understanding amongst teenagers regarding teenage pregnancy, sexuality and contraception in Taung. South African Family Practice. 2010;52(6).
31. Nalwadda G, Mirembe F, Byamugisha J, Faxelid E. Persistent high fertility in Uganda: young people recount obstacles and enabling factors to use of contraceptives. BMC public health. 2010;10(1):530.
32. Hale J, Householder, B., & Greene, K. The theory of reasoned action. In J. Dillard, & M. Pfau (Eds.), The persuasion handbook: Developments in theory and practice. (pp. 259-287). Zalwango A, editor. Thousand Oaks, CA: SAGE Publications, Inc.; 2002.

33. WHO. Gender, women and health. [18.05.13]. Available from: http://www.who.int/gender/whatisgender/en/index.html.
34. Marston C, King E. Factors that shape young people's sexual behaviour: a systematic review. The Lancet. 2006;368(9547):1581-6.
35. Waszak C, Thapa S, Davey J. The Influence of gender norms on the reproductive health of adolescents in Nepal—perspectives of youth.
36. Varga CA. How gender roles influence sexual and reproductive health among South African adolescents. Studies in family planning. 2003;34(3):160-72.
37. Kim YM, Kols A, Nyakauru R, Marangwanda C, Chibatamoto P. Promoting sexual responsibility among young people in Zimbabwe. International Family Planning Perspectives. 2001:11-9.
38. Pathfinder. Focus on young adults [18.05.13]. Available from: http://www2.pathfinder.org/pf/pubs/focus/pubs/eop_report.pdf.
39. Malterud K. Kvalitative metoder i medisinsk forskning. En innføring. 3.utgave ed: Universitetsforlaget; 2011.
40. Palys T. Purposive Sampling. In Lisa M. Given (Ed.), The SAGE Encyclopedia of Qualitative Research Methods. (pp. 698-699). Thousand Oaks, CA: SAGE Publications, Inc.; 2008.
41. Kvale S. Interviews: an introduction to qualitative research interviewing. Thousand Oaks, Calif.: Sage; 1996.
42. Ayres L. Semi-Structured Interview. In Lisa M. Given (Ed.), The SAGE Encyclopedia of Qualitative Research Methods. (pp. 811-812). . Thousand Oaks, CA: SAGE Publications, Inc.; 2008.
43. Malterud K. Kvalitative metoder i medisinsk forskning: en innføring. 3.utgave. Oslo: Universitetsforlag; 2011.
44. Morgan DL. Focus groups. Annual review of sociology. 1996:129-52.
45. QSR International. NVivo. [15.05.13]. Available from: http://www.qsrinternational.com/products_nvivo.aspx.
46. Malterud K. Qualitative research: standards, challenges, and guidelines. Lancet. 2001 Aug 11;358(9280):483-8.
47. World Medical Association. Ethical Principles for medical research involving human subjects. The Declaration of Helsinki (2008). [24.04.2012]. Available from: http://www.wma.net/en/30publications/10policies/b3/index.html.
48. Council for International Organizations of Medical Sciences (CIOMS). International Ethical Guidelines for Biomedical Research Involving Human Subjects (2002) [09.01.2013]. Available from: http://www.cioms.ch/publications/layout_guide2002.pdf.
49. UNESCO. Universal Declaration on Bioethics and Human Rights (2005). 2012 [updated 24.05.2012]. Available from: http://www.unesco.org/new/en/social-and-human-sciences/themes/bioethics/bioethics-and-human-rights/.
50. Flaherty A, Kipp W, Mehangye I. 'We want someone with a face of welcome': Ugandan adolescents articulate their family planning needs and priorities. Tropical doctor. 2005;35(1):4-7.
51. Gage AJ. Sexual activity and contraceptive use: the components of the decisionmaking process. Studies in family planning. 1998:154-66.
52. Abdul-Rahman L, Marrone G, Johansson A. Trends in contraceptive use among female adolescents in Ghana. African journal of reproductive health. 2011;15(2).

53. Gilliam ML, Warden M, Goldstein C, Tapia B. Concerns about contraceptive side effects among young Latinas: A focus-group approach. Contraception. 2004;70(4):299-305.
54. Hannaford PC, Selvaraj S, Elliott AM, Angus V, Iversen L, Lee AJ. Cancer risk among users of oral contraceptives: cohort data from the Royal College of General Practitioner's oral contraception study. BMJ: British Medical Journal. 2007;335(7621):651.
55. Siegler AJ, Mbwambo JK, McCarty FA, DiClemente RJ. Condoms "contain worms" and "cause HIV" in Tanzania: Negative Condom Beliefs Scale development and implications for HIV prevention. Social science & medicine. 2012 Nov;75(9):1685-91. Pubmed Central PMCID: 3432708.
56. Boonstra H. Learning from adolescents to prevent HIV and unintended pregnancy. Issues in brief (Alan Guttmacher Institute). 2007:1.
57. Namisi FS, Flisher AJ, Overland S, Bastien S, Onya H, Kaaya S, et al. Sociodemographic variations in communication on sexuality and HIV/AIDS with parents, family members and teachers among in-school adolescents: A multi-site study in Tanzania and South Africa. Scandinavian journal of public health. 2009;37(2 suppl):65-74.
58. Masatu MC, Kvale G, Klepp KI. Frequency and perceived credibility of reported sources of reproductive health information among primary school adolescents in Arusha, Tanzania. Scandinavian journal of public health. 2003;31(3):216-23.
59. Romer D, Stanton B, Galbraith J, Feigelman S, Black MM, Li X. Parental influence on adolescent sexual behavior in high-poverty settings. Archives of Pediatrics & Adolescent Medicine. 1999;153(10):1055.
60. Kirby DB, Laris B, Rolleri LA. Sex and HIV education programs: their impact on sexual behaviors of young people throughout the world. Journal of Adolescent Health. 2007;40(3):206-17.
61. Miller P. Reliability. In Lisa M. Given (Ed.), The SAGE Encyclopedia of Qualitative Research Methods. (pp. 754-755). Thousand Oaks, CA: SAGE Publications, Inc.; 2008.

# APPENDIX

## Appendix A: Interview guide, example of questions

**<u>Overall aim</u>:** *Explore Tanzanians adolescent`s perception of contraceptives and contraceptive use*

**<u>Personal background information and introduction</u>**
Gender:
Age:
Children:
Religion:
Education:

*Start the interview with a few informal questions such as which subjects they like or get their story if out-of-school adolescents.*

**<u>Family plans and wishes</u>**
- Can you describe what type of family you want? Do you want to have children? How many children do you want? When do you want to have children?

**<u>Theme: Understanding of contraceptives and rationale for use/not use</u>**
**Aim:** Gain insight in adolescents' understanding of contraceptives

- When you hear the word contraceptives, what do you understand? (Or what is the first thing that pops into your mind?) Please explain.
- What do you know about contraceptive methods?
- Can you please tell me which contraceptives you know/have heard about? (Probe on different types of contraceptives)
- Can you explain to me why you think we have contraceptives? (Probe on STIs prevention, pregnancy prevention)?
- Are their differences between the contraceptives? Can you please explain to me what the differences are?
- Who do you think can/should use contraceptives? Please explain.
- What are the positive features of contraceptives? And the negative?
- What do you think are the reasons why some adolescents use contraceptives?
- What do you think are the reasons why some adolescents do not use contraceptives?

**<u>Theme: Traditional vs. modern contraceptives</u>**
**Aim:** Understand adolescents' views of modern contraceptives in relation to traditional methods of contraceptives

Pick up on methods talked about in the first theme.
- Can you please explain me the differences between traditional and modern contraceptives?
- How would you describe traditional contraceptives? (Probe on different types)

- What are the positive features of traditional contraceptives? And the negative?
- What type of contraceptive method do you think adolescents prefer to use and why? (modern or traditional)
- What type of contraceptive method do you think is most important for adolescents and why? (Probe on reasons, modern vs. traditional)
- What type of contraception would adolescents never use? Can you please explain me why
- What type of contraceptive method most accessible and why? (Probe on reasons, modern vs. traditional)

**Theme: Influence by other people**
**Aim**: Find out how their perspectives are influenced by others, such as health personal, friends, family and teachers

- Where can adolescents get information about contraceptives?
- Where to adolescents usually seek advice for contraceptives?
- Where and who would you ask for advice/information about contraceptives?
- Did you learn about contraceptives in school?
- What did you learn?, How did you learn it? Who talked to you about contraceptives?
- Does your family talk to you about contraceptives (parents)? If yes: Can you please explain to me what you can talk to your family/parents about? If no: Probe for reasons
- Do you talk to your friends about contraceptives? If yes: Can you please tell me what you talk about? If no: Probe for reasons
- Who else are you free to talk to?
- Who take the decision to use a contraceptive method or not in a sexual relationship?
- Can a girl decide to use a contraceptive method without telling her boyfriend? Why/why not?

**Theme: Contraceptive need and access**
**Aim:** Ascertain the perceptions adolescents have about adolescents' need for reproductive and sexual health services and their reflections on access to modern contraceptive services

- What type of reproductive health services should be provided for adolescent? Can you please explain why?
- Is there a need of contraceptive services for adolescents? Why/why not?
- What access do adolescents in Tanzania have to contraception? Where do they get it/prefer to go?
- What are the reasons why adolescents use or don't use reproductive health services?

**Theme: Cultural values/norms**
**Aim**: Assess how cultural values/norms affect their view of contraceptives and contraceptive use(marriage, gender, fertility, cultural importance of having children and norms)

- What are the difference between married adolescents and unmarried adolescents in terms of use of contraception? (Probe on STI prevention and pregnancies)

- Who take the decision regarding use of contraceptives in a sexual relationship? (probe on married vs unmarried, long term vs short term relationship, type of contraception – condom vs the pill)
    - If a boy insists not to use a condom, what does that mean to the partner/girl?
    - If a girl is taking the pill/injections or another type of contraceptive, what does that mean?
    - Can girls use contraceptives without having a partner? Please explain

**<u>Personal contraceptive experiences</u>**
**Aim:** Get a deeper understanding of adolescents' perceptions of contraceptives and contraceptive use.

- Have you ever used or considered to use a modern contraceptive?
- What type of contraceptives did/do you use?
- What type of contraceptive would you prefer to use if you should need it and why?
- If used before, but stopped: Why did you stop?
- Is there any type of contraceptives you would never use? Why?
- Where did you get the contraceptive (if use/used)?

**<u>Additional questions</u>**
**Aim:** Find out if there is anything important that has not been discussed and what they consider most important

- Of all the things we discussed, what to you is the most important?
- Review the purpose of the study and then ask: Are there things we have not talked about that you think is important?

# Appendix B: REK Approval

| Region: | Executive officer: | Phone number: | Our date: | Reference |
|---|---|---|---|---|
| REC south-east | Gjøril Bergva | 22845529 | 01.06.2012 | 2012/778 |
| | | | Your date: | |
| | | | 24.04.2012 | |

Att: Arnfinn Helleve

**2012/778 Adolescents` perception of modern contraceptives and contraceptive use in Arusha, Tanzania.**

In reference to your application reviewed by the Committee on the 10th of May 2012.

**Chief investigator:** Arnfinn Helleve
**Institution responsible:** University of Oslo

***Project description***
*Tanzania has a major public health challenge in terms of improving adolescents' reproductive health. The modern contraceptive prevalence in the country is low, and assumed to be significant lower among adolescents. The purpose of the study is to explore Tanzanians adolescent`s perception of contraceptives and contraceptive use, in order to help address the continued low contraceptive prevalence. The study aims to explore adolescents' understanding of modern contraceptives in relation to traditional methods of contraceptives, identify how their perspectives are influenced by health personal, friends, family and teachers, ascertain the perceptions adolescents have about adolescents' need for modern contraceptives, and address their reflection on access to modern contraceptives (family planning services).*

*About 30 adolescents aged 15-18, will be included. Informed consent will be sought from every participant. Data comprise of focus groups and semi-structured interviews.*

**The Committee's decision**
The Committee reviewed the application during its meeting on 10 May 2012. The project was assessed in accordance to the Norwegian Research Ethics Act of 30 June 2006 and Act on medical and health research (the Health Research Act) of 20 June 2008 for the regional committees for medical and health research ethics.

The purpose of the prosject is to explore perceptions and understandings of contraceptives and contraceptive use among adolescents. The Committee concluded that the main goal of this study is not to provide new knowledge regarding disease and health. Therefore, the Committee considers the study to lie outside the remit of the Health Research Act. The project can be implemented without the approval by the Regional Committee for Medical Research Ethics.

The decision of the committee may be appealed to the National Committee for Research Ethics in Norway. The appeal should be sent to the Regional Committee for Research Ethics in Norway, South-East D. The deadline for appeals is three weeks from the date on which you receive this letter.

**Besøksadresse:**
Gullhaug torg 4A, Nydalen,
0484 Oslo

**Telefon:** 22845511
**E-post:** post@helseforskning.etikkom.no
**Web:** http://helseforskning.etikkom.no/

All post og e-post som inngår i saksbehandlingen, bes adressert til REK sør-øst og ikke til enkelte personer

Kindly address all mail and e-mails to the Regional Ethics Committee, REK sør-øst, not to individual staff

Yours sincerely

Stein A. Evensen
Professor dr. med.
Chair

Gjøril Bergva
Executive officer

**Copy:** live.storehagen@studmed.uio.no
universitetsdirektor@uio.no

# Appendix C: NSD Approval

**Norsk samfunnsvitenskapelig datatjeneste AS**
NORWEGIAN SOCIAL SCIENCE DATA SERVICES

Harald Hårfagres gate 29
N-5007 Bergen
Norway
Tel. +47-55 58 21 17
Fax +47-55 58 96 50
nsd@nsd.uib.no
www.nsd.uib.no
Org.nr. 985 321 884

Arnfinn Helleve
Institutt for helse og samfunn
Universitetet i Oslo
Postboks 1130 Blindern
0318 OSLO

Vår dato: 08.10.2012    Vår ref:31085 / 3 / KS    Deres dato:    Deres ref:

## TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 24.07.2012. All nødvendig informasjon om prosjektet forelå i sin helhet 03.10.2012. Meldingen gjelder prosjektet:

| | |
|---|---|
| *31085* | *Adolescents' perception of modern contraceptives and contraceptive use in Arusha, Tanzania* |
| *Behandlingsansvarlig* | *Universitetet i Oslo, ved institusjonens øverste leder* |
| *Daglig ansvarlig* | *Arnfinn Helleve* |
| *Student* | *Live Storehagen* |

Personvernombudet har vurdert prosjektet, og finner at behandlingen av personopplysninger vil være regulert av § 7-27 i personopplysningsforskriften. Personvernombudet tilrår at prosjektet gjennomføres.

Personvernombudets tilråding forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, eventuelle kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, http://www.nsd.uib.no/personvern/forsk_stud/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, http://pvo.nsd.no/prosjekt.

Personvernombudet vil ved prosjektets avslutning, 01.07.2013, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Vigdis Namtvedt Kvalheim

Katrine Utaaker Segadal

Kontaktperson: Katrine Utaaker Segadal tlf: 55 58 35 42
Vedlegg: Prosjektvurdering
Kopi: Live Storehagen, Trondheimsveien 24c, 0560 OSLO

Avdelingskontorer / *District Offices*
*OSLO*: NSD. Universitetet i Oslo, Postboks 1055 Blindern, 0316 Oslo. Tel. +47-22 85 52 11. nsd@uio.no
*TRONDHEIM*: NSD. Norges teknisk-naturvitenskapelige universitet, 7491 Trondheim. Tel. +47-73 59 19 07. kyrre.svarva@svt.ntnu.no
*TROMSØ*: NSD. SVF, Universitetet i Tromsø, 9037 Tromsø. Tel. +47-77 64 43 36. nsdmaa@sv.uit.no

## Appendix D: NIMR Approval

THE UNITED REPUBLIC OF
TANZANIA

National Institute for Medical Research
P.O. Box 9653
Dar es Salaam
Tel: 255 22 2121400/390
Fax: 255 22 2121380/2121360
E-mail: headquarters@nimr.or.tz

Ministry of Health and Social Welfare
P.O. Box 9083
Dar es Salaam
Tel: 255 22 2120262-7
Fax: 255 22 2110986

NIMR/HQ/R.8a/Vol. IX/1432

20th November, 2012

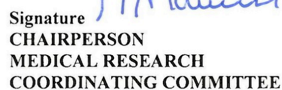
Live Storehagen
University of Oslo, Faculty of Medicine
Institute of Health and Society
P O Box 1130 Blindern 0318, OSLO, NORWAY
C/O Dr Masatu Melkiory,
CEDHA, P O Box 1162, ARUSHA

**CLEARANCE CERTIFICATE FOR CONDUCTING MEDICAL RESEARCH IN TANZANIA**

This is to certify that the research entitled: "Adolescents' perceptions of modern contraceptives and contraceptives use, in secondary schools students in Arusha", (Storehagen L *et al*), whose Local Supervisor is Dr Melkiory Masatu , CEDHA, Arusha, has been granted ethical clearance to be conducted in Tanzania.
The Principal Investigator of the study must ensure that the following conditions are fulfilled:

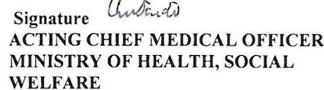
1. Progress report is submitted to the Ministry of Health and the National Institute for Medical Research, Regional and District Medical Officers after every six months.
2. Permission to publish the results is obtained from National Institute for Medical Research.
3. Copies of final publications are made available to the Ministry of Health & Social Welfare and the National Institute for Medical Research.
4. Any researcher, who contravenes or fails to comply with these conditions, shall be guilty of an offence and shall be liable on conviction to a fine. NIMR Act No. 23 of 1979, PART III Section 10(2).
5. Sites:
6. Approval is for one year: 20th November, 2012 to 19th November, 2013.

**Name: Dr Mwelecele N Malecela**



**Signature**
**CHAIRPERSON**
**MEDICAL RESEARCH**
**COORDINATING COMMITTEE**

**Name: Dr Donan Mmbando**



**Signature**
**ACTING CHIEF MEDICAL OFFICER**
**MINISTRY OF HEALTH, SOCIAL WELFARE**

**CC: RMO**
**DMO**

# Appendix E: Information letter with consent form to adolescents

**Request for participation in the research project "Adolescents' perceptions of contraceptives and contraceptive use in Arusha, Tanzania"**

My name is *Live Storehagen* and I am a researcher in the "Afya kwa Vijana na mwanafunzi Project" from the University of Oslo in Norway. This is a request for you to participate in a research study where the main aim is to better understand how adolescents think of contraceptives and contraceptive use.

**What does the study entail?**
There will be face to face interviews and Focus Group Discussions. The interview will last for approximately 1 hour. Focus Group Discussion will take approximately 2 hours. I will take notes while we talk. If it is okay with you, I will use a tape recorder so that I should not forget.

**What will happen to the information about you?**
The information you share during the interview is confidential between us two, neither your teachers nor parents will know about it. I will assure confidentiality by not writing down your name or other identifiable information. All written information from the interview will be given a number instead of your name. Other information that may come up during the interview which can be identified with you will be changed. However, I will ask you for information about how I can contact you again, and I will therefore make a list with this information connected to your identification number.

After we have finished the interview, nobody will have access or listen to what we have discussed here apart from the research team. All the tapes and written information from this interview will be kept in a locked cabinet where only I have access. The study will end the 1st of July 2013, and all recorded data and your contact details will be deleted after this date.

**Voluntary participation**
Participation in the study is voluntary. There will not be any consequences for you if you do not wish to participate in this study, or if you want to withdraw from the study during the process. You can withdraw your consent to participate in the study at any time and without stating any particular reason.

**Consent to participate in the study**
I have read/information was read to me by the research assistant i understand all about this research study.

Would you like to participate? (circle one answer)

1. YES
2. NO

DATE:___________________

Signature:_______________________________________________

**PLEASE RETURN THE SIGNED DOCUMENT TO THE ONE WHO GAVE IT TO YOU**

**Contact Information**

Live Storehagen (researcher)
University of Oslo
Institute for General Practice and Community Medicine, Section for International Health
P.b. 1130 Blindern, 0370 Oslo, NORWAY
Phone: 0779-730322
E-mail: live.storehagen@studmed.uio.no

DR. Melkiory Masatu (Supervisor in Arusha)
CEDHA College, Sanawari Arusha
P.O. Box 1162, Arusha
Phn: 0754-800793

# Appendix F: Information letter to parents with parental consents

**Request for letting your child participate in the research project "Adolescents' perceptions of contraceptives and contraceptive use in Arusha, Tanzania"**

My name is *Live Storehagen* and I am a researcher in the "Afya kwa Vijana na mwanafunzi Project" from the University of Oslo in Norway. This letter is to kindly ask for your consent to let your child participate in a research study where the main aim is to better understand how adolescents think of contraceptives and contraceptive use.

**Information about the study**
I want to interview adolescents between the ages of 15 to 19, both face to face and in group discussions. The face to face interviews will last for approximately 1 hour, and the group discussions will take approximately 2 hours.

**What will happen to the information?**
All information shared during the interviews will be kept confidential. I will assure confidentiality by not writing down names or other identifiable information. All written information from the interview will be given a number instead of the participants` name. Other information that may come up during the interview which can be identified with the participant will be changed. No one will have access or listen to what we have discussed in the interviews apart from the research team. All the tapes and written information from this interview will be kept in a locked cabinet where only I have access. The study will end the 1st of July 2013, and all recorded data and contact details will be deleted after this date.

**Voluntary participation**
Participation in the study is voluntary. There will not be any consequences if you don't allow your child to participate or if your child wants to withdraw from the study during the process. You can withdraw your parental consent at any time and without stating any particular reason.

**Consent to participate in the study**
I have read the information sheet/the information sheet has been read to me, and I understood the information about the research study.

Do you allow your child to participate in this study? (circle one answer)

1. YES
2. NO

DATE:____________________

Signature:______________________________________

**PLEASE RETURN THE SIGNED DOCUMENT TO THE ONE WHO GAVE IT TO YOU**

**Contact Information**

Live Storehagen (researcher)
University of Oslo
Institute for General Practice and Community Medicine, Section for International Health
P.b. 1130 Blindern, 0370 Oslo, NORWAY
Phone: 0779-730322
E-mail: live.storehagen@studmed.uio.no

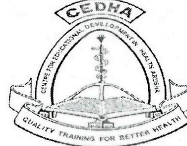
DR. MelkioryMasatu (Supervisor in Arusha)
CEDHA College, SanawariArusha
P.O. Box 1162, Arusha
Phn: 0754-800793

## Appendix G: Permission from Regional Educational Officer Arusha

THE UNITED REPUBLIC OF TANZANIA

**MINISTRY OF HEALTH AND SOCIAL WELFARE**

**CEDHA**
Centre for Educational
Development in Health Arusha



P.O Box 1162, Arusha
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+ 255-27-2050085
E-mail:cedhatz@cedha.ac.tz

Our Ref. No CEDHA/L.7/VOL.I/156 Date: 14/11/2012

REGIONAL EDUCATION OFFICER
ARUSHA

**Re: Request to have an interview and group discussion with students.**

As part of our **Afya Kwa Vijana project**, we would like to interview and hold a group discussion with some few students at your school on their perceptions and use of modern family planning. The purpose is to explore adolescents' perception of modern contraceptives and contraceptive use, in order to help address the continued low contraceptive prevalence in Tanzania. The study will be conducted by **Live Storehagen,** from Oslo University, an institution which collaborates with us on the project. She will be accompanied by an assistant. The research has been approved by our National Institute for Medical Research (NIMR).

I request you to allow them do this work at your school, which is one of the school participating in the **Afya Kwa Vijana project**.

Looking forward to your usual cooperation,

Sincerely yours,

Dr. Melkiory Masatu
**Principal.**

cc. Live Storehagen