Knowledge, Attitude and Perception about Unsafe Sex and teenage Pregnancy: Qualitative study among Adolescent living with HIV/AIDS in Dar es salaam, Tanzania

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DEDICATION

I dedicate this research study to my lovely wife Dr. Faraja Kiwanga Kayange and my lovely daughters; Alice-Elizabeth, Jane-Rose and Doreen-Faith for their tireless support and encouragement through out of my course. May the Lord God Almighty bless them abundantly.
ABSTRACTS

Background: Over the last decade, availability of antiretroviral therapy has increased rapidly throughout Africa including Tanzania, with the result of children acquired HIV through mother to child transmission lives longer. Many of them have entered into puberty period where they are at high risk of HIV re-infection or becoming infected with other STI’s, such as gonorrhea and unwanted pregnancy among the girls. In Tanzania, about 23% of the total population are adolescents constituting to about 10.3 million. Almost one in four (23%) girls between the ages of 15 and 19 has either given birth or is pregnant. Between June 2011 and August 2013, I observed fifteen adolescent girls living with HIV/AIDS who became pregnant and one among them died while known she was pregnant. This indicates that, adolescent girls and boys engage in both safe and unsafe sexual activities at an early stage.

Objective: To explore the knowledge, attitude and perception about unsafe sex and teenage pregnancy among adolescent living with HIV/AIDS in Dar es salaam, Tanzania.

Methodology: Qualitative study design was employed in this study. Triangulation of method and data were employed. Twenty in-depth interviews (IDI’s) was conducted to girls between 15 and 19 years who never were pregnant, girls between 15-19 years who were pregnant at a time of interview or had already delivered, boys between 15 and 19 years, and woman between 20 and 25 years who had pregnant during their teenage period participated in the study. IDI’s were followed by two focus group discussions and non-participatory observations.

Findings: The study found 18 out of 20 respondents had the understanding of unsafe sex and teenage pregnancy but more than half of respondents were not able to relate unsafe sex to both teenage pregnancy and new HIV infections or other STI’s. They reported engaging in unsafe sex as mean of survival, a mean to support their families, and value for fertility. Also, they engaged in unsafe sex as a result of sexual coercion, foolish age, lack of power to negotiate on condom use among girls, and strong sexual desires “Mihemuko”.
Conclusion: Adolescents living with HIV/AIDS engage in unsafe sex which may leads to teenage pregnancy and new HIV infections or other STI’s. They need a simplified and comprehensive sexual and reproductive health education which is adolescent centered, involving multiple disciplines and delivered repetitively.
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<td>AbLWHA</td>
<td>Adolescent born and living with HIV/AIDS</td>
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<tr>
<td>AIDS</td>
<td>Acquired immunodeficiency syndrome</td>
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<tr>
<td>AJOL</td>
<td>African Journal Online</td>
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<tr>
<td>AYA</td>
<td>African Youth Alliance</td>
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<tr>
<td>ALWHA</td>
<td>Adolescent living with HIV/AIDS</td>
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<tr>
<td>ANECCA</td>
<td>African Network for the Care of Children Affected by AIDS</td>
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<tr>
<td>ART</td>
<td>Antiretroviral therapy</td>
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<tr>
<td>ARV’s</td>
<td>Anti-retroviral</td>
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<tr>
<td>ASAP</td>
<td>AIDS Strategy and Action Plan</td>
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<td>ASRH</td>
<td>Adolescent sexual and reproductive health</td>
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<td>BSI</td>
<td>Binti Simama Imara project</td>
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<tr>
<td>CDC</td>
<td>Centers for Disease Control</td>
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<td>CTC</td>
<td>Care and treatment clinic</td>
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<tr>
<td>DHS</td>
<td>Demographic and Health Surveys</td>
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<tr>
<td>DMO</td>
<td>District Medical Officer</td>
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<tr>
<td>FGD</td>
<td>Focus group discussions</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>HIV</td>
<td>Human immunodeficiency virus infection</td>
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<td>IAS</td>
<td>International AIDS society,</td>
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<td>ICPD</td>
<td>International Conference on Population and Development</td>
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<td>IDI</td>
<td>In-depth interview</td>
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<tr>
<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
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<tr>
<td>IUD’s</td>
<td>Intrauterine Devices</td>
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<tr>
<td>KCMC</td>
<td>Kilimanjaro Christian Medical Centre</td>
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<tr>
<td>LAM</td>
<td>Lactation Amenorrhea Method</td>
</tr>
<tr>
<td>MD</td>
<td>Medical Doctor</td>
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<tr>
<td>MDG</td>
<td>Millenium Development Goals and targets.</td>
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<td>MIC’s</td>
<td>Middle Income Countries</td>
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<td>MMS</td>
<td>Medical Mission Support</td>
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<tr>
<td>MoFAIC</td>
<td>Ministry of Foreign Affairs and International Cooperation</td>
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<td>MoHSW</td>
<td>Ministry of Health and Social Welfare</td>
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<tr>
<td>MTP-I</td>
<td>Medium-term Plans I</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<td>MTP-II</td>
<td>Medium-term Plans II</td>
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<td>MTP-III</td>
<td>Medium-term Plans III</td>
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<tr>
<td>NATNETS</td>
<td>National Insecticide Treated Nets</td>
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<tr>
<td>NBS</td>
<td>National Bureau of Statistics</td>
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<tr>
<td>NBS &amp; ICF-Macro</td>
<td>National Bureau of Statistics &amp; ICF-Macro</td>
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<tr>
<td>NBS-MoF</td>
<td>National Bureau of Statistics-Ministry of Finance</td>
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<tr>
<td>NCPHSBBR</td>
<td>The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research</td>
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<tr>
<td>NIMR</td>
<td>National institute of medical research</td>
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<tr>
<td>NIV</td>
<td>New International Version</td>
</tr>
<tr>
<td>PASADA</td>
<td>Pastoral Activities and Services for people with AIDS</td>
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<tr>
<td>PLWHA</td>
<td>People living with HIV and AIDS</td>
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<tr>
<td>REK</td>
<td>Regional Committees for Medical Research Ethics (Norway)</td>
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<tr>
<td>SATF</td>
<td>Social Action Trust Fund</td>
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<tr>
<td>SRH</td>
<td>Sexual and Reproductive Health</td>
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<tr>
<td>STI's</td>
<td>Sexually transmitted diseases</td>
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<tr>
<td>TACAIDS</td>
<td>Tanzania Commission for AIDS</td>
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<tr>
<td>TB</td>
<td>Tuberculosis</td>
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<tr>
<td>TDHS</td>
<td>Tanzania Demographic Health Surveys</td>
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<tr>
<td>TGNP</td>
<td>Tanzania Gender Network Programme</td>
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<tr>
<td>THMIS</td>
<td>Tanzania HIV/AIDS and Malaria Indicator Survey</td>
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<tr>
<td>TJHR</td>
<td>Tanzania Journal of Health Research</td>
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<tr>
<td>TMC</td>
<td>Temeke Municipal Council</td>
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<tr>
<td>TV</td>
<td>Television</td>
</tr>
<tr>
<td>UN</td>
<td>United Nation</td>
</tr>
<tr>
<td>UNAIDS</td>
<td>United Nations Programme on HIV/AIDS</td>
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<tr>
<td>UNFPA</td>
<td>The United Nations Population Fund</td>
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<tr>
<td>UNICEF</td>
<td>United Nations’ Children’s Fund</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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CHAPTER 1: INTRODUCTION

1.1 Background

Adolescent pregnancy is a global problem. Sixteen million adolescent girls between 15–19 years old give birth each year, equivalent to 11% of all births worldwide (WHO, 2014). In simple calculation, this means that, one in every ten pregnancies annually is among adolescent girls between the ages of 15 and 19 years. In Africa, many women begin bearing children in their teenage years (Brown et al., 2013). Despite the significant reduction of maternal mortality of 45 percent for the past 20 years (WHO, 2015a), teenage pregnancies creates one of the setback in its reduction.

Tanzania mainland and Zanzibar have a population of 43.6 million and 1.3 million respectively making a total population of 44.9 million (NBS, 2012). About 23% of the total population are adolescents constituting to about 10.3 million (NBS-MoF, 2012). Almost one in four (23%) girls between the ages of 15 and 19 has either given birth or is pregnant (NBS&ICF-Macro, 2011). Despite several research studies done among adolescents in Tanzania, few or no research has explored in detail knowledge, attitude and perceptions about safe sex and pregnancy among adolescent living with HIV/AIDS.

Adolescent girls and boys engage in both safe and unsafe sexual activities at an early stage. Between June 2011 and August 2013, I observed 15 adolescent girls living with HIV/AIDS became pregnant and one of them died while pregnant. Five percent (5%) of perinatally HIV infected children are slow progressors. They reach adolescence, even without antiretroviral therapy (ART) (Tindyebwa et al., 2006). It has been 10 years since the introduction of free antiretroviral (ARV) in Tanzania witnessing the number of deaths among children born with HIV infections from HIV positive parents decreased, increasing the chance of survival and some of these children are orphans following the death of their parents (Busza, Besana, Mapunda, & Oliverasd, 2013). Many of these children have entered into puberty period where they are at a high risk of HIV re-infection or becoming infected with other STI's, such as gonorrhea or becoming pregnant for girls.
With the increased effectiveness of ARV drugs, an increased number of adolescents have been observed to experience unwanted consequences of sexual activity (Bakeera-Kitaka, Nabukeera-Barungi, Nostlinger, Addy, & Colebunders, 2008). Few exploratory studies have been conducted in Tanzania among this group of adolescents in relation to unsafe sex and pregnancy. This study has tried to explore the knowledge, attitude and perception about unsafe sex and teenage pregnancy among adolescent living with HIV/AIDS in Dar es salaam, Tanzania.

1.2 Tanzania’s country profile
1.2.1 Geography of the country
1.2.1.1 Location, area and population
Tanzania is located in Eastern Africa. It is bordered by Kenya and Uganda to the North, Rwanda, Burundi and the Democratic Republic of Congo to the West and Zambia, Malawi and Mozambique to the South. The country’s eastern border lies in the Indian Ocean, which has a coastline of 1,424 kilometers (MoFAIC, 2015). It has a total area of 945,087 square kilometers, including 61,000 square kilometers of inland water. The total surface area of Zanzibar is 2,654 square kilometers. Unguja, the larger of the two islands has an area of 1,666 square km, while Pemba has an area of 988 square kilometers (MoFAIC, 2015).

According to the 2012 Population and Housing Census results, Tanzania has a population of 44,928,923 of which 43,625,354 are on Tanzania Mainland and 1,303,569 are in Tanzania Zanzibar (NBS-MoF, 2012). There are more women (51.3%) as compared to men (48.7). Half of the total population (50.1%) is composed of young population of up to 17 years and 1,696,349 (7.7%) of children are orphaned with one or both parents died (NBS-MoF, 2012).

1.2.1.2 Administration
Tanzania is composed of 30 regions; 25 regions on the mainland and five in Zanzibar. Tanzania’s regions are Dar-es-Salaam, Dodoma, Arusha, Geita, Iringa, Kagera, Katavi, Kigoma, Kilimanjaro, Lindi, Manyara, Mara, Mbeya, Morogoro, Mtwara, Mwanza,
Njombe, Pemba North, Pemba South, Pwani, Rukwa, Ruvuma, Shinyanga, Simiyu, Singida, Tabora, Tanga, Zanzibar Central/South, Zanzibar North and Zanzibar Urban/West (MoFAIC, 2015). Dar-es-Salaam saves as the famous city of the country being more advanced in terms of infrastructures than the rest of the regions whereby Dodoma is the Capital of the country where the Parliament of United republic of Tanzania and headquarters of other government offices are located.

1.2.1.3 Climate condition

The climate of Tanzania mainland is tropical type being divided into four climatic zones: the hot humid coastal plain; the semi-arid zone of the central plateau; the high-moist lake regions; and the temperate highland areas. In the highlands, temperatures range between 10ºc and 20ºc during cold and hot seasons respectively. The rest of the country has temperatures usually not falling lower than 20ºc. The hottest period spreads between November and February (25ºc - 31ºc) whereas the coldest period is often between May and August (15ºc - 20ºc). Climatically, the island of Zanzibar is tropical and humid. Average maximum temperature is about 30ºC recorded during the hot season November to March, while average minimum temperature is 21ºC, recorded during the cool season of June to October. Humidity rate is high ranging from 50’s to 80’s and slightly higher in Pemba than Unguja (MoFAIC, 2015).
1.2.2 Culture and politics

Tanzania is a diverse country with more than 120 local languages spoken with Swahili being the national language spoken by all natives of Tanzania. English is used as the official language of education; administration and business. Local people are native African 99% (of which 95% are Bantu) and the remaining 1% consisting of Asians, Europeans, and Arabs (MoFAIC, 2015). Most of the population is Christian or Muslim with a small number of being Hindus and atheist.

Tanzania became independent in 1961 and since then it has been led by four presidents including the current one who will finish his term by the end of October 2015. Its constitution allows political pluralism and currently there are about 18 political parties.
1.2.3 Economy
Despite high growth averaging 7% over the past 10 years, the recent household budget survey results indicate that 28.2% of Tanzanians are poor, and poverty remains more prevalent in rural areas (approximately 90 percent) than in urban areas (Charle, Dhliwayo, & Loening, 2014; IFAD, 2014). Its economy depends heavily on agriculture which accounts for more than 40% of the GDP, providing 85% of the country’s exports and employs 80% of the total workforce. Other economic activities include; tourism, mining and small scale industries which all together contributes to the national economic growth (MoFAIC, 2015).

1.2.4 Health service system
Tanzania’s health system is divided into six levels arranged from the lowest to the highest levels. These are; i) Village health service, ii) Dispensary services, iii) Health Centre services, iv) District hospitals, v) Regional hospitals, and vi) Referral or Consultant hospitals (MoHSW, 2014; NATNETS, 2012).

i) Village health post
Village health post is the first and lowest level of health service delivery in the country. It provides preventive services which can be offered in homes. Each village health post has two village health workers chosen amongst villagers. After being chosen, they receive a short training from the government before they start working (MoHSW, 2014; MMS, 2009).

ii) Dispensary services
The dispensary is a second level of health services. It provides services to the population of between 6,000 to 10,000 people. The services offered at this level include; supervision of village health post, vaccination, antenatal clinic, curative and preventive services (MoHSW, 2014; MMS, 2009).
iii) **Health Centre services**
The health centre is a level which provides services to the population of approximately 50,000 people. The services offered at this level include; supervision of dispensaries, vaccination, antenatal clinic, curative services, preventive services, laboratory services and in-patient treatment with 20 hospital beds (MoHSW, 2014; MMS, 2009).

iv) **District hospitals**
In Tanzania, each district must have a district hospital. For those districts which lack its hospital, have designated the religious hospitals to play the role as district hospitals in partnership with the government. District hospitals are at higher levels compared to health centres with a total of 100 to 200 hospital beds (MoHSW, 2014; MMS, 2009).

v) **Regional hospitals**
The regional Hospitals offer similar services like those agreed at district level; however, regional hospitals have specialists in various fields and offer additional services which are not provided at district hospitals (MoHSW, 2014; MMS, 2009). It provides services to the population of approximately 1,000,000 people (MoHSW, 2014; MMS, 2009).

vi) **Referral or Consultant hospitals**
This is the highest level of hospital services in the country currently there are four referral hospitals namely, the Muhimbili National Hospital, which caters the eastern zone; Kilimanjaro Christian Medical Centre (KCMC) which cater for the northern zone, Bugando Hospital, which cater for the western zone; and Mbeya Hospital which serves the southern Highlands (MoHSW, 2014; MMS, 2009).

Care and treatment services for people living with HIV and AIDS (PLWHA) have been incorporated in all four referral hospitals, all regional and some district, private and faith based organization hospitals (TACAIDS, 2015).
1.2.5 Health indicators in Tanzania
Still birth rate (per 1000 total birth) is 26 (as per year 2009), total maternal death is 7900 (as per year 2013), lifetime risk of maternal death (1 in N) is 44 (as per year 2013), and the total fertility rate per woman is 5.3 as per year 2012 (MNCS-Report, 2014). Other indicators are summarized in the table below.

Table 1: Summary table of the demographic indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Life Expectancy at Birth (Male/Female)</td>
<td>54/57</td>
</tr>
<tr>
<td>Total Fertility Rate (TFR)</td>
<td>5.4</td>
</tr>
<tr>
<td>Infant Mortality (per 1,000 live births)</td>
<td>51</td>
</tr>
<tr>
<td>- 1q0</td>
<td></td>
</tr>
<tr>
<td>Under-Five Mortality (per 1,000 live births)</td>
<td>81</td>
</tr>
<tr>
<td>- 5q0</td>
<td></td>
</tr>
<tr>
<td>Maternal deaths per 100,000 live births</td>
<td>454</td>
</tr>
<tr>
<td>Percentage of births attended by skilled health personnel</td>
<td>42.6</td>
</tr>
<tr>
<td>Adolescent birth rate</td>
<td>67.1</td>
</tr>
</tbody>
</table>


1.3 Problem statement
Regardless of HIV status, unsafe sex among adolescents plays a key role in increasing the number of pregnancies at an early age and increased risk of acquiring STIs and their associated complications. Adolescent mothers, particularly those under the age of 18, have been shown to be more likely than older mothers to experience pregnancy and delivery complications, affecting the health of both the mother and the child (Tanzania Gender Network (TGNP) and Macro International Inc, 2007, p. 9). Even though globally adolescents aged 15-19 years account for 11% of all births, 95 percent of these births occur in low- and middle-income countries (WHO, 2008; B&BCF, 2013). The average adolescent birth rate in middle income countries (MIC’s) is more than twice as high as that in high-income countries, with the rate in low-income countries being five times as high (WHO, 2008). Fourteen percent of all unsafe abortions in low- and middle-income countries are among young adolescents aged 15–19 years. This accounts for 2.5 million
adolescents having unsafe abortions every year, and are more seriously affected by complications than are older women (WHO, 2008).

Tanzania is one of the countries in Sub-Saharan Africa (SSA) with high maternal mortality of about 454 deaths/100,000 live births (NBS&ICF-Macro, 2011, p. 265). Fourteen percent of the maternal deaths in Tanzania are among adolescent girls between 15 to 19 years (NBS&ICF-Macro, 2011, p. 265). This implies that, any delay in becoming pregnant at an early age will lower the number of girls dying due to birth complications and ultimately contribute in lowering maternal mortality.

There has been an increased awareness about STIs and the effect of early pregnancy, but this awareness alone does not show an impact on reducing the number of early pregnancy. Adolescents with appropriate knowledge, prospects for future and caring, communicative parents demonstrate better and more protective behaviors. Reports show that, adolescents with sexual knowledge alone had less positive sexual attitudes and did not show increased practices of safe sex behavior (WHO, 2012). Failure to effectively address the issue of unsafe sex and early pregnancy among adolescents potentially impairs all the efforts in lowering the maternal mortality in Tanzania. In many countries, including Peru, Tanzania, Bangladesh, and Samoa, more than one third of girls who had sex before the age of 15 report that their first sexual encounter was coerced (Goldstein, 2013; WHO, 2005). Parental status (family structure), peer conformity, poverty, inactive or non-operational policy, school dropout, unstable family, unstable adolescent relationships and attitude of the community are other possible contributing factors toward unsafe sex and underutilization of family planning services among adolescent girls (Panday, Makiwane, Ranchod, & Letsoalo, 2009; Moore & Rosenthal, 2006; Bezuidenhout & Joubert, 2008)

Limited researches have been conducted in Tanzania to understand more about knowledge, attitude and practice about unsafe sex and pregnancy. This study has attempted to explore, in details, knowledge, safe sex practices and perceptions regarding teenage pregnancy, new HIV infections and other STI’s among adolescent
living with HIV/AIDS. The major aim of this research was to garner more insight and recommend tailored solutions to the problem.

1.4 Research questions

- How do adolescents living with HIV (ALWH) in Tanzania understand and relate safe sex practices to prevention of teenage pregnancy, new HIV infections and other STI's?
- What are the attitudes of ALWH in Tanzania about friends/peers becoming pregnant?
- How do ALWH in Tanzania view safe sex and teenage pregnancy?

1.5 Objectives

1.5.1 Broad objective

This study explored the knowledge, attitude and perception about unsafe sex and pregnancy among adolescents living with HIV/AIDS in Dar es Salaam, Tanzania.

1.5.2 Specific Objectives

The specific objectives were:

- To understand how Adolescents living with HIV (ALWH) in Tanzania relates safe sex practice to prevention of teenage pregnancy, new HIV infections and other STI's.
- To explore how ALWH in Tanzania understand on prevention of teenage pregnancy.
- To explore how ALWH in Tanzania feel about friends becoming pregnant.
- To explore how ALWH in Tanzania view safe sex and teenage pregnancy.

1.6 Rationale/ justification of the study

Adolescents and youth are the most vulnerable groups to become infected or re-infected with HIV/AIDS and other sexual transmitted infections. Not only that, teen pregnancies contribute significantly to the maternal death and morbidity in Tanzania. In order to address the Millennium Development Goals (MDG's) 4th, 5th and 6th which are the country's priority, adolescents must be considered especially in the area of sexual
and reproductive health. If the issue of unsafe sex is not adequately addressed, there will be increased morbidity and mortality among adolescent girls getting pregnant, higher chances of acquiring sexual transmitted diseases and new HIV infections, increased cost of dealing with the complications, including those due to unsafe abortions, transmission of STI’s to others (partners) in the community, increased school drop out and unemployment which lead into poverty. In most of the community, there is no closeness between adolescent and their caretakers. The community has great expectations from adolescent being free from early pregnancy, free from STI’s without devising the best strategies on how this issue can be addressed.

This study has responded to the International Conference on Population and Development (ICPD) Program of Action para 7.46 which calls on countries to “protect and to promote the rights of adolescents to reproductive health education, information and care and greatly reduce the number of adolescent pregnancies” (UN-World Conference, 1968). It has also responded to the gaps identified in previous researches (Chacko, Kipp, Laing, & Kabagambe, 2007; Kanku & Mash, 2010). Some study reviewed; include a study done in South Africa which reported misinformation on contraceptive and factors influencing teenage pregnancy (Kanku & Mash, 2010). A study done in India reported that, both genders were involved in premarital sex and there was a perception that, an adolescent girl can’t remain virgin before marriage (McManus & Dhar, 2008). A study done in Uganda reported lack of knowledge on dual protection of STI’s and pregnancy, and perceived condom to promote promiscuous and lower trust (Chacko, Kipp, Laing, & Kabagambe, 2007). Also, a systematic review conducted in the USA, documented three behavioral health challenges in the first cohort of long-term HIV/AIDS survivors: decreased medication adherence, sexual debut and accompanying pregnancy and transmission risk, and mental health problems (Koenig, Nesheim, & Abramowitz, 2011).

None of the studies reviewed were conducted among adolescents living with HIV/AIDS in relation to knowledge, attitude and perception about unsafe sex and teenage
pregnancy. Attitudinal issues were not adequately or not addressed at all though they featured as the aim of those studies.

The findings will help to identify the best way of addressing the adolescent sexual and reproductive health (ASRH) and it will benefit the whole community from the families to policy makers at both national and international levels.

1.7 Outline of the Research report
The first chapter has discussed the introduction of the research comprising the background, problem statement, research questions and rationale of the study. The remaining part of this thesis is arranged in the following order: Chapter two will discuss the literature review of the study, addressing all issues related to adolescent pregnancy, HIV/AIDS, sexual practices and safe sex, and consequences of unsafe sex. Chapter three elaborates the theoretical perspectives used in my research development. Chapter four explains how the research was conducted (Methodology). It consists of the study design, study sites, study population, sample size and sampling procedure, inclusion criteria and exclusion criteria, strength and limitation of the study design, methods of data collection, ethical consideration, data analysis and a plan for dissemination of the findings. Chapter five contains the study findings whereas chapter six contains the discussion of the findings. Chapter seven the conclusion and recommendations are discussed.
CHAPTER 2: LITERATURE REVIEW

2.1 Definition of adolescents, adolescent pregnancy and unsafe sex

Adolescent is the critical transition period in human growth and development that occurs after childhood and before adulthood, from age 10 to 19 years (WHO, 2014). It is characterized by a remarkable pace in growth and change. Biological processes drive many aspects of this growth and development, with the onset of puberty marking the passage from childhood to adolescence (WHO, 2014). In Tanzania, the definition of adolescent has varied from one researcher to another. For example, Leshabari (1998) defined adolescent as young people aged between 10-17 years whereas Kapiga, Nachtigal & Hunter (1991) defined adolescent as people aged between 10-20 years. In this study, the WHO definition will be used to focus on adolescent boys and girls in the age between 15 and 19 years.

Adolescent pregnancy or sometimes termed as “teenage pregnancy” refers to all pregnancies occurring among girls who are below the age of 20 years (WHO, 2014).

Unsafe sex with respect to adolescents is defined as the kind of sex whereby adolescents engage in unprotected sexual intercourse without using protection such as condom and thus increasing the risk of causing or acquiring teenage pregnancy and also get infected or infect their partners with STI's such as HIV infections, gonorrhoea and syphilis. I also use the definition by Collin (2015) which defines unsafe sex as a kind of sex whereby non-penetrative methods is used to prevent the spread of diseases such diseases as AIDS and pregnancy.

2.2 Nature of Adolescent

Adolescence is a period in the life of a human being which is accompanied by changes in behavior, experimentation and risk taking. Adolescents differ both from young children and from adults because they are not fully capable of understanding complex concepts, or the relationship between behavior and consequences, or the degree of control they have or can have over health decision making including those related to sexual behavior (WHO, 2014). Lack of correct information on the risk of early
pregnancy, new HIV infections and other STI's, lack of family support and parenting, peer pressure (peer conformity), poverty, school dropout, unstable family, unstable adolescent relationship and attitude of the community increases the vulnerability of adolescent to engage in unsafe sex (Panday, Makiwane, Ranchod, & Letsoalo, 2009; Moore & Rosenthal, 2006; Bezuidenhout & Joubert, 2008). Due to this reason, adolescents need more attention from guardians, teachers and the whole communities in terms of education to raise awareness and guidance which ultimately will help them to understand the transition period which they are going through and be able to overcome all challenges occurring during this period.

2.3 Status of Adolescent

2.3.1 Adolescent Globally including Sub-Saharan Africa

In 1994, when 179 countries signed up the ICPD Program of Action, one of the focus was to provide universal access to family planning and sexual and reproductive health services and reproductive rights; with emphasis on social inclusion, human rights and the importance of addressing the needs and developing the capacities of the young (Jejeebhoy, Zavier, & Santhya, 2013). Today about 1.2 billion in the world are Adolescents between the ages of 10 and 19 years (UNICEF, 2012a). This is about 17% of the world population of 7 billion people. The youngest age group contributes a large number of sub-Saharan African countries as compared to the developed world where older people contribute a large number in the general population. This is partly due to high fertility rate and lowest life expectancy in developing countries thus making the only continent with an increasing number of young people.

According to May (2008), a rapid population growth puts a lot of stress on ecosystems and impacts on the economy because governments need to provide human capital investments for their population, e.g. education and health. When a population grows too fast such investments become logistically and financially very difficult to meet. Investment on health and education is linked to the health of women and their children as well as the status of women in society. Pregnancies that are too early, too late and too many are not conducive to good health outcomes
2.3.2 Adolescent in Tanzania
The largest population of Tanzanian citizens is composed of young people. There are no specific population data showing the actual number of adolescent in Tanzania. Instead, adolescents fall in the category of children (below 14 years) and youth (between 15 and 24 years). According to 2012 Tanzania population census, 43.9 percent of the population is below the age of 15 years. The pattern is almost similar to that of Zanzibar with 42.5 percent of the population below 15 years (NBS, 2012, p. 29). The population of youth varies across regions, with the highest being in Dar es Salaam (23.8 percent), followed by Mjini Magharibi (21.3 percent), while the lowest is in Lindi (15.8 percent) (NBS, 2012, p. 38). If the number of old people is added to this age group, there will be more than a half of Tanzanian population which is composed of people who at a certain degree need to be supported in terms of health care, food, shelter, transportation and education.

2.4 HIV prevalence in Tanzania
Tanzania is among many countries in SSA that have been highly affected by the HIV/AIDS epidemic since the first case was identified in 1983. According to Tanzania Commission for AIDS (TACAIDS), the HIV prevalence was increasing steadily and reached the peak national prevalence of 8.0% in 1997. From 1997, the HIV prevalence started to fall gradually and plateaued at about 6.4% from 2005/06 (ASAP-UNAIDS, 2008).

The slight decrease in HIV prevalence which was seen from 1997 went simultaneously with the slight reduction of total fertility rate per women of age between 15-49 years which may be explained by the excelled family planning services which started in early 1990’s. Introduction of the short-term plan (STP) in 1985-86, followed by three medium-term Plans (MTP-I from 1987, MTP-II since 1992, and MTP-III in 1998) each lasting for a period of five years all together has contributed greatly as the efforts undertaken by the Government of the united republic of Tanzania to combat the HIV epidemic (Msamanga & Swai, 1998).
According to the 2011-12 Tanzania HIV/AIDS and Malaria Indicator Survey (THMIS), HIV prevalence among adults reached 5 percent with higher prevalence among women (6%) as compared to men (4%). The HIV prevalence estimate for age group 15-19 is assumed to represent new infections and therefore serves as a proxy for HIV incidence among young people (THMIS, 2011-12, p.109). A comparison of HIV prevalence estimates in the age group 15-19, between the 2007-08 THMIS and the 2011-12 THMIS, reveals no change in prevalence, which was 1 percent in both the 2007-08 and the 2011-12 survey (THMIS, 2011-12, p.109). About 1.4 million people are currently living with HIV, and approximately 11 percent of them are children under 15. Among young people aged 15 to 24 years, the average HIV prevalence is 3.6 percent and is significantly higher among females than males (UNICEF-Tanzania, 2013).

The HIV prevalence among young adults who have never had sex (1 percent) suggests that there may be other underlying determinants of HIV transmission that will need to be targeted in order to reduce the incidence of HIV in this population. It may also reflect under reporting of sexual activity among young people (THMIS, 2011-12)

2.5 Sexual practices among adolescent

2.5.1 Initiation of sex

Early and unprotected sex characterizes sexual relations among the young (Jejeebhoy, Zavier, & Santhya, 2013) and in order to understand whether adolescents have started sex or not, it’s vital to be aware of the time when they initiate sexual activities. This gives the clear picture of what has been happening in the society. According to a Tanzania demographic health survey (TDHS) 2010, the proportion of women age 15-19 that had first sexual intercourse by age 15 was 11.3 percent as compared to men which was 7.8% at the same age. (NBS&ICF-Macro, 2011, p. 96, 97) Fifteen percent of women age 25-49 have had sex by age 15, and almost 6 in 10 have had sex by age 18 (NBS&ICF-Macro, 2011, p. 96) Women in rural areas are more likely than those in urban areas to have had sex by age 15 and by age 18. Men in urban areas are as likely as men in rural areas to have sex by age 15 (NBS&ICF-Macro, 2011 p. 237)
2.5.2 Frequency of sex
A study conducted among 350 adolescent females aged 12–18 in the United States showed that, Of the participants who reported having had sex with a main partner, 272 (90.1%) had vaginal intercourse and 47 (15.6%) had anal intercourse. The median frequency of sex for each type of intercourse was once per week. Of the participants who reported having had sex with a casual partner, 118 (83.1%) had vaginal intercourse and 17 (12%) had had anal intercourse. The median frequency of sex for each type of intercourse was a few times per month (Houston, Fang, Husman, & Peralta, 2007). The frequency might be more among adolescents who have experienced sexual coercion. Nonconsensual sex has been associated with risky subsequent behaviors in consensual relationships, including early consensual first sex, unprotected sex, multiple partners, drug and alcohol abuse, and, in extreme cases, prostitution (Jejeebhoy, 2005).

2.5.3 Number of sexual partners and condom use
According to TDHS 2010, about 2 percent of adolescent girls between 15 to 19 years had more than two sexual partners in the past 12 months and out of them only 35.3 percent used condom during the last sexual intercourse. Adolescent boys of the same age group had three times more sexual partners (7 percent) in the past 12 months with only 34.2 percent used condoms during the last sexual intercourse. These findings are less the same with that from the Tanzania HIV Malaria Indicator Survey (THMIS) 2011/12 with a slight rise from 2% to 3% among adolescent girls between 15 to 19 years who had more than two sexual partners in the past 12 months. (THMIS, 2011-12, p. 75, 76)

2.5.4 Contraceptive use among adolescent
According to the study conducted in the United States of America, the findings showed that, HIV-positive youth were more likely to use contraception, particularly condoms, than those who were either HIV-negative or unaware of their status (Belzer et al., 2001). Similar study conducted in Uganda comparing surveys of adolescents 15 to 19 years, it was found that among those who knew they were HIV-positive, almost half (49.6%)
reported ever-use of contraception and 39.3% current use of condoms. Among those who did not know their status, only 17.0% had used contraception and 11.1% were using condoms. On the other hand, in a prospective cohort study of 15–24 year old from Uganda, 34% of sexually active youth with HIV reported contraceptive use compared to 59% of uninfected respondents (Busza, Besana, Mapunda, & Oliveras, 2013).

Despite of the higher percentage of HIV positive adolescent using contraception compared to non HIV adolescent, consistent in using contraception remain to be a challenge among this group. A similar study from Uganda showed that, when adolescents were asked about condoms, 24% of HIV-positive youth reported consistent use compared to 38% of the HIV-negative group. The authors concluded that using protection might be more difficult for adolescents with HIV, particularly if they had received counseling messages that did not support or empower them to negotiate with partners (Busza, Besana, Mapunda, & Oliveras, 2013).

This study support the survey conducted in Tanzania which showed that, among adolescent girls between 15 to 19 years, only 10.7% used at least some method of contraception (such as pills, injectables, implants, male condoms and lactation amenorrhea method (LAM)). For sexually active unmarried woman, less than half (40.4) used at least any methods of contraceptives (NBS&ICF-Macro, 2011)

### 2.6 Knowledge, attitude and perception about unsafe sex and teenage pregnancy

A qualitative study done in Taung (South Africa), showed poor knowledge or misinformation on contraceptive, perceived falling pregnant as a negative event (unemployment, school dropout, infection, secondary infertility). They reported falling pregnant as a positive event as they will be enrolled in the child support grants program which provides financial support to all adolescent mothers. They also perceived falling pregnant not immoral and highlighted poverty, peer pressure, alcohol use as among of the main the factors influencing teenage pregnancy. Even though findings were relevant, it responded more on the factors related to teenage pregnancy and left aside
issues of attitude unaddressed (Kanku & Mash, 2010). Low self-esteem has been also associated with teenage pregnancy (Flishera & Aarob, 2002).

Another qualitative study by McManus & Dhar (2008) done in South Delhi (India), reported poor knowledge on STI’s and contraception as the setback toward safer sex practice among adolescent. Both gender were involved in premarital sex and there was perception that, adolescent girl can’t remain virgin before marriage. It pointed out poverty as the main factor that encouraged sexual practices among adolescent. Safer sex practices and pregnancy were not adequately studied and was not able to capture views and feelings from adolescent.

In Uganda, a study done by Chacko et al., (2007) found the lack of knowledge on dual protection of pregnancy and sexual transmitted infection. There was also misinformation or wrong perception on condom as not effective. Also, adolescent stressed that, condoms do promote promiscuous behavior and lower trust in a relationship. They reported the desire to have children even if they will be found HIV+. The findings were more or less similar to the study conducted in Kenya among adolescent boys between 15-19 years who perceived condom as the method to be used by adults alone and promiscuous boys. They counted condom as an ineffective method to protect against (Nzioka, 2001).

A review study by Koenig, Nesheim, & Abramowitz (2011) reported three behavioral health challenges among HIV/AIDS long-term survivors: decreased medication adherence, sexual debut and accompanying pregnancy and transmission risk, and mental health problems. It also reported the mean age at first sex as 14 years for female and 13 years for male. It also showed that, one in two of adolescents who acquired HIV perinatally were sexually experienced and one in three engaged in unprotected sex. This correspond studies done in China, Kenya, Nigeria which emphasized that, adolescents are involved in unsafe sex and are frequently victims of coercion (Zheng et al., 2001; Nzioka, 2001; Ajuwon et al., 2001). All these studies have left the attitude issues related to unsafe sex and teenage pregnancy unaddressed.
2.7 Adolescent risk-taking behaviors

Risk taking among adolescent is the situation whereby adolescent engages in a deleterious behavior which ultimately may end up with a harmful outcome. Though many adolescents are also healthy and happy, often they experience pressures to engage in high risk behavior and venture into sex unprepared. Many of them face pressures to use alcohol, cigarettes, or other drugs and to initiate sexual relationships at earlier ages, putting themselves at high risk of intentional and unintentional injuries, unintended pregnancies, and infection from sexually transmitted infections (STIs), including the human immunodeficiency virus (HIV). Many also experience a wide range of adjustment and mental health problems which may establish behavior patterns such as drug use or nonuse and sexual risk taking or protection, can have long-lasting positive and negative effects on future health and well-being. As a result, during this process, adults have unique opportunities to influence young people (WHO, 2014).

Furthermore, Tanzanian youth find it difficult to access SRH and HIV/AIDS services because the few services available are not friendly to them and are basically designed for adults. In addition, they commonly have no money, or without transportation, lack awareness of services available, are restricted from seeking SRH information and services and fear the stigma associated with seeking sexual and reproductive health care services (AYA/Pathfinder, 2003).

2.8 Adolescent pregnancy and it’s contributing factors

Globally, about 16 million girls aged 15 to 19 years and two million girls under the age of 15 give birth every year most of low- and middle-income countries. One in five girls has given birth by the age of 18. In the poorest regions of the world, this figure rises to over one in three girls (WHO, 2012). Teenage pregnancy is associated with poor health for both mother and child, social, economic and behavioral risk factors, which are also independent risk factors for adverse outcomes of pregnancy, Maternal age less than 16 years is independently associated with a 1.2–2.7 fold increase in prematurity, low birth weight and neonatal death (Cunnington, 2000). Maternal negative health and social
consequences includes haemorrhage, sepsis and other life-threatening morbidities from unsafe abortion complications (Jejeebhoy, Zavier, & Santhya, 2013).

In low and middle-income countries, almost 10% of girls become mothers by age 16 years, with the highest rates in sub-Saharan Africa and south-central and southeastern Asia. The proportion of women who become pregnant before age 15 years varies enormously even within regions – in sub-Saharan Africa, for example, the rate in Rwanda is 0.3% versus 12.2% in Mozambique (WHO, 2008).

While the experiences of non-consensual sex may occur at any age, young people are particularly vulnerable to unwanted sex. Adolescents are at a formative stage of social and physical development, nonconsensual sex at a young age can set patterns that damage long-term physical and mental health (Jejeebhoy, 2005). Coerced sex which is reported by 10% of girls who first had sex before age 15 years, contributes highly to unwanted adolescent pregnancies (WHO, 2008). About one in every three adolescent girls has been sexually abused and seven out of ten adolescent boys and girls have experienced physical or sexual violence abuse and exploitation continue to undermine opportunities for adolescents throughout Tanzania (UNICEF-Tanzania, 2011, p. 6)

Separation and divorce among parents are major disruptions in children’s lives that can be deeply unsettling, altering their day-to-day routines and undermining their sense of security for years thereafter (Hofferth & Goldscheider, 2010). This may end up into single-parented adolescent. Studies show that, two-parent families monitor and control their children more than do single-parent families (Forste & Jarvis, 2007; McLanahan & Sandefur, 1994; Pears et al., 2005).

However, it is suggested that the mother-adolescent relationship is important in reducing problems among girls (Hofferth & Goldscheider, 2010 p. 418). Girls may wish to escape unstable families and establish whatever relationships they can to regain a sense of stability, including cohabitation and early marriage. For boys, that may mean
fathering a child before having the resources to sustain a long-term relationship with the mother (Hofferth & Goldscheider, 2010, p.419).

The children of women who began childbearing as teenagers are also likely to be disadvantaged. Hence, we expect them to be more likely to become young parents and, among males, to become nonresidential fathers, again because of the lack of role models or because of limited family resources (Albrecht & Teachman, 2003; Barber, 2001; Hardy, Brooks-Gunn, Shapiro, & Miller., 1998). Sons and daughters of mothers who were young mothers experience premarital births at an early age (Barber, 2001). African American youth are expected to be more likely to bear a child out of wedlock than white youth (Hofferth & Hayes, 1987). Children need to feel secure, to have a routine, to know who is going to care for them, where they will be this time tomorrow. They need love and guidance, discipline and continuity to thrive. Take any or all of these positive components away and children are in danger of physical, emotional and psychological damage (Moore, 2011).

In an unstable family life, where a child is uncertain of love, or where the next meal is coming from, or if mommy or daddy will still be home when they get in from school, emotional disturbances are likely. Deviant behaviors, inappropriate attention-seeking, aggression, excessive shyness, withdrawal or the inability to relate to peers are all potential dangers - there are more. The knock-on effect of such a child is exclusion from social groups, possibly school and finally, self-destruction (Moore, 2011). Psychologically, such children can be fragile, tending to lack self-esteem, confidence or motivation to succeed. The potential dangers of the child running away, turning to crime, including prostitution and drugs are very real possibilities. Those children who have continuously experienced unstable family life are more likely to find it difficult to become attached to others for fear of change or loss, a fear exacerbated by emotional disturbance. This means that in adult life, there is a real danger that they will be unable to make and maintain healthy relationships with a partner and may begin to repeat the whole horrible cycle of damage (Moore, 2011).
One consequence of high school dropout that has received limited attention is the potential impact on teen childbearing. There are a number of reasons to expect that 4 adolescents who drop out of high school are at greater risk for unintended pregnancy and teen childbearing. The first is that teens, free from the structured environment of a high school, are more likely to engage in unproductive and even risky behavior. Lack of commitment to school means the child has ceased to see the role of student as a viable one. Young people who have lost this commitment to school are at higher risk for substance abuse, delinquency, teen pregnancy, and school dropout (Lindsey, 2003).

Influence from others stand as one of the key components in shaping the lives of many adolescent girls and boys. If peers are older, receive poor grades, use alcohol or drugs, or engage in other negative behavior, then the teens are more likely to have sex. When teens believe that their peers have more pro-childbearing attitudes, have permissive values about sex, or are actually having sex, then they are much more likely to have sex too. If teens believe their peers support condom or other contraceptive use or actually use condoms, they are more likely to use condoms or other contraceptives themselves (Kirby et al., 2005).

Young people who drink are more likely to use tobacco and other drugs and engage in risky sexual behaviour, than those who do not drink (Hibell et al., 2000; Bonomo et al., 2002). Numerous studies have found relationships between teens’ use of alcohol and illegal drugs and increased likelihood of having sex, having sex more often, having sex with more partners, and pregnancy. Studies have also found that those teens who use drugs are less likely to use condoms and more likely to contract an STD. It is plausible that drinking alcohol and using drugs may lower inhibitions, reduce ability to assess risks, or increase sexual aggression (Kirby, Lepore, & Ryan, 2005, p.11).

2.9 Protective factors of adolescent pregnancy
Promotion of protective factors has been demonstrated to reduce risk of problem behavior including drug use, violent or disruptive behavior, teen pregnancy, and dropping out of school (Lindsey, 2003). One of the most consistent and potent
predictors of adolescents’ engagement in aggressive and health-risk behaviors is the extent to which adolescent peers engage in similar behaviors (Prinstein & Dodge, 2008).

Connection to faith communities has greater impact on the life of young people. Teens who describe themselves as more religious, who attend religious services more frequently, and who have a stronger religious affiliation are less likely to initiate sex. They also have sex less frequently if they do have sex. These associations are particularly strong if the teens are involved with faith communities with conservative values about sexual behavior. Just as an attachment to faith communities may affect sexual behavior, sexual behavior may also affect attachment to faith communities. For example, teens that have had sex may feel less comfortable in places of worship and may be less likely to attend services (Kirby, Lepore, & Ryan, 2005, p.11)

Sports participation is associated with numerous positive health behaviors and few negative health behaviors (Pate, Trost, Levin, & Dowda, 2000). Studies have found that, for teen girls, but not teen boys, participation in sports is related to delayed initiation of sex, less frequent sex, greater use of contraception, and lower pregnancy rates. These studies suggest that young women’s participation in sports motivates them to want to avoid pregnancy, which, in turn, delays the initiation of sex (Kirby, Lepore, & Ryan, 2005, p.11)

2.10 Consequences of unsafe sex

2.10.1 Direct consequences of unsafe sex: Transmission of HIV/AIDS and STI’s

Documented reports show that half of all HIV infections are acquired under the age of 25 and that females become infected at an earlier age than males. Data obtained from the THIMS 2011/2012 shows that 4% of young females and males (15 – 24 years) respectively were HIV infected. According to available data, the rate of sexually transmitted infections among youth is very high. Records at the infectious disease clinic in Dar es Salaam show that 55% of all STI clients seen between 2005/2008 were below 25 years of age (ref. IDC/STD clinic data) (Social Action Trust Fund (SATF), p.9).
2.10.2 Unsafe abortion as an indirect consequence

Engaging in unsafe sex may lead into early and unplanned pregnancy among adolescent girls. An unplanned pregnancy can be a frightening, if not devastating experience for teenagers (WHO, 2004). Basing to the nature of most communities in Tanzania, there is higher possibility for a girl seek for abortion services being own plan or a plan suggested by a male partner. Due to high secret kept between a pregnant girl and her partner, most likely the abortion service sought will be unsafe. A study conducted in four public hospitals in Dar es Salaam in 1997 on “Factors Associated With Induced Abortion” showed that, among 455 women who had induced abortion and developed complications necessitating hospital admissions; about one third (32.9%) were teenagers aged 19 years and below. Ninety-one respondents (about 20%) admitted being students at either primary or secondary school level (M pangile, et al. 1993, p.21-31). Furthermore, various studies conducted at the Muhimbili National Hospital indicate that 50% of admissions due to abortion-related complications are youth aged between 15-24 and as many as 24% die from abortion-related causes (Urassa, Chalamila, Mhalu, & Sandstorm, 2008)

Teenagers in rural areas are more likely to start childbearing than their urban counterparts (26 and 15 percent, respectively). The percentage of women age 15-19 who have begun childbearing ranges from 16 percent in the Northern zone to 30 percent in the Western zone. Only 6 percent of women age 15-19 have begun childbearing in Zanzibar. There is a strong inverse relationship between early childbearing and education; teenagers with less education are much more likely to start childbearing than better-educated women. Fifty-two percent of teenagers who had no education had begun childbearing compared with only 6 percent of women who attended secondary education. Teenagers in the lowest wealth quintile are more than twice as likely to start childbearing early compared with women in the highest wealth quintile (28 percent and 13 percent, respectively). The median age at first sex for men age 25-49 is 18.5 years, about one year later than women (17.4 years) (NBS-MoF, 2012).
CHAPTER 3: THEORETICAL PERSPECTIVES

This study aimed at exploring the knowledge, attitude and perception about unsafe sex and teenage pregnancy among adolescent living with HIV/AIDS. The qualitative phenomenological approach has been used to understand experiences related to study topic from the study participants. The phenomenological approach is an approach which focus on descriptions of what people experience from their own perspectives and how it is that they experience what they experience (Patton, 1990p. 71; Lester, 1999). In this study, the focus was on the experiences and perceptions about unsafe sex and teenage pregnancy from AbLWHA who were pregnant, those who had history of pregnant before and those who had never been pregnant. It also involved young boys with similar HIV status as girls.

The research questions was developed and used to collect information from the study participants who had experienced teenage pregnancy and at some point in their lifetime had been engaged in unsafe sex practices (Creswell, 1998). According to Lester (1999) & Creswell (1998), there are varieties of methods of data collection that can be used in phenomenological-based research, including interviews, conversations, participant observation, action research, focus meetings and analysis of personal texts. For this study, in-depth interview, focus group discussion, non-participatory observation, field notes, documents such as Tanzania’s local newspapers and one television documentary were employed as the main method of data collection. These methods helped capture views, understanding and experiences from the study participants.

Information gathered from the interview notes, tape recordings, jottings or other records were read through to get what was being said, identifying key themes and issues in each text which finally were transformed into clusters of meaning, tying the transformation together to make a general description of the experience, including textural description, what was experienced and structural description, how it was experienced (Lester, 1999; Creswell, 1998).
The findings from the study have been arranged according to themes and topics and draw out key issues being discussed by participants. This has helped the researcher to report exactly what were said by the participants and avoid biases as much as possible. Direct quotes from participants have been used to illustrate points (Lester, 1999).

This approach enables the researcher to ‘intrude’ more into the study by making interpretations and linkages, relating the findings to previous research or commentary, to personal experience or even to common-sense opinions, and developing tentative theories. Informed speculation and theorizing have been included here, provided it is clear what findings are being discussed and what assertions and assumptions were made (Lester, 1999).
CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

This study aimed at exploring the knowledge, attitude and perception, in order to gain a better understanding about what adolescents living with HIV/AIDS know, view and think about unsafe sex and teenage pregnancy. In this chapter, all procedures used in data management are described. This includes study design, study setting, study population, including the inclusion and exclusion criteria, recruitment process and sample size, methods of data collection, data analysis and storage, the trustworthiness of the study, dissemination of the findings and ethical consideration.

4.2 Study design

Qualitative study design was employed in the study. Qualitative approach was an appropriate design because it helped generates textual narrations of the feelings and views from the study participants (Lopez & Willis, 2004). The design provided the platform for the voices of study participants to be heard as related to unsafe sex and teenage pregnancy because there are few purely qualitative studies on similar subject that have been conducted among this group.

Triangulation was used to help the researcher view the problem with multiple lenses (Denzin, 1970). Triangulation is the combination of two or more theories, data sources, methods or investigators in the study of a single phenomenon to enhance confidence in the ensuing findings (Yeasmin & Rahman, 2012). Intra-method and data triangulation were used to facilitate deeper understanding of the phenomenon (Cohen & Crabtree, 2006). Intra-method refers to the use of two or more techniques of the same method to collect data (Bauer & Gaskell, 2000). This study used in-depth interviews, focus group discussions and non-participant observation to garner information. Data source triangulation refers to the use of multiple data sources with similar foci to obtain diverse views about a topic for the purpose of validation (Kimchi, Polivka, & Stevenson, 1991; Bryman & Bell, 2003). There are three types of data source triangulation; time, space and person (Denzin, 1978). This study used person triangulation whereby girls between
15 and 19 years who never were pregnant, girls between 15-19 years who were pregnant at a time of interview or had already delivered, boys between 15 and 19 years, and woman between 20 and 25 years who had pregnant during their teenage period participated in the study.

4.3 Study setting
The study was conducted in Dar-es-Salaam Temeke district. Temeke is the district which is located to the southernmost of three districts of Dar es Salaam city, with Kinondoni district located to the northern and Ilala district located in the down town of the city. The Indian Ocean is located to the eastern part of Dar es Salaam whereas to the south-western part is the coastal region of Tanzania.

According to the 2012 Tanzania National Census reports, the population of Temeke District was 1,368,881 inhabitants, of whom 669,056 were male and 699,825 female with an estimated growth rate of 6.6% per year (NBS, 2012; TMC, 2012). The area of Temeke district is 786.5 km². It has among the poorest socio-economic conditions in the country, with many of its people living in extreme poverty. The Temeke District is administratively divided into 3 divisions and 24 wards (see figure 2&3). The list of Temeke’s wards are as follows; Chang’ombe, Azimio, Kibada, Somangira, Miburani, Toangoma, Sandali, Yombo vituka, Mtoni, Chamazi, Keko, Mbagara, Pemba Mnazi, Mbagara Kuu, Tandika, Temeke, Vijibweni, Makangarawe, Kigamboni, Kurasini, Charambe, Kimbiji, Mjimwema and Kisarawe II (TMC, 2012). Chang’ombe ward was then selected purposively because it is within this ward where PASADA care and treatment dispensary for people living with HIV/AIDS is located.

PASADA is an organization functioning under the Roman Catholic Archdiocese of Dar es Salaam striving to reach the poorest of the poor living with HIV and provide them with holistic care and support services. Services offered at PASADA includes voluntary counseling and testing, medical assistance, pediatric clinic, TB diagnosis and treatment, prevention of mother to child transmission, ARV therapy, specialist day clinics, malaria prevention and treatment, home based palliative care, support to orphans and
vulnerable children, community education program and support to PLWHA groups (PASADA-Tanzania, 2009).

It has more than 5000 children and adolescent living with HIV/AIDS who attends monthly in its pediatric clinic. The clinic operates four times each month. Children attend the clinic according to their appointments which are given based on their age and the selected day of the week. Children between 6 to 11 years attend their clinic on the first Tuesday of the month, Children between 12 to 14 years attend their clinic on the second Tuesday of the month, Children between 1 month to 5 years attend their clinic on the third Tuesday of the month, and Children between 15 to 19 years attend their clinic on the fourth Tuesday of the month. The clinic arrangement provides a friendly environment for children with similar age group and similar level of growth attends the clinic which in turn helps to increase children turn-up to the clinic.

PASADA has other 10 mobile clinics and 10 outreach sites located in all three districts in Dar es Salaam and the coastal region. These sites were not involved in the study because they had either few children attending the clinic or they were located to the periphery of the city compared to Upendano clinic which is a big clinic (in terms of health care workers, structure, and services) with large number of adolescent attending each month. Also, based on its location, Upendano clinic provides services to patients coming from all three districts and it is also headquarter of PASADA. In the past, Upendano clinic was the only clinic among PASADA’s clinic which was providing free snacks and drinks to all children attending care and treatment hence having larger number of children on its attendance whereas other outreach and mobile clinic had no free drinks and snacks.
Figure 2a: Map of Dar es Salaam city and its 3 municipalities (source, TMC, 2012)
4.4 Study population

The study population was composed of adolescents born and living with HIV/AIDS. Among them, participants of age between 15 to 19 years and young women born and living with HIV/AIDS between 20 to 25 years attending care and treatment at PASADA were selected. Furthermore, adolescents were of three categories; girls who were pregnant or had already delivered babies at a time this research was conducted, girls who never had pregnant, and boys. I used women who were pregnant during their teenage years to confirm the information which were given by girls who were pregnant or had already delivered babies.

No participant was asked about to disclose his or her HIV status because it is known that all people attending PASADA’s CTC lives with HIV. Moreover, studies conducted in Uganda, USA and Canada has indicated that, most of the perinatally infected adolescents know their HIV status by the age of 12 years (Birungi, Mugisha, Obare, &
Nyombi, 2009; Ezeanolue et. al., 2006; Fernet et al., 2011). For the participant to be part of the study, he or she had to meet the criteria set to help enroll the right participant. These criteria are elaborated further here under.

4.4.1 Inclusion criteria
- Young boys aged between 15 to 19 years attending care and treatment at PASADA (Upendano clinic).
- Young boys aged between 15 to 19 years accepted to participate in the study and had their consent form signed or gave oral consent.
- Young girls aged between 15 to 19 years attending care and treatment at PASADA (Upendano clinic).
- Young girls aged between 15 to 19 years accepted to participate in the study and had their consent form signed or gave oral consent. This included those who were pregnant or had already delivered babies at the time this research was conducted, and those who never had pregnancy.
- Young women aged between 20 to 25 years.
- Young women accepted to participate in the study and had their consent form signed or gave oral consent.

4.4.2 Exclusion criteria
- Young girls and boys living with HIV/AIDS who were below 15 years old.
- Young girls and boys, and women not ready to take part in the study.
- Women above 25 years.
- Adolescents who had unstable health condition, and reported to be sick during the interview day.
- Adolescents and young women who were not ready for interview day re-appointment.

4.5 Recruitment process and sample size
Purposive sampling was employed to select participants for the study. Because I worked with the organization before joining master’s program at the University of Oslo, I
decided to recruit a triage nurse who was available at the time of the study to assist in directing the study participant to me. She gave oral information about the study to all attending adolescents before she directed them. It is the routine for all adolescent coming to the clinic to pass through triage unit for the purpose of being allocated to the clinician and at the same time taken the anthropometric measurements. Another reason of using a triage nurse was the fear of getting study participants who would have simply accepted to participate in the study for the purpose of getting an opportunity to meet me as I was away for long time.

The referred adolescents were screened by the researcher if they met the inclusion criteria. Two girls and one boy who were referred to us were not included in the study because their reported age was below 15 years. This was discovered when they were asked to tell us (the researcher and research assistant) the specific year they were born. Another girl was found to be on tuberculosis (TB) treatment thus giving the reason of her exclusion. It was discovered when she was given an appointment to come for interview where she reported not be able to come because she was just started tuberculosis treatment and the day of appointment she was going to the TB unit. Another two boys who were eligible for the study had to be excluded because they were going back to boarding school and they could not meet the appointment date. All participants who were given an appointment came for an interview except one (1) girl 18 years old who had a four months baby, was not allowed to come to an appointment date by a man whom they cohabit. She was not available to participate when another appointment was made through phone call.

All study participants were given an appointment of between 7 and 14 days from the time of recruitment to make sure they had enough time to think and decide willingly to participate in the study. None of the participants was forced to participate in the study. The study participants were recruited until the saturation of information was derived from the study participants (MASON, 2010).
4.6 Data Collection

Data collection from the study participants began on 1st November to 27th December 2014. It was preceded by separate introductory meetings with the executive director, human resource manager, medical director, research assistant and other co-workers explaining my role at PASADA as a researcher for the whole period of my stay. These meetings and other pre-data collection process were conducted between 1st September and 30th October 2015.

One female doctor was employed in the study as the research assistant. She was recruited based on availability and adequate research experience she acquired from medical school. Another reason to recruit her was the need of having an opposite gender because I am a man. This mixture of interviewers helped to create comfortable atmosphere for all participants (boys or girls) who came for interviews. The research assistant was just employed at the organization at the time of her recruitment into the study knowing neither me nor any adolescents who were coming to the clinic, thus helping to minimize biases in the study. Data were collected using an in-depth interview guide, focused group discussion and non-participants observation, field notes and tape recorder.

4.6.1 In-depth interview (IDI)

Twenty (20) face-to-face in-depth interviews (IDI's) were employed to the study. The interviews were conducted among eight adolescent boys, seven adolescent girls (who never been pregnant), four adolescent girls (who had a pregnancy or was pregnant at the time of interview) born and live with HIV/AIDS between 15-19 years, and one young women 23 years (who became pregnant at a time she was below 19 years) born and live with HIV/AIDS. Among all interviewees, four adolescent boys and four adolescent girls (who have never been pregnant) reported to be actively engaged in sexual activities. The two groups of adolescent were later recruited to participate in two separate gender based focus group discussions (i.e. one male group and one female group).
Interviews were conducted using the national language of Swahili which is spoken and well understood by all study participants. To ensure there was privacy and confidentiality, all IDI’s were carried out in a private room located at the clinic that none of us (Researcher and research assistant) had ever used before. The rooms which were once used while working with organization were avoided in order to minimize environmental familiarity of the researchers and the study participants. In order to establish a comfortable interaction between the interviewer and the respondent, an open, sympathetic and trustworthy approach, free of moral judgments, was considered to all respondents (Silberschmidt & Raschb, 2001). A triangular sitting arrangement was planned to ensure there was a good communication between the study participant and interviewers (see figure 3). The setup was used for planning purposes and it remained flexible depending on the request of the study participants.

Figure 3: Sitting plan used in In-depth interviews

In-depth interviews gave a platform for the participants talk about their personal feelings, opinions, and experiences. It was also an opportunity to gain insight into how
people interpret and order the world. In general, in-depth interviews, with exception to few, most participants were more confident, more relaxed and they felt more encouraged to express the deepest thoughts about a certain subject (Milena, Dainora, & Alin, 2008). Interviewers asked one question and probed further whenever it was needed a new question was asked with permission. A tape recorder was used to record the interview.

4.6.2 Focused group discussion

A focus group is a group discussion that gathers together people with similar backgrounds or experiences to discuss a specific topic of interest to the researcher (Dawson, Manderson & Tallo 1993). In this study, two focus group discussions (FGD’s) were conducted in two different groups. First group involved four adolescent boys. Similarly, the second group involved four adolescent girls who had never been pregnant but sexually active. Both groups were composed of adolescents’ age between 15 and 19 years born and living with HIV/AIDS and were actively engaged in sexual activities. None of the participants refused invitation to participate in the FGD. Literature suggest the small focus group with participants ranging between four to six participants to be easier to recruit, to host and are more comfortable for participants (Krueger & Casey, 2000). And also based on the time of data collection used in the field, I consider the size of FGD in this study to be suitable and justifiable.

A focus group guide was used to conduct the discussion. Both FGD’s were conducted in the national language of Swahili which is spoken and well understood by all study participants. Questions were asked to the group and each participant was given an opportunity to respond. The research assistant played the role of moderator in both focus group discussions. Simple language with short well-constructed and understandable questions was used in the discussion. All nonverbal communication such as laughter, disagreements by shaking head was also documented. Questions were asked until there was no new information that was generated from the study participants. At the end of each FGD, study participants were given an opportunity to ask questions related to the discussion. The group discussion lasted for 85 to 90
minutes. A semi-circular sitting arrangement was planned to ensure there was a good communication between the study participants and interviewers (see figure 4). The setup was used for planning purposes and it remained flexible depending on the request of the study participants.

**Figure 4: Sitting plan used in focus group discussion**

4.6.3 Non-participants observation field notes

Field notes involve all notes taken during a qualitative study by writing in a notebook all activities that took place. In this research, non-participant observation was conducted whereby arrivals and departures of adolescents from the clinic; interactions during the clinic, behaviors among adolescent themselves, and how they had conversed among themselves were observed. All events were recorded in the notebook. The aim of keeping field notes was to help as evidence and an understanding of the culture, social situation, or phenomenon being studied (Schwandt, 2015). The researcher ensured detailed description of what was observed in the field, accuracy in writing what was
observed, and use of chronological organization of the field notes which simplified understanding of information collected.

4.6.4 Pre-testing of data collection tool

Before data collection ensued, a pre-test of the interview guide was conducted. Pre-testing is an administration of data collection instrument with few respondents from the study population (AGC, 2007). Because two genders were to be interviewed during the study, two pilot adolescents (one girl and one boy) participated. They were asked all questions which were set for the interview. After the interviews, some question had to be restructured as they appeared two questions in one. Some questions that were found to be irrelevant were removed. It helped the interviewers to understand the interview guide and get used to it before starting the data collection. The pre-test also helped to assess the comfortability and privacy of the room used to conduct interviews. After the pretest, the room was found to be suitable and no changes were made. Changes to the interview guide were an ongoing process throughout the course of data collection.
4.7 Data storage and analysis

As the study went on, the data collected were kept locked and I only had the key. Data entry was done anonymously and no liked codes for the material. Not only have that, but also according to Norwegian law, the anonymous data files had to be stored in the national data storage system in Norway.

Textual data analysis of the transcripts of interviews has been employed. The analysis began in the field, at the time of both focus group discussion and in-depth interview.
were carried on. Information gathered from the interview notes, tape recordings, jottings or other records were read through to get what was being said, identifying key themes and issues in each text which finally were transformed into clusters of meaning, tying the transformation together to make a general description of the experience, including textural description, what was experienced and structural description, how it was experienced (Lester, 1999; Creswell, 1998).

Data was transcribed by typing text into the word processing document. Initially all transcription were done to local language of Swahili following interview. All transcripts in Swahili language were then translated to English language by the researcher. A research assistant was asked to re-translate three interviews selected randomly as the control researcher’s biased translation. Transcribed and translated data was read carefully, creating themes followed by assigning of a code or category name to signify the particular segment (Ryan & Bernard, 2003; Golden, 1992).

4.8 Trustworthiness

Trustworthiness is the extent to which the findings are an authentic reflection of the personal or lived experiences of the phenomenon under investigation (Creswell, 2009; Barbour, 1998). It supports the argument that the inquiry’s findings are “worth paying attention to” (Lincoln& Guba, 1985 p.290). It is the way in which qualitative researchers ensure that transferability, credibility, dependability, and confirmability are evident in their research. (Given & Saumure, 2008)

4.8.1 Credibility

Credibility refers to the confidence in the truth of the findings, including an accurate understanding of the context (Ulin, Robinson, & Tolley, 2005, p. 25). It can be enhanced by using one or more of the following strategies: prolonged engagement, persistent observation, triangulation, peer debriefing, negative case analysis, and/or member checking (Denzin & Lincoln, 1994).
While at the study area, we devoted most of our time on the research. There was sufficient time set apart for research work. We stayed at the research site from 8am to 4pm every day from Monday to Friday and it was done for eight weeks. This helped us to have more focus on the research. It also gave the opportunity for the researcher to collect information from the field until data saturation was reached. Detailed and insistent interpretations of the phenomenon under the study were done that helped us to exclude what were irrelevant and focused on the most relevant information.

Data were triangulated at method and person level. Intra-method triangulation was used to facilitate deeper understanding of the phenomenon (Cohen & Crabtree, 2006). The triangulated methods include; semi-structured in-depth interview, focus group discussion and direct observation (non-participatory). Triangulation of persons included adolescent girls between 15 and 19 years who never had pregnant, girls between 15-19 years who had pregnant at the time of interview or had already delivered, boys between 15 and 19 years, and woman between 20 and 25 years who had pregnant during their teenage period.

Triangulation of method and person helped to provide variety of information with different viewpoint on the similar matter which in turn increased the understanding of the given phenomenon (Jick, 1983; Patton, 2002; Silverman, 2000). It increased the trustworthiness, persuasiveness and quality of the findings by countering any concern that a study’s results were simply the product of working in a singular fashion (Bryman, & Bell, 2003; Erlandson, et al., 1993; Jick, 1983; Patton, 2002; Tutty, et al., 1996).

All personal interviews were audio recorded to make sure they could be revisited whenever needed because of its originality. Also, television (TV) sessions, newspaper, photograph, books, articles, class notes, reports, comic cartoons, and diaries were used as additional information within the context to make the finding more understandable and credible.
My colleague who graduated from similar course (M.Phil International community health) participated to examine the transcript, methodology, and final report of the study. His main role was to reviews and identifies all areas which were either under emphasized or over emphasized, poor descriptions, errors and biases that would have occurred in the course of study.

4.8.2 Transferability
Transferability refers to the generalizability of findings in one context (where the research is done) to other contexts or settings (where the interpretations might be transferred) (Patton, 2002). To ensure the data under this study can be generalizable; all procedures explaining how the study was carried out have been documented in detail. Tools that were used in data collections (both in Swahili and English language), consent form, and Gantt chart have been attached as appendices in this study. This will help other researcher or any audience understand on how the data were collected. Thick description of the phenomena under study and the context in which the study took place has been explained well under introduction, rationale and methodology part of this study (Patton, 2002).

4.8.3 Dependability
Dependability refers to the stability or consistency of the inquiry processes used over time (Falk, Dierking, Foutz, Allen, & Anderson, 2007). It is a criterion for evaluating integrity in qualitative studies, referring to the stability of data over time and over conditions; analogous to reliability in quantitative research (Polit, 2013). I triangulated the source of information and data collection method to enhance dependability and comprehensiveness of the study finding. Triangulation strengthened my research because it provided more insight from different study participants and minimized shortcoming that were found in one source of data. An audit trail was also created. This is the systemic documentation of material that allows an independent audit of a qualitative study to draw conclusions about trustworthiness (Polit, 2013). Through an audit trail, I have given an opportunity to other researchers to inspect the methodology used in the study from data collection, analysis, interpretation and reporting.
4.8.4 Confirmability

Confirmability refers to a degree of neutrality or the extent to which the findings of a study are shaped by the respondents and not researcher bias, motivation, or interest (Lincoln, 1985). Trochim (2006) explain further as the degree to which the results could be confirmed or corroborated by others. To make sure the study findings were corroborated; the data collected from the field were discussed with a qualitative research methodology teacher during class presentations, discussed transcripts, themes and coding with fellow student researcher, and research supervisors. Tool that were used to collect the data (both English and Swahili versions) have been attached as appendices of the report to ensure all readers get access to see the content of data collection tools.

4.8.5 Reflexivity

Reflectivity is an attitude of reflecting upon the ways in which our own values, experiences, interests, beliefs, political commitments, wider aims in life and social identities have shaped the research (Malterud, 2001; Willig, 2001 p. 10; Sagbakken, 2013). It involves thinking about how the research may have affected and possibly changed us, as people and as researchers (Malterud, 2001; Willig, 2001 p. 10; Sagbakken, 2013). The researchers become aware of how their biases, values and personal background such as gender, history, culture, and socioeconomic status, influence how the study is designed, implemented, data collected, analyzed, and interpreted, and findings reported (Creswell, 2009). Throughout the study, I tried to be aware of all issues around my life.

I am a medical doctor, graduated from University of Muhimbili which is located in the city of Dar-es-salaam Tanzania. Since my graduation I have been working as a clinician in the Pediatric Unit of Iringa Regional Hospital and later shifted to PASADA. I have worked as the head of PASADA’s Pediatric unit from 2009 to 2013. As the head of unit, I was privileged to oversee issues related to care and treatment, home visits to children living with HIV/AIDS, training on adolescent sexual reproductive health education, half-day respite center activities such as games and artwork (drawing, clay art), family
centered care services, intensified pediatric HIV case finding, tuberculosis (TB) screening, and infectious control task force member.

I also had the privilege to be one of the national facilitators for pediatric HIV/AIDS training course for health workers. While at PASADA, I participated as the co-investigator of a published qualitative study titled, “Barriers to men having sex with men attending HIV-related health services in Dar-es-Salaam, Tanzania”. I have also written two articles presented at European congress in Palliative care in Czech Republic (2013) and Lleida-Spain (2014) with titles; Multiple nation originality, “a challenge in managing a child with HIV/AIDS” and “Use of Psychosocial activities as a non-pharmacological management among orphaned children living with HIV/AIDS”, respectively. Also, between June 2011 and August 2013, I observed 15 adolescent girls living with HIV/AIDS attending care and treatment at PASADA who became pregnant and one among them died. All these experiences explain the reasons why I became interested in the condition under study.

When I arrived at PASADA for my research, workers at the facility considered me as a fellow staff resumed back to work. It was easy to be approached for help whenever patient’s turn up to the clinic was high. To make everything clear, introductory meetings with the executive director, human resource manager, medical director and other co-workers were conducted explaining my role as a researcher for the whole period of my stay. I had to put on casual clothes, not wear the traditional white coat, avoid holding the stethoscope as other doctors used to do, to look the part as a researcher. I also changed the rooms which were once used while working with organization to minimize any environmental familiarity to me, my research assistant and the study participants that would have affected the study.

Being born and living in Tanzania, where Swahili is spoken as the national language, I was able to conduct all in-depth interviews and focus group discussions using Swahili language. Conducting interviews using the language which was familiar to all study participants helped them to speak up and be open to me. Participants were encouraged
to use all Swahili words, they thought were fit for them to make explanations, including use of “street” Swahili words which is used by many young people. Street Swahili is the words which come from the street with the same meaning to the official Swahili meaning of that word e.g. Father in Swahili means “Baba”, but a street Swahili call father as “Dingi”.

I am a Christian who observes biblical values and I am also a parent with three children. According to Bourdieu (1977), there are social structures around us containing “taken for granted values and knowledge” which to a large extent decides what kind of perceptions of the social world we believe are the “right ones” (Bourdieu, 1977, 1999). “Taken for granted” values and knowledge make us use certain classification systems and categories to describe and relate to the social reality in a specific way (Bourdieu, 1977, 1999). We must not mix taken for granted values and norms with scientific truths, ethics, values, and norms to avoid ethnocentrism. That means, as a father and a Christian believer, I tried to refrain from any judgmental atmosphere to any participants based on what they reported about themselves. I positioned myself as a student doing research.

On the other hand, my research assistant is married and she has one child. She had a pregnancy of about four months at the time she was recruited in the study. Being pregnant would have shaped her, on how she experienced and perceived pregnancy, and how she added probing questions during both in-depth interviews and focus group discussions. She has also been trained as a medical doctor. Being a medical doctor would have shaped her role in research. She is normally calm and talking very slowly in the way, it is very easy to understand what message she wants to convey to others.

I conducted two pre-data collection meeting with her. The meeting helped her to know her role in the research as a research assistant and not as a parent, medical doctor or a pregnant woman. The meeting focused on the study design, study setting, study population, effective ways of data collection in qualitative research, pretesting of the data collection guide and the nature of the study.
Based on the sensitivity nature of the study, both of us agreed to adhere to research ethics: to focus on data collection and analysis without any form of judgment, accusation and disrespect.

4.9 Dissemination of findings

The findings of this study have been compiled, finalized and handed over as a master thesis to the University of Oslo’s Faculty of Medicine in the Department of Community Medicine. The findings will also be disseminated through conferences in Tanzania and beyond. Copies of the report will be sent to the Ministry of Health and Social Welfare (MoHSW) of Tanzania, Tanzania’s National Institute of Medical Research (NIMR) and to the District Medical Officer (DMO) of Temeke municipality. Another target of dissemination of the findings will be through organizations’ meetings especially in organizations like PASADA which deals with children and adolescents; through workshops and personal communications. It will also be published in local and international journals like Tanzania Journal of Health Research (TJHR), African Journal Online (AJOL), and international reproductive health journal like Reproductive Health Matters, Journal of the International AIDS society, and many other journals.

4.10 Ethical consideration

Ethical clearance for the study was obtained from Norway’s Regional Committees for Medical and Health (Appendix I), Tanzania’s National Institute of Medical Research (appendix III), Temeke District Medical Officer (appendix IV) and finally from the executive director at PASADA (appendix V). Based on the nature of my study, notification has been sent to the Norwegian Social Science Data Services (NSD).

To ensure the autonomy of the study participants was observed, informed consent was prepared in a paper form introducing the researcher to the study participants (NCPHSBBR, 1979). The consent form was given to all respondents and another separate parental/guardian consent, as in Tanzania the age of consent for health research is above 18 years. There was no parental/guardian consent for those at age of 19 years and above. The consent form explained the purpose of the study, how study
participants were going to participate in the research and the duration of their involvement in the study. It also informed them about how data were going to be collected and used. The consent form stressed that their participation as voluntarily and that one could refuse to participate at any time during the study. Participants were informed prior that, their participation had no instantaneous benefits to them, but the information they gave was going to help future development of programs addressing the issue of teenage pregnancy. They were also told that, their participation had no financial benefits but rather they would be reimbursed travel costs incurred during the study.

Study participants were assured that their participation in the study was anonymous and confidential. Fictitious names were used to ensure anonymity. Because the study involved the extraction of sensitive information such as HIV status, sexual life and pregnancy, the researcher ensured the study participants were protected from any harm (non-maleficence) that may arise through keen observation by the researcher. Contact information of the researcher was provided to the study participants.
CHAPTER 5: STUDY FINDINGS

5.0 Introduction
This chapter displays the findings which were collected in the field using different data collecting tools. These findings respond to the objective narrated earlier in Chapter 1 which aimed at exploring the knowledge, attitudes and perceptions about unsafe sex and pregnancy among adolescents living with HIV/AIDS. The findings from the study have been arranged according to themes topics and key issues being discussed by participants. Direct quotes from participants have been used to illustrate points (Lester, 1999).

The findings are reported in the following order: demographics of the study participants; the understanding of adolescents living with HIV/AIDS on unsafe sex and teenage pregnancy; relationship between unsafe sex and teenage pregnancy, new HIV infections and other STI’s; perceptions (views) about teenage pregnancy; attitudes (feelings) toward teenage pregnancy; contributing factors toward teenage pregnancy; and protective factors toward teenage pregnancy.

5.1 Demographics of the study participants
The study comprised of 20 participants. This included; the adolescents born and living with HIV/AIDS between 15 to 19 years and young women born and living with HIV/AIDS between 20 to 25 years. It involved eight adolescent boys, 11 adolescent girls and one young woman.

Participants in an in-depth interview were four (4) girls who were pregnant or had already delivered babies at a time the research was conducted, seven (7) girls who never had pregnant, eight (8) boys and 1 young woman aged 23 who had pregnant during her teenage. Among them, four boys who reported to be actively engage in sexual activities and four girls who never had pregnant and were actively engaged in sexual activities participated in a focus group discussion.
Nine adolescents among the study participants had finished standard seven, two participants never finished standard seven (primary school dropouts), three adolescents were form two drop outs, one was a form three drop out, one adolescent was a form one drop out and four adolescents had completed standard 12 (Refer Table 2). In Tanzania, the education system is divided into five levels: pre-school level (kindergarten) involving children up to six years, primary/basic level (standard one to seven) involving children between seven and 13 years, ordinary secondary level (standard nine to twelve or form one to form four) involving children between 14 and 17 years, advanced secondary school level (standard 13 to 14 or form five to form six) involving age between 18 and 20 years and university or college level involving young people above 20 years.

Over half were Muslim (12 out of 20), while the rest (eight) were Christians. Four participants had both parents alive, four had one parent (either mother or father) while 12 had both parents deceased being cared by grandparents, aunt, uncle, sister or live alone.
Table 2: Summary table of the demographic information of the study participants

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Age</th>
<th>Sex</th>
<th>Education</th>
<th>Religion</th>
<th>Parental status</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>18</td>
<td>M</td>
<td>Standard 7 level</td>
<td>Muslim</td>
<td>F (a), M (d)</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>M</td>
<td>Standard 7 level</td>
<td>Muslim</td>
<td>F&amp;M (a)</td>
</tr>
<tr>
<td>3</td>
<td>19</td>
<td>F</td>
<td>Form 2 drop out</td>
<td>Christian</td>
<td>F&amp;M (d), live with G/father</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
<td>M</td>
<td>Standard level</td>
<td>Muslim</td>
<td>F&amp;M (d) Guardian</td>
</tr>
<tr>
<td>5</td>
<td>15</td>
<td>F</td>
<td>Form 2 drop out</td>
<td>Muslim</td>
<td>F&amp;M (d), live with G/parents</td>
</tr>
<tr>
<td>6</td>
<td>18</td>
<td>M</td>
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<td>Christian</td>
<td>F (a), M (d)</td>
</tr>
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<td>7</td>
<td>19</td>
<td>M</td>
<td>Not finished Standard 7</td>
<td>Christian</td>
<td>F&amp;M (d) Live with G/father</td>
</tr>
<tr>
<td>8</td>
<td>17</td>
<td>F</td>
<td>Finished Standard 12</td>
<td>Muslim</td>
<td>F&amp;M (a)</td>
</tr>
<tr>
<td>9</td>
<td>18</td>
<td>F</td>
<td>Finished Standard 12</td>
<td>Christian</td>
<td>F&amp;M (a)</td>
</tr>
<tr>
<td>10</td>
<td>17</td>
<td>F</td>
<td>Finished Standard 12</td>
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<tr>
<td>11</td>
<td>19</td>
<td>F</td>
<td>Form 1 drop out</td>
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<td>F&amp;M (d) Live with aunt</td>
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<tr>
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<td>F</td>
<td>Form 2 drop out</td>
<td>Muslim</td>
<td>F&amp;M (d), live with G/mother</td>
</tr>
<tr>
<td>13</td>
<td>18</td>
<td>F</td>
<td>Standard 7</td>
<td>Christian</td>
<td>Live with mother alone</td>
</tr>
<tr>
<td>14</td>
<td>19</td>
<td>M</td>
<td>Standard 7 drop out</td>
<td>Muslim</td>
<td>F&amp;M (d) Live with Uncle</td>
</tr>
<tr>
<td>15</td>
<td>18</td>
<td>F</td>
<td>Standard 7</td>
<td>Muslim</td>
<td>F&amp;M (d) Live with Uncle and grand mother</td>
</tr>
<tr>
<td>16</td>
<td>17</td>
<td>F</td>
<td>Standard 7</td>
<td>Christian</td>
<td>Live with Mother alone but father alive</td>
</tr>
<tr>
<td>17</td>
<td>18</td>
<td>F</td>
<td>Standard 7</td>
<td>Muslim</td>
<td>F&amp;M (d) Live with Aunt</td>
</tr>
<tr>
<td>18</td>
<td>23</td>
<td>F</td>
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<td>Christian</td>
<td>F&amp;M (d) Live with grandmother</td>
</tr>
<tr>
<td>19</td>
<td>16</td>
<td>M</td>
<td>Standard 7 level</td>
<td>Muslim</td>
<td>F&amp;M (d)</td>
</tr>
<tr>
<td>20</td>
<td>18</td>
<td>M</td>
<td>Standard 7 level</td>
<td>Muslim</td>
<td>F&amp;M (a)</td>
</tr>
</tbody>
</table>

F (a) = Father alive, F (d) = Father Dead, M (a) = Mother alive, M (d) = Mother dead, F&M (a) = Father and mother alive, F&M (d) = Father and mother dead.

All participants participated in the in-depth interviews. Among the 11 adolescent girls, eight reported to be actively engaged in sexual activities and among them one was pregnant and three had already delivered a child at the time of interview. The three
remaining adolescent girls reported not engaging in sexual activities, although they reported have sexual feelings. Among the eight adolescent boys, four reported to be actively engaged in sexual activities while the other four reported not being engaged in sexual activities. Adolescent girls and boys who reported actively engaging in sexual activities were the ones who later participated in the focus group discussions. Two focus group discussions were conducted. The first group contained four adolescent boys who reported actively engaging in sexual activities and the second group contained four adolescent girls who never had pregnancy, but they reported to be actively engaging in sexual activities.

5.2 The understanding of unsafe sex and teenage pregnancy among ALWHA
In this study, we started by looking at the knowledge of adolescents living with HIV/AIDS on unsafe sex and teenage pregnancy and how they related engaging in unsafe sex and teenage pregnancy, new HIV infections and other STI's.

5.2.1 Knowledge on unsafe sex and teenage pregnancy
Almost all respondents (18 respondents) had an understanding of the unsafe sex except two study participants who reported to have no idea about unsafe sex. The two participants who reported to have no understanding of unsafe sex were boys who reported to have never engaged in any form of sexual activity.

All 18 respondents who understood what unsafe sex was defined it as the kind of sex done without the use of protection or a shield. The word “protection” was used by all respondents in the study. When they were asked to explain the meaning of the word protection, they used it to mean condom. The reason of using the word protection or shield was because in most of the campaigns which were related to condom use, the word protection or “Kinga” in Swahili was mostly used.

“Unsafe sex, mmmmmmmh…unsafe sex is the kind of sex...Mmmh … is the kind of sex which one is engaged without using protection, I mean condom thus
ending up with infections...Infections like gonorrhea, syphilis and other many more infections”. Jacky, 17 years old girl

“It’s the kind of sex where a person is engaged in sexual activities without using protections...protection it means family planning like injections for pregnancy and condoms for HIV and pregnancy”. Anna, 17 years old girl

“Unsafe sex is that sex without using protection. I mean condom. Let’s say lovers meet and they meet they decide to have sex, as they do so, one may advise to use a condom and the other would say no to it. By doing sex without protection, they will find themselves involved in unsafe sex and they are all in danger but also they are still young”. Teddy (FGD)

A Swahili version of unsafe sex was reported by one of the respondent as “Ngono zembe”; Ngono meant “sex” whereas Zembe meant “careless”. In general, Ngono zembe mean «careless sex» or sex done without considering the ultimate outcomes among sexual partners such as pregnancy and infection of diseases.

“Unsafe sex, mmmmmmmh.... means “Ngono zembe”, doing sex without using protection...What I mean is that, if you want to do sex with someone, and the partner you want to do sex with is not safe or sure of her health status, you need to make all efforts to protect yourself so that after the sexual act, you come out safe...when doing sex one need protection”. Jimmy, 16 years old boy

Ten out of 18 respondents, who had understanding of unsafe sex as the kind of sex done without the use of protection, also gave another meaning of unsafe sex. The other meanings which were reported were; sex done before marriage, the kind of sex done at a younger age below 20 years, sex which involves more than one sexual partner (multiple sexual partners) or any kind of sex done between infected and uninfected sexual partners. Uninfected sexual partner here means a person with negative HIV status and can get HIV infections if they have sexual intercourse with an HIV positive
person. The issue of discordant couples was not mentioned in all meanings which were given.

“...is the type of sex which is done before time or when one do sex when he or she is below 20 years. One is permitted to have sex when she or he is above 20 years. And also it means having sex without using protection”. Beatrice, 23 years old

Having found the understanding of respondents of unsafe sex, the researcher went further to explore the understanding which the respondents had on teenage pregnancies. Twelve (12) out of 20 respondents reported to have the understanding of what teenage pregnancy was. They reported teenage pregnancy as the pregnancy acquired at a younger age. They all reported younger age as the age between 12 and 19 years.

“Is the pregnancy, which one gets while the age is still young or the age does not allow...because for girls they enter puberty from an age of 11, for that reason from 12 to 18 years there is high chance of one getting pregnant while still they are children”. Chris, 18 years old boy

“It’s all about getting pregnant before the age. Before the age I mean like, a girl attains puberty at 12 years and start having her menses, and then at the same age of 12 or 13, 14 and 15 she gets pregnant, this is a teenage pregnancy. If a girl of 20 years or more get pregnancy this is not called teenage pregnancy, but below 19 it is a teenage pregnancy. In Tanzania, for example, my family had a house girl who came to live with us at an age of 10. At the same age, she attained puberty and she started seeing her menses. Now are days, even 11 year old girls start menstruating hence she starts having sexual desires and start looking for a boyfriend. The end result can be getting early or teenage pregnancy. In short, the majority of young girls between 12 and 17 years are the one who get teenage pregnancy”. Emma, 19 years old girl
“It is the pregnancy one carries before reaching the appropriate age. Let’s say 16 years. It should be remembered that, now are days children grow very fast, therefore 10, 11, 12 years can get pregnant and all these are teenage pregnancy”. Kayla (FGD)

Four respondents had other understanding of what teenage pregnancy was. The first two reported teenage pregnancy as unexpected pregnancy. They were unexpected because they engaged in sexual activities without any anticipation of getting pregnant and they were not ready for it. The third respondent considered teenage pregnancy as unwanted pregnancy and the last one defined it as pregnancy as the result of being seduced by men. In connection to unexpected pregnant, the two girls viewed sexual activity as a game or form of leisure which in turn, they became pregnant. None of the boy respondents reported sexual activity as a game or form of leisure.

“….like me, I didn’t expect that I will get pregnant. We were doing sex as leisure so that we feel good. We were doing it as playing a game, but unfortunately I became pregnant”. Sarah, 19 years old girl

“...I didn’t expect it at all...I went to tell the person whom i had sex with, not my first partner...” Vicky, 19 years old girl

“We normally took it as a funny game for leisure, and I never expected that I will get pregnant. I felt bad because I knew I wouldn’t fulfill all I dreamed after”. Beatrice, 23 years old

“...I could not do anything because it has already happened and I didn’t plan to have a pregnancy. I told my guardian (Grandmother) about the situation, she advised me to keep the pregnancy because of my situation of being HIV positive, my condition may get worse if I try to do anything like abortion”. Beatrice, 23 years old
Because respondents showed higher understanding of unsafe sex and teenage pregnancy, the researcher went further in exploring how the participants were able to relate unsafe sex to, new HIV infections and other STI's.

5.2.2 Relationship between unsafe sex and teenage pregnancy, new HIV infections and other STI’s

Among 20 respondents, seven (7) respondents reported to be aware of both relationships. This is the relationship of unsafe sex and teenage pregnancy, and new HIV infections and other sexual transmitted infections (STI's).

“... A person who does unsafe sex have a higher chance of getting teenage pregnant. Because she is just doing sex without the use of condoms, and at the same time she might have more than one male sexual partner, she has a higher chance of getting teenage pregnancy and other infections. But the one who has only one sexual partner even if she has lower age and she also uses a condom, I think that is fine and she may not get new infections or teenage pregnancy...Like me here I have HIV and suppose also I have any other STI's, and my male sexual partner is free from any infection...I will advise him to use condom, although I know that condom has a low possibility to prevent HIV, but it has a higher effect in preventing other STIs”. Emma, 19 years old girl

“...Yes, there is a relationship, because when you do safe sex using protection, when you use protection it means you prevent teenage pregnancy therefore they relate and fit to each other”.

“...because when you do safe sex, let’s say using protection, you will also protect from getting infections, even if your partner has STI's it will not be easy to get that infections”. Sophie, 18 years old girl

“By doing safe sex you prevent teenage pregnancy so the relationship is there because you can’t get pregnant. For example me, myself, if I am in a dangerous days (fertile days) that I may get pregnant, I normally stay away from my sexual
partner and he always understands me. I am not used with condoms, but for those who are used with condoms, they may go ahead doing sex even in dangerous days because it will also protect them from STI's”. Kayla (FGD)

Four (4) respondents reported understanding the relationship of unsafe sex and new HIV infections or other STI's alone whereas none reported understanding the relationship of unsafe sex and teenage pregnancy alone.

One (1) respondent were not sure if both relationships exists and eight (8) respondents didn’t know the relationship between unsafe sex and teenage pregnancy, new HIV infections or other STI's. This means that, there was almost half of respondents (nine respondents) didn’t know the above relationships. Also, among them, some had a wrong understanding of how unsafe sex related to new HIV infections and STI's.

“It depends on my blood or the blood of my partner. Because if they match then my partner will not have infections, but if it doesn’t match, then my partner will acquire infections from me......When I say they don’t match, it may be...What.....his CD4 to be affected”. Amina, 19 years old girl

“...if you do safe sex with those who don’t use protection it depends, how long you going to do sex with that condom. Even if you will have sex without condom, normally a man ejaculate sperm mixed with mucous which reduce friction thus reducing a chance of getting infections. But if you do sex for a long time or have sex with multiple partners then you increase frictions and you may have HIV infections”. Rehema, 19 years old girl

Among those respondents who failed to relate unsafe sex and teenage pregnancy, new HIV infections or other STI’s, three were girls who reported to actively engage in sexual activities and history of getting pregnant, two were boys who reported to actively engage in sexual activities and four were boys who never reported engaging in sexual activities.
5.3 Perception about unsafe sex and teenage pregnancy

There was a wide variation of responses from the respondents on the perception about unsafe sex and teenage pregnancy. They perceived as common and normal to have a teenage pregnancy. They have also associated it with stigma, shame and dishonor. They perceived teenage pregnancy as the way of punishment by men “Komeshwa”, unsafe sex and teenage pregnancy as their own decision, bad luck, and teenage pregnancy as the mark of being a prostitute or slut “Hujatulia”

5.3.1 It is common and normal to have teenage pregnancy

Some study respondents perceived teenage pregnancy as normal and very common among themselves and in the community.

“About teenage pregnancy, I think it’s very common among ALWHA. I have first to say that, here at the clinic there are so many girls who are pregnant or have babies in their homes and it does not mean they don’t have education, they have it. The problem with girls who attends this clinic is envious (tamaa)” Ally, 18 years old boy.

This was contrary to one girl with a history of pregnancy, who reported teenage pregnancy as something common but not normal.

“…Teenage pregnancy is common, but it is not normal because people will point fingers at you, they will speak badly about you…” Carol, 16 years old girl

5.3.2 Associated with Stigma, shame and dishonor

Some reported whenever teenage girls get pregnant, they end up being stigmatized because it brings shame and dishonor to the family and community. She would also be counted as deviant person.

Five adolescent girls and four adolescent boys felt teenage pregnancy was associated with shame, dishonor, stigma and discrimination. This was also reflected in both focused group discussions. They reported that once a girl become pregnant, she gets shame to herself, her family and to the whole community. This led to being dishonored
by her own family and the whole community. Because of this, she ended up being stigmatized and discriminated.

“You are despised in the community. When you pass in the community every one point fingers at you, some saying, look at her, she is very young and yet is pregnant”. Zubeda, 18 years old girl

“My views according to what I see, I think it is not a good thing. They bring shame to themselves as they are still young children and studying and run for elderly staffs while they even know their lives are poor. Hunting men to have sex with brings shame to themselves. My views will be OK if that person is an adult, but I will despise when I see a teenager. You know if you want to get pregnant, you need to plan, know where you will live, how I am going to care for my child but rather most of them have “Kiherehere” while they know life is tough, you do it and yet depend to your father and mother who also end up despising you”. Sam, 16 years old boy “Kiherehere” is the Swahili word which means doing or jumping into something before permission or before reaching the required time.

“Also you need to know that, carrying pregnancy at lower age is a shame to the family” Ally, 18 years old boy

“Not blessing but dishonor to the family …you dishonor your mother and she will be considered as if she is not a good parent”. Anna, 17 years old girl

“.......some will totally discriminate you and look at you as a meaningless person and you will never be meaningful in the community and they say what is she going to do today and tomorrow?. They forget that it is just one of the life challenges one is going through”. Christine, 17 years old girl

“...I noticed something from her close friends, all of them segregated her and they used to run away from her” Saumu, 17 years old girl.
5.3.3 “Hujatulia”, teenage pregnancy as the mark of being a prostitute or slut

Teenage pregnancies were directly associated with a bad sexual habit of a person. Anyone who has a pregnancy in teenage would be considered as a prostitute or a slut whereby pregnancy was considered as a sign (stigmata). Pregnancy was considered as an outcome of a girl’s sexual behavior with many men. She was also viewed as a girl who has not been settled “Hujatulia”. Hujatulia is a Swahili word coined to name any person being male or female, married or not married who doesn’t settle to one sexual partner (promiscuous) whereas “Mihemuko” is the Swahili word which means the strong sexual driving forces or desire to have sex that comes from the body of a sexually active person.

“Getting pregnant is the sign which shows the girl is not settled or she engages in dangerous sexual acts “Hujatulia” at a younger age ending up with pregnant. But at the same time you find she has already had attained puberty and you know at this age already our bodies have “Mihemuko”, so getting any chance or freedom and at the same time there is a lot of temptations out there, you can’t call her a slut because she just failed to overcome those many temptations”.

Suzy, 19 years old girl

“They will count her as a child prostitute who has ended up with a pregnancy. They will take it as a personal behavior and she is the one who wanted it”. Anna, 17 years old girl

5.3.4 Teenage pregnancy as the way of punishment “Komeshwa”

Some reported that a young girl who gets pregnant was punished “kukomeshwa” by men in order to stop the habit she has of having sex.

“...You know I like chatting with men and I know that they normally talk about us. They say; in order to punish “komeshwa” a girl, make her pregnant. Because when she gets pregnant that becomes enough punishment for her and she will stop hunting for men. As I know, it’s only men who do this because girls cannot
punish men by pregnancy. For example LK (Not real abbreviation), she became pregnant while she was at school. She has been abandoned by the man who impregnated her and life is tough for her. Whenever she comes to the clinic to collect her medication, she must complain about it. She just stayed with her child for only two weeks; then she decided to take the child to the village. At least now she is resting” Rehema (FGD)

“...You also find someone say he loves you, but the intention inside him are to just infect you or get you pregnant and leave you”. Christine, 17 years old girl

5.3.5 Bad luck
Getting pregnant was regarded as bad luck because not all teenagers who had sex ended up becoming pregnant.

“If that happens, I think that will be a bad luck and accident which I think I will need to talk to her parents. But this will need understanding parents because it is like an emergency. If they will not understand me and they are planning to send me to the police, I will advise the girl to abort the pregnancy”. Davie, 19 years old boy

“For some girls it is bad luck because they may be having knowledge but end up pregnant...for example, a girl K who is also attending CTC clinic here, you know she is very young and now she has a child... The only thing is that, they had unsafe sex which ended up for K getting pregnancy...” Suzy, 19 years old girl

5.3.6 Own decision
There were those who considered getting pregnant as the teen’s own decision. She wanted to have children as any other woman does. They feared premature death due to their health condition, thus they thought it was good to leave a mark before they died.

“If I get pregnant now, I think it will be my own desire because I know what to do. But if it happens I catch pregnancy unplanned, I will make sure I attend a clinic
for pregnant women regularly, I will keep my health well so that I don’t transmit the infection to my child in the womb”. Suzy, 19 years old girl

“I am not surprised and not something will make me wonder, because I have talked with many girls directly and some say they decided to have pregnancy, they had a desire to give birth. Most of them gave the example of their friends who had died; they said they can’t die without leaving any child behind. I asked three of the girls here at the clinic and they gave me those answers”. Rehema, 19 years old girl

Then we explored how the girls who had a pregnancy felt when they realized they were pregnant. For the girls and boys who never had a pregnancy and boys, we asked how they would have felt when upon realizing their close friends were expecting to be a parent.

5.4 Attitude toward unsafe sex and teenage pregnancy
Respondents had different ways they felt regarding teenage pregnancy and unsafe sex. The attitudes reported have been categorized into four aspects; girls vs. boys attitudes, attitude of girls reported to be pregnant at the time of interview or had history of pregnant vs. girls who has never been pregnant, community attitudes toward teenage pregnancy, and feelings about teenage pregnancy as bad and a burden.

5.4.1 Girls’ vs. boys’ attitudes toward teenage pregnancy
Boys don’t like to keep the pregnancy. The girl respondents reported that, boys who impregnated them didn’t like to keep the pregnancy. They wanted the pregnancy to be terminated through abortion.

“When he realized I am pregnant, he gave me money and forced me to go for abortion. I took some time thinking of it and I decided not to abort a baby in my life. He decided to change the telephone number and I was not able to reach him anymore. I went through such a kind of challenge...” Sarah, 19 years old girl
“The boy convinced me to abort the pregnancy, he gave me money but because my grandmother had already warned me, I opposed the plan. He forced me too much but I denied his proposal. I decided to keep the money”...

“Yes, the reason he gave me was that, he was not ready to have baby by that time and he didn’t plan for it because he had no job and was dependent on his family...” Sarah, 19 years old girl

Similar responses were given by boys respondents who reported themselves to be sexually active, when they were asked to give their views incase their sexual girlfriends reported to them they were pregnant.

“If my girlfriend gets pregnancy...Oooh, I will be disappointed “nyong’onyea” ...I don’t know, I am still thinking, and mind you we are all still young, because the community consider us as children and still we are under care, then we bring another burden to the family and the social economic wellbeing of our families are not good, I personally...I will advise her to abort the pregnancy... to be honest it’s a difficult situation”. Ally, 18 years old boy

Having an abortion was opposed by girls who had history of pregnant and those who reported not engaging into sexual activities. They both wanted to keep pregnancies until they delivered their babies.

“Mmmh...I will just keep it...I will keep it because doing abortion is a sin, also having a baby is a sin and it is very bad”. Saumu, 17 years old girl

“First of all abortion is not good because according to faith it is like killing the living thing which does not have any fault. I can’t advise that way and the one who has done it I will tell her it is not good”. Halima, 17 years old girl

“It happens you yourself get pregnant, I will accept the situation; I can’t take any harsh response. I will accept the situation although I know my parents will consider me differently, they will say I am a child and now I am carrying another
child in the womb, I think they will just need to accept me and the situation”.
Halima, 17 years old girl

The girls with history of pregnancies also reported boys denied their pregnancy once they were informed to be responsible for it; girls reported that, boys believed not responsible for the pregnant even though had sexual affairs with the girl. They considered girls to have more than one sexual partner.

“…….if you tell him I have your creation “kiumbe” in my abdomen, he will deny and say it’s not my “kiumbe” and tell you, may be go somewhere else where you went for sex”. Christine, 17 years old girl Kiumbe is the Swahili word which means creature. In the quote above it meant the creation created in the abdomen.

“First time, when I told the boy who caused the pregnancy, he totally refused the pregnancy. I went home and told my mother who couldn't believe what she heard from me. I was so disappointed...my mother was very furious because she lost all her money that she paid to school I was studying and I was just in the beginning of my studies...” Zubeda, 18 years old girl

“...People may know that I am in sexual relationship with the girl but yes even if I had sex with her, in reality you find that pregnancy is not mine, it belongs to another man”. Ally (FGD)

5.4.2 Girls who had a pregnancy vs. girls who had reported to never have pregnancy before
Girls who had never had a pregnancy considered being pregnant as bad, dangerous and risky and it would be wise if their friends had aborted it. They counted abortion as the best resort than going for child delivery. They also posed blames to the friends asking them why they ended up getting pregnant. This was different with girl respondents who had history of pregnancies, who outweighed termination of the
pregnancy with delivery of the babies despite the risk and dangers which were posed to them by their friends.

“My friends whom I thought had a meaning in my life advised me to abort it because I was going to die and I was surprised. I told them, if is to die, I had died long time ago. I remember I met a certain girl who was my friend also and she advised me to go for abortion and I just ignored her. I told her, “even if I don’t know who the father of this child is, I can’t abort this pregnancy because the father will just show up by himself. She kept on insisting that I am going to die and I better abort my pregnancy, I kept ignoring her. You know, I knew once I give birth to the child, he/she will help me in the future and so longer the child is already in my womb I need just to accept and I can’t kill it” Christine, 17 years old girl

“Ooh, there are so many, I remember those who told me to abort some was my close friend, I used to look at my abdomen and cry a lot until sometime my mother would ask me, what are you crying for? She also would say, if you cry your child will die in the womb and you will also die. I could go to the bathroom and hold my abdomen and say my child, people talk a lot, but whichever you are whether you are a boy or a girl, I will love you, I was talking many positive confessions to my child while still in my womb”. I really loved him so much.... You know even after I gave birth, there were some who came to see me with a good heart but some came to just see if I have managed to give birth or it is just rumors”. Sophie, 18 years old girl

“...they blamed me so much asking me why I ended up getting pregnant. My best friend blamed me why I got pregnant so early, she said she didn’t like at all what I did saying the decision I made was not right and will no longer be part of the future plan we have been making with her... You know we are singers, we had a plan to put efforts in singing so that we become one of the best singers in the country, but getting pregnancy was the way of ruining out our future plan
because most of the time I will be spending at home taking care of my pregnancy and can’t participate in singing practices”. Sarah, 19 years old girl

5.4.3 Community attitude toward teenage pregnancy

Girls respondents reported the way the families and community members treated young girls who ended up getting pregnant. Family meetings to discuss the matters and blame from the family members; being pointed fingers by neighbors and other community members were among of the issues which were mentioned.

“...but those at home knew it. Some of them you could hear whispering to each other, telling each other about my situation...I tried to keep myself busy. Even some who I met them directly, would show as if they are surprised and then ask me, “ooh, are you pregnant”? And then they just “Kuguna”.......They “guna” and some ask you “kwa kejeli” are you pregnant. I remember one of the neighbors came to our house. She scared me and told my mother that your daughter is so young, she will not be able to deliver, she needs to be ready for an operation, I was praying a lot and thank God I gave birth a normal delivery at Tumbi hospital”. Zubeda, 18 years old girl

“Kuguna” is a nonverbal sound accompanied by mouth twist used by a person to indicate something seen or heard is not acceptable or not right whereas “Kejeli” is a Swahili word meaning “to mock”

“...My guardians who was my grandmother blamed me a lot, she blamed me because I was still young, and...because of my health condition” Sarah, 19 years old girl

“If a girl gets pregnant in my community, the parents or caretaker will transfer her to the village far away from their home. She will stay there until she delivers the child and after birth the family brings her back to their home. If she remains at their home, there will be on and off meetings from family members, blaming her...they blame her until she gets confused...telling her, why have you done this and you are not married...” Sophie (FGD)
5.4.4 Teenage pregnancies are bad and they are burden

Boy respondents had the feeling that their future lives (in term of education, health, and social economic) would be ruined once their girlfriend became pregnant. Some had even a fear of being jailed once discovered they have caused pregnancy to the girl. They also reported the bad outcome of teenage pregnancies, such as damage of reproductive organs, including the uterus, weakening their health due to HIV status, and death.

“…In short, I don’t have a girlfriend. If it happens, I am responsible by causing pregnancy to a girl, I will not feel good because she would have already ruined my life, ruined my studies and everything has been ruined” Jimmy, 16 years old boy

“…some parents become angry because of what their daughter has done and they decide to chase her away from home, imagine where she will go then”. Saumu, 17 years old girl

“…When I see a girl getting pregnant, I feel bad, because taking care of the baby is the tiresome task and time consuming, my own health is a burden to me and then I have to start taking care of the baby, to some extent I normally feel pity to them”. Rehema, 19 years old girl

“When my friend discloses her pregnancy status to me, Aaagh, I will feel very bad. First of all she is my friend and once she gets pregnant at her young age I will feel pity for her because she will definitely stop her studies by being expelled from school…she has also lost her virginity and has no value anymore”. Chris, 18 years old boy

5.5 Contributing factors toward unsafe sex and teenage pregnancy

According to the findings, most of the respondents were aware of unsafe sex and teenage pregnancy. Despite of that, some of them reported engaging in unsafe sex
which led to some of them becoming pregnant. I went further by looking what would be the possible contributing factors which led them to engage in unsafe sexual activities. The factors were divided into four categories; (i) intrapersonal factors, (ii) interpersonal factors, and (iii) social economic factors.

5.5.1 Intraperisonal factors
These are the factors from a person himself or herself. In this study, intrapersonal factors refer to all factors which originated from within an individual adolescent.

5.5.1.1 “Mihemuko”
During the interviews, more than half of the respondents (both adolescent girls and boys) reported developmental changes happening within their bodies acts as the driving force toward their engagement in both safe and unsafe sex. They explained the drive to be so strong that they lack control of their bodies. This driving force mentioned was referred to as “Mihemuko” in Swahili language. They reported “mihemuko” as one of the leading causes for them to engage in dangerous sexual affairs which in turn lead to teenage pregnancy.

“…to be honest, we have “mihemuko” (sexual desires) at some point, so if it happens you meet your sexual partner or any lady, it is hard to control, I know we are supposed or it is advised to use protection so that you don’t infect her and protect her from getting pregnant, you all remain safe”. Chris, 18 years old boy

“It is practically impossible to abstain from sex. All adolescent of our age, including ourselves do sex…I know there might be few adolescents, may be one in ten, who could abstain from sex, but they are disturbed a lot by men out there and if a man know you are a virgin they will follow you tirelessly like a cock chicken chasing a chicken. Many girls after attaining puberty must have sex…you know God has created “mihemuko”, which makes you have desires to sleep with men. And you know in my case, if I need a man, I will make sure I get one because I don’t feel shy… I can come to you and tell you I am tired I need to have sex… Some girls
who feel shy, try to seduce men by how they dress up and men will definitely understand that this girl need to have sex...to be honest “mihemuko” has strong contribution here” Kayla (FGD)

5.5.1.2 Foolish age
Some respondents reported that, they engage in unsafe sex because of being in a “foolish age”. This is the age where they fail to control sexual drives, and it is related to puberty period when sexual drives start to emerge. They engage in sexual activities without good judgment as to what will be the ultimate outcome of doing so.

“... and for us young girls who have reached puberty, it is a must or just find yourself doing sex because you are in the foolish age, which make you become like a blind and deaf person...you don’t listen or see any repercussion ahead” Suzy, 19 years old girl

“...but yes, you are right but you know many girls when they attain puberty they are still in foolish age, and “mihemuko” are high, it is easy to be cheated and they end up getting pregnant at a younger age”. Sophie (FGD)

5.5.1.3 Envy “Tamaa” and aspiration for wealth and valuable items
Many respondents reported inability to be satisfied, with family life condition being one of the problems. Five girls, five boys and focus group discussions for both boys and girls reported teens were covetous of other people’s life style. They wanted to have money, good clothing, cell phones, and have outings like girls from rich families. Covetous was mentioned to be the problem for both adolescents coming from families that could afford their daily requirements and those coming from families that could not meet their daily needs such as food.

“What causes these girls to get pregnant is envy. If you look, there are some girls who come from families which are able to give them anything they wanted and
they live good life, but because they are envy, they end up getting pregnant…” Sophie (FGD)

“…The problem with girls who attend this clinic is envy. The majority wants faster life, even before their age allows them. Personally, I consider that, there are some children knows that they are coming from poor family background, they have all education or knowledge regarding HIV, they know having unsafe sex will lead to teenage pregnancy, or acquire new HIV infections, bad enough some of the adults people who are like our father by age and somehow have the money or car or good cell phone, make timings to get these girls, these girls get tempted which cause them have sex even though they know they are still young”. Ally, 18 years old boy

“You find a girl comes from the poor family, lets’ say they lack food or get it with difficulties, others lets’ say its money, which is lacking to them, she find her friend look beautiful with make up on her face and desire why she should not be like my friend, she decides to find a man and men can’t give a girl money unless they have sex with her and normally in times like this, men don’t like using condom, so a girl starts doing sex which ultimately she ends up with pregnancy”. Rehema, 19 years old girl

“You find one has poverty life and you know we human beings differ. Some may fail to tolerate the poor conditions of their family, when she meets someone who shows care and provide her with some material things she then is easily convinced to have sex”. Jacky, 18 years old girl

“....we normally have something like our aspirations...because you see your friend is doing this or that and you also want to do like him or her...even when you see a friend doing something bad to get money, ...bad like reckless sex...you decide to follow that way without counting what will be the consequences later” Jimmy, 16 years old boy
“...some girls are not satisfied with the level of life of her family. Girls need to be satisfied with their families’ financial status. I don’t have parents (father or mother) but I am satisfied by my own life I live”. Rehema, 19 years old girl

Some adolescents were observed coming to the clinic as if they were coming for a fashion show, and they would move from one spot to another at least they would show their friends what they were wearing; on that particular day. Girls who didn’t have cell phones were observed hanging around with boys who came with phones. The boys with phones which could play music, shows video, take photo, and access to internet had more influence than others as they will be surrounded by group of girls.

5.5.1.4 Entrapment

Other girls considered pregnancy as the way of keeping their male partners, especially those men who were financially stable. Pregnancy was the way of sustaining their relationship which in turn made the girl benefits with the financial support of their male partners.

“...you find the girl finds a boyfriend who has some money, she makes a decision to get pregnant and give birth with that man so that she can continue enjoying that money”. Sarah, 19 years old girl

5.5.1.5 Girls’ desires to have babies

Some girls desired to have babies and because of that they ended up doing without a condom. Their main reason for looking to have children was the fear of death without leaving children of their own. They recalled the death of their friends who died at the young age of 15 to 19, who died without having even a single child. Because of their health condition, they thought they would die any time, thus causing them to seek having a pregnancy. They didn’t consider transferring of HIV infections to their male partner as something to worry out. They also considered a girl who engage in sexual activities and never had pregnant as infertile. This forced the girls to do whatever they can to prove to their friends that they were not infertile as it was regarded.
They regarded pregnancy as a symbol to show that they existed, that their blood line would continue live on.

“...It came in my mind also that I may die without leaving a child. I continued having sex with my boyfriend several times until I got pregnant. I think a lack of faith that we can live a longer life like any other people misled us and we had the wrong mindset that we can’t live to a point we can have our own families in future”. Sarah, 19 years old girl

“...Most of them give examples of their friends who have died; they say they can’t die without leaving any child behind. I asked 3 of the girls here at the clinic and they gave me those answers”. Rehema, 19 years old girl

“...I was born alone in my family and the issue of aborting it was not in my mind. I felt it would be better if I can just give birth to a baby because I knew this child is the one who will help me in the future. I had no other option, I encouraged myself and now you see, I am already a mother”. Sarah, 19 years old girl

5.5.2 Interpersonal factors
In this study, interpersonal relationships meant the relationship between an adolescent with friend (s), parents, community members and sexual partners.

5.5.2.1 Parental care
Five respondents out of 20 reported lack of parental care and thus lack of guidance in the adolescent’s lives played a great role in engaging in unsafe sex and ultimately led some of them to becoming pregnant. The following question was asked: “What factors may contribute for an adolescent girl end up being pregnant”? One of the factors that were given was parental care and it was reported as either complete lack of parental care or poor parental care.

In lack of parental care, adolescents reported to lack parents who would have guided them in their lives. They considered the community where they live; were the silent
community whereby no parents could dare to educate or warn children who not theirs once they see them misbehaving. They reported that each parent focused on their own children and no one else.

“Yes, parental cares do contribute...for example in my family, my care takers who are my grandfather and brother used to be very strict to me”... Kayla (FGD)

“Parents of those days used to be very strict....I remember my father used to be strict and follow-up everything. When I was 4 years, my sister was severely beaten by my father using a belt because she came home from school very late. I remember she came back home late in the evening around 7pm and she never repeated that again...but see, who can do that again for me...because even my aunt whom I lived with passed away.” Teddy (FGD)

Parental care was also regarded as poor when parents or guardians remained silent when they saw their children engaging in dangerous sexual habits.

“...Another example, my aunt is very rich financially. She has one son 15 years old. She can give him about one hundred thousand Tanzanian shillings to be spent in one night at the club. He has now engaged himself in bad behaviors of women “womanizer”. Bad enough he is not infected as I am, but he will end up getting infections and cause unexpected pregnancy to all girls he has sex with...”

Hawa (FGD)

Loose home environment were reported to be one of the factors propelling young people to misbehave in the community. Lack of strictness in the family is the loophole for young people to start engaging into sexual activities.

“Environment where they live, let’s say the mother does not take care of her daughter, doesn’t give her food or cares. The child comes home in the morning or come late night and she is not asked where she has been, instead the door is opened and she enters inside the house. Sometimes when she comes in the morning she even gives some money to her mother and the mother doesn’t ask
where she got that money. Because of the life situation may be, the mother fails to question where the money comes from”. Sophie (FGD)

5.5.2.2 Peer pressure
Adolescents reported exhibiting certain behaviors because of imitating their friends. Peer pressure was expressed in many forms such as pressure to have a sexual partner and pressure to have children.

“...Street peer pressures are very strong. You find let’s say in your group you have fellow girls who live hooligan life, even some of them could be younger than me or older than me, but they are doing strange things. When you see them doing, you think it’s a good thing and you also start imitating them”. Anna, 17 years old girl

“...my friends convinced me to the extent I was jumping the house wall (fence) at night and go to men. When I come back, used to be beaten so hard but when I meet my friends again, I forget that I was beaten, and continue with my behavior... the moment I see my friend going to the club, I used to see as if my parents were ill-treating me and decide to follow what my friend was doing. I used to jump the wall, go to night clubs and sometime I could have sex with boys...” Kayla (FGD)

It was also considered living without a male sexual partner was impossible for any adolescent girl. Those who managed to overcome the influence of friends were considered as eunuchs, impotent and buoyant for boys.

5.5.2.3 Male's denial of using condom
Male partners were reported by girls to be the causes for many girls to have unprotected sex. Girls reported using of condoms were denied by men because men said it reduced the taste of sex and that they would prefer more having bareback sex. Due to many factors such as fear of disclosing their HIV status, fear of being abandoned by their partners if they insisted on the use condom, girls reported succumbing to bareback sex.
“...But you find your partner reject using a condom in that situation you have nothing to do. There are men you meet are so contentious in using condoms and not using condom is not safe. Another thing some men you meet, once you tell them to use condoms because I have this and that condition therefore you must use condom, ...ooh, after that he goes to other people and start telling them, “I have met Eve (Not real name), she asked me to put on condom because she has infection so and so...she asked me to put on condom so that she doesn’t infect me”. That is not good for sure, that will cause me not to tell him my status....but also some men you meet they don’t care at all and they just focus on sex and are satisfied. For example my current boyfriend, I have disclosed my health status to him but he doesn’t care at all and he has given himself sacrificially “amejitoa sadaka” and we do sex without using condom....” Teddy (FGD)

“It depends, if the partner agrees to using the condom or disagrees. Other men don’t agree to using condom...” Amina, 19 years old girl

“...I normally advise men to use condom because I know myself, but they reject. If I feel I am in love to that man, I don’t deny him and that become not my problem or faults because he has not accepted my truth”. Rehema, 19 years old girl

“...as you know the guys of now a day it is very hard to oppose their proposal, and it is a great challenge but that is it. What can you do? ...you find yourself in the situation you can do nothing; you decide to just do it”. Jacky, 17 years old girl

5.5.2.4 Sexual coercion

One respondent reported her first sexual intercourse was done by force. The boyfriend asked to have a visit where he used that opportunity to have sex with her. Since then she has been doing sex with protection until the day she became pregnant. She was not even sure who was responsible for the pregnancy because she had started other sexual affairs.
“...to be honest, the first day I remember it was morning and I was in his room. At the beginning I just took normal because he was my boyfriend. Later on he said he wanted to have sex with me. I was worried because I had never had sex before. He forced me to have sex, he removed all my clothes including my pants, and he also removed all his own clothes...I was scared, and then he had sex with me...I felt severe pain during sexual intercourse because it was my first time to have sex”. Emma, 19 years old girl

“...as I understand, unsafe sex is the sex done without one’s consent. It involves one partner forcing the other. When you force your partner to have sex and you are infected, you will pass the infection to her...” yaah, I think you need to handle the issue of sex “kistaarabu” lest you end up with infections once you force someone because there is low chance of using condom if it’s by force” Jimmy (FGD)

5.5.3 Social economic factors

5.5.3.1 Sex for survival due to poverty

Many children reported that lack of food and school support played a pivotal role in girls engaging in unsafe sex which ultimately caused pregnancy. They reported going to school without taking breakfast, without being given pocket money to buy food while at school. Some reported even if they were not going to school, staying home was impossible because there was no food. They had to look for ways they could get food. Starting sexual affairs with men was reported as one of the alternatives among many of the girls.

“Let’s say at school one of your friends comes with 10,000 Tanzanian shillings (Tshs) and you have just come with 500 Tshs. Like me I use 400 Tshs for transport round trip remaining with only 100 Tshs out of 500 Tshs. What do you think I can buy with 100 Tshs? Mind you as I go to school I have already swallowed my ARV’s, I don’t have food during the break time. If I ask my friend where you get that money, she says she gets that money from a man, she goes
to the man’s place and have sex with him and he also gives her money. I end up being tempted by asking her to look for a man for me; once I get a man I also start having sex with him so that I get money to sustain me at school. To be honest, with this situation, to prevent teenage pregnancy becomes very difficult”. Carol, 16 years old girl

“I have witnessed people engaging into multiple sexual affairs to get money and be able to support their families simply because they are poor and live hard life…for example my friend Rehema (not real name), she is my age mate and we all attend this clinic. …I know her, she was very bright in the class, and has also broad life skills. But the life she has been living I am sure it is because of her socioeconomic condition. She has been working as a barmaid where she has been doing sex with many men, at the end of the day she became pregnant. Despite of this, she currently lives with a man so that she can get money to pay school fees for her young brother because their parents died long time ago. She has sacrificed her body because of her young brother. …sometimes she starts thinking, what are we going to eat, what am I going to feed my family, and for her this is a genuine reason and she decides to find another man who can provide additional money, on the other hand behind the scene you may not understand why she is doing so and some people may even throw abusive words to her, but she does that to get money for her family” Teddy (FGD)

5.6 Protective factors toward unsafe sex and teenage pregnancy

To address the issue of unsafe sex and teenage pregnancy among adolescents who were born and living with HIV, several factors were mentioned that could help teens from engaging in unsafe sex and ultimately getting pregnant. These factors were reported with different perspectives among adolescents. Those who said it was not possible for adolescent living with HIV to abstain from sex, their suggestions were based on how they could have sex without getting pregnant and new infections whereas others had focused on total abstinence. The factors were then categorized into three groups; (i) abstinence factors, (ii) non-abstinence factors and (iii) other factors.
5.6.1 Abstinence factors
These were the factors reported to help an adolescent to refrain from having sex before their time. They reported that teens are not allowed to have sex until they reach the desired age of 20 years or above. This was reported to be possible if adolescents would adhere to several habits such as to associate with good friends (positive peer pressure), cling to religious teachings and get involved in physical exercises.

5.6.1.1 Positive peer pressure
Adolescents who never became pregnant reported bad company as one of the factors that can make an adolescent who doesn’t plan to engage into sexual affairs to start doing so. They recommended hanging out with friends with good character as the way to maintain the character of others.

5.6.1.2 Cling on Religious teachings
There is no religion that allows promiscuity. Also, all religions forbid any form of sexual activities before marriage. It was reported that, if adolescents fear God they will be in a position of getting rid of teenage pregnancy.

“Religions prohibit sex before marriage. It is completely not allowed to have sex before marriage, it is a sin… My friends normally say I am a strict Christian, strictly holding Christian faith that I fear doing sin… Because as I see myself; I am still not yet to start sex, the way I understand myself I have not tied the knot or not wedded and even I don’t have someone who I will be wedded to, doing sex at this age is sin… It is sacrilegious” Saumu, 17 years old girl

5.6.1.3 Physical exercises
Two girl's respondents who reported not started sexual activities mentioned physical activities as one of the ways to overcome the power of “Mihemuko”. In doing so, one will get rid of engaging in unsafe sex which in turn may lead to pregnancy.
“... I normally do exercise...I normally run, jumping so that I don’t remember. I play a game which we draw boxes on the ground and we start jumping”. Saumu, 17 years old girl

“…because I sometimes have sexual desires but I put goals of what I want to achieve in my life…. And engage myself in sports so that I don’t allow my feelings drive me”. Anna, 17 years old girl

“Yes, “mihemuko” is there, but what help you overcome are the strategies given through education that helps someone for example doing exercises, avoiding stay alone but by mixing up with friends”. Saumu, 17 years old girl

5.6.2 Non-abstinence factors (Family planning)
These were the factors reported to help adolescent to have sex and keep themselves safe from getting pregnancy or new HIV and other STI’s infections or both. These were the factors which were recommended by adolescents who reported to have already started doing sex.

5.6.2.1 Coitus interruptus
Ejaculating outside the vagina was reported as one of the unsafe sex which can prevent girls from getting pregnancy.

“... and for boys or men, so that they don’t cause pregnancy, they should use all mechanism not to cause pregnancy. I know many men and boys do not like using condoms, for those who do not like using condom and is the only man you trust, during the sexual act, they have to pee sperms outside the vagina and avoid peeing sperms inside the vagina”. Emma, 19 years old girl

5.6.2.2 Calendar method
The respondents reported the need for girls to know their monthly menstruation calendars. By doing so, they will be able to have sex only in safe days and refrain from
sex during the dangerous days. Safe days are those days where a woman cannot get pregnancy whereas dangerous days are the days which there are higher chances for a girl to get pregnant.

“For a girl, is to make sure you follow well your calendar…” Suzy, 19 years old girl

“…I think calendar is very nice and help 100 percent not get pregnancy. A good example is me, I use my calendar very well and it is clear. But the problem may arise to other people who have irregular menses”. Rehema, 19 years old girl

There was no respondent who mentioned the use of injectables such as Depo-Provera, use of combined oral contraceptives and spermicides or morning after pills as the family planning method.

5.6.3 Other factors
These were the factors that were also found to be important to both groups of adolescents; those who reported abstaining and those who reported not to abstain from having sex.

5.6.3.1 Parental Care
Respondents reported how parents or guardians can contribute significantly in raising their children in good order. They noted that parents or guardians should take responsibilities of teaching their children in all issues related to sexual and reproductive health. They wanted parents to be open to their children by teaching them; because they believed no parent or guardian is uninformed in all issues regarding sexual and reproductive health.

“...Parents must be open to their children by teaching their children, telling them if you do this or that is good or bad… Parents should tell their children about HIV and teenage pregnant because parents knows each and everything and still they
hesitate talking to their children…I don’t believe that parents are not been able to teach their children about issues related to HIV/AIDS and reproductive health because now are days even a primary school child have a glimpse of what HIV is and they also learn small portion of reproductive health education through drawings they make in science subject. What they get at school is not enough, parents and community has full responsibility of helping young people …” Ally, 18 years old boy

“Yes, parental care does contribute…also to all guardians who have children whom they care, they should help them by educating them so that the children know themselves. When children know themselves, it doesn’t matter who will try to change them, or convince them engage in bad behaviors, they will fail because they have education…” Hawa (FGD)

5.6.3.2 Education
Multi-level education was reported as one of the potential aspect in ensuring all adolescents are well informed regarding their sexual health. Multi-level education means sexual and reproductive health education delivered at family, community and school level. Within the family, mothers were pointed out as key figures in conveying messages regarding sexual health to their children.

“...first of all education should come from the family level where young people lives especially mothers”. Ally, 18 years old boy

“Education is needed to children and even to our guardians…but especially to we children because sometime guardians try their level best but it is not enough…” Ally, 18 years old boy

“... School also should take greater consideration to strengthen reproductive health education so that they can help students”. Ally, 18 years old boy
“Children need education especially from parents to educate their teens, by telling them; engaging into sexual matters earlier is dangerous and it is not a good thing. They have to advise their children to study…” Jimmy, 16 years old boy

5.6.3.3 Be resilient

Having resilience was mentioned by both girls and boys as one of the important aspects which needed by all adolescents. Regardless of their social economic status, being resilient would have made adolescents get rid of being tempted by materials things such as mobile phones, clothing, and money to have unsafe sex.

“Girls shouldn’t aspire for money; they should set life goals on what they want to be” Anna, 17 years old girl

“............children need to be satisfied with all situations in their family, if you are satisfied other things can not disturb you and you will always remain safe…” Rehema, 19 years old girl

“I think as I said, she should not aspire for material things, ... but also parents should have obligations of fulfilling the needs of their children so that it can help reduce the way they aspire for material things”. Davie, 19 years old boy
CHAPTER 6: DISCUSSION

6.0 Introduction

Teenage pregnancy is not something new in Africa. It is a result of doing unprotected sex. The study found 18 out of 20 respondents had the understanding of unsafe sex and teenage pregnancy, but more than half of respondents were not able to relate unsafe sex to both teenage pregnancy and new HIV infections or other STI’s. They reported engaging in unsafe sex as mean of survival, a mean to support their families, and value for fertility. Also, they engaged in unsafe sex as results of sexual coercion, foolish age, lack of power to negotiate on condom use among girls and strong sexual desires “Mihemuko”. They also reported teenage pregnant as something common in the society, but it was associated with stigma and discrimination, blames, labelling, and rejections. Provision of education on SRH, devoted to religious beliefs, advocacy on the importance of family planning methods, building resilience and parental care were reported as protective factors against teenage pregnancy among ALWHA.

This chapter has been arranged in six parts: HIV and adolescent sexuality, school and adolescent sexuality (academic), adolescent understanding of unsafe sex and teenage pregnant, adolescent views and feelings about unsafe sex and teenage pregnant, contributing factors toward teenage pregnant and unsafe sex, protective factors toward unsafe sex and teenage pregnancy (abstinence factors, non-abstinence factors/family planning, and other factors).

6.1 HIV and adolescent sexuality

It was observed that, all study respondents were born and lives with HIV and they all had at least 15 years experiences of being in pediatric Care and Treatment clinics (CTC). Services offered at the pediatric include: prescriptions of ARV’s for HIV/AIDS, prescription of opportunistic infections drugs, voluntary counseling and testing, disclosure of HIV status, drug adherence education, education of how HIV and other STI’s are transmitted, sexual and reproductive health education and family planning education (PASADA-Tanzania, 2009). Exposure to services above would have been helpful to them when it comes to sexual feelings, behaviors and development.
Despite this, more than half of the adolescents reported engaging in unprotected sexual activities which led some of them getting early pregnancies. This corresponds to the WHO (2012) report which showed adolescents with sexual information alone had less positive sexual attitudes and did not show increased practices of safe sex behavior. Possibly some of them might have had STI's other than HIV, but unfortunately no history of other STI’s was inquired and it was not part of the study.

Adolescents living with HIV need reproductive health education which is comprehensive, repetitive and tailored on how they can integrate their sexual feelings, behavior and development with their HIV infections. Moreover; social, economic and cultural factors need to be addressed all together with education to help adolescents make own informed choices regarding to sexual life.

However, HIV/AIDS as chronic disease increases the risk of depression, anxiety and feelings of isolation among adolescents. Studies have shown that, three out of five adolescents born and live with HIV/AIDS have been affected by these mental problems (Vranda & Mothi, 2013). Furthermore, HIV illness is associated with secrecy preceded by stigma within the community. All these may impair adolescents to make own informed choices regarding to sexual life.

6.2 School and adolescent sexuality (academic)
According to Tanzania’s education system, children are expected to complete standard seven level at the age of 13 years, provided they start grade one at a recommended age of seven years. The age at completion might be even less than 13 years as recently it has been observed some children begin grade one at five years and finishes at 11 years. Because all study respondents were between the ages of 15 and 19 years this implies that, more than half of respondents (11 respondents) had out of school life for the period between four to eight years. This long duration of being out of school might provide a platform for adolescents to become pre-occupied by other feelings related to risk behaviour instead of education issues.
According to Lindsey (2003), school attendance has protective effect to children who attend class every day as they are being away from the environment where they can be enticed to engage in bad behaviors. It is the programmed schedule of a child who is growing up. For the children who follow the school schedule adequately and while at school has access to HIV and sex education, there is higher chance for them to delay in engaging in risk behaviors such as drug and alcohol use, unsafe sex (De Bruyn, 2000). Children who wake up without knowing what they do next in the day increases more chances of them to engage in risky sexual behaviors at a young age.

The findings of this study showed only four (three girls and one boy) out of 20 respondents were able to reach and complete grade 12 (form four levels). In connection with that, seven out of 20 respondents reported to had never sex before and four of them were the one who completed grade 12 and all showed good prospect for future. It is an obligation of the families and governments to ensure none of the adolescents remains out of school. More emphasis should be on adolescent girls because out of school girls are at higher risk of early initiation of sexual activities than boys.

6.3 Adolescent understanding of unsafe sex and teenage pregnancy

The findings have shown almost all respondents (18 out of 20 respondents) had knowledge of unsafe sex and teenage pregnancy. Despite their knowledge, they still reported engaging in unprotected sexual behaviors and some of them ended up getting pregnant. This implies that, having knowledge alone doesn’t necessarily assure adolescents will wait or delay having sex but rather there are other factors that need to be addressed simultaneously with the issue of education in order to ensure ALWHA remain safe from getting pregnant, new HIV infections or other STI’s and even not transmit infections to their sexual partners.

Furthermore, when the adolescent were asked to relate the unsafe sex and teenage pregnant or unsafe sex and new HIV infections/other STI’s almost half (eight out of 20) of the respondents failed to understand the relationship. The explanation as to why they failed to give this relationship could be lack of repetitive or inadequate sexual and
reproductive health education. The findings were similar to the study conducted in Uganda by Chako et al., (2007), which found the lack of knowledge on dual protection of pregnancy and sexual transmitted infection among adolescent between 14 to 18 years attending secondary school. Fragmentation of health education which was delivered by two separate programs was mentioned as the reason of failing to understand the relationship.

6.4 Adolescent views and feelings about unsafe sex and teenage pregnant

In this study, both adolescent boys and girls considered teenage pregnant as something that occur in the community more often and that it was a usual thing. The findings were similar to the study conducted in Transkei, Eastern Cape (South Africa) which showed pregnant among unmarried teenage girls and woman as common and that it was morally acceptable (Makiwane, 1998). But the context of South Africa is different from that of ALWHA in Tanzania because in South Africa there was a social security and economic support system in place which propagated many adolescent girls to have interest of becoming pregnant. Falling pregnant was considered a positive event as they were enrolled in the child’s support grants program which provided financial support to all adolescent mothers (Kanku & Mash, 2010). On the contrary, there is no such a system in Tanzania.

On the other hand, one girl respondent who was pregnant at the time of interview considered teenage pregnant as something that often occurs in the community, but it was not usual because it was associated with stigma, shame and dishonor. The issue of stigma and discrimination was also raised by all respondents in the study. Furthermore, girls who had a history of pregnant reported to be stigmatized, blamed and over judged by community members including close relatives and neighbors. These findings correspond to the study by Leshabari et.al, which showed a significant proportion of close relatives who had no interest when information about the pregnancy was communicated by the teenagers (Leshabari, Mpangile, Kaaya, & Kihwele, 1994). This caused teenage girls to remain indoors for the whole period of their pregnancy or some of them were even shifted to another community where no one knew them and they stayed until they delivered their babies. In reality, it is not anticipated to see a pregnant
girl being stigmatized or discriminated in the community if the issue of teenage pregnancy was considered a usual thing.

Stigma creates a wall between pregnant adolescents and family members or other community members who may play as potential supporters during the pregnancy period. The effect of stigma may range from psychological, mental, physical and social even after child delivery. A social related stigma which is associated with teenage pregnancy has also been reported in the study done among low-income Caucasian, Mexican-American, and African-American pregnant adolescents aged below 18 years (Wiemann, Rickert, Berenson, & Volk, 2005). Being orphaned due to HIV/AIDS, living with HIV/AIDS and getting pregnant all together intensify the feeling of being stigmatized that I refer it as a triplet burden.

In connection to stigma and discrimination, adolescent girls considered it difficult to disclose their HIV status to their respective partners. They had feared that, disclosure would have ended their sexual relationship. This finding corresponds to the study conducted in Zambia among adolescents living with HIV/AIDS, which showed fear of abandonment by romantic or sexual partners as one of the reasons why adolescent never wanted to disclose their HIV status to their partners (Mburu et al., 2014). The fear to disclose HIV status to partners may pose more potential health consequences and a loophole for continuous HIV transmission within the community.

Adolescent girls showed desires to have children. The reasons were that, they wanted to prove to their friends, they were not infertile, envy of friends who had borne children and belief on untimely death that would have occurred to them due to their health condition. Because of that, a child was regarded as a mark to leave behind once they die. This finding was similar to the study conducted in Uganda among adolescent girls and boys not living with HIV where they reported, even if they were HIV positive they would have liked to have a child so as they leave behind a legacy or someone to be remembered by (Chacko, Kipp, Laing, & Kabagambe 2007). Another study done in the USA showed adolescents who expressed pregnancy desire or ambivalence were likely to be older, have been younger at first sex (Sipsma, Ickovics, Lewis, Ethier, & Kershaw,
These findings differ from the finding reported in this study, which had no relationship of age at first sex and desire to have pregnant. Some respondents who had their first sex at the younger age were the one who reported not want to have pregnant.

Girl respondents viewed teenage pregnant to be related to men’s punishment. They reported that, men punish the girls by impregnating and the punishment reported was not related to violence or rape. It was believed once girls get pregnant, they will stop to clinging or hanging out looking for men, “…once the man realizes she is pregnant, he will then abandon her; because he has already punished her”. The reasons for girls cling for men include financial gain and you find men are not interested in these girls. This could be the explanation as why men decide to impregnate a girl as the way of keeping distance with her.

Teenage pregnancy was viewed as a label or marker of being a prostitute or a slut. The Swahili word “Hujatulia” were used to imply any adolescent who have teenage pregnancy as a person who have multiple sexual partners. This finding correlates with the finding from the study done in Nigeria, which showed some adolescent s had difficulty with visiting hospitals except maternity homes run by missionaries in the communities because of the associated stigma. Even those who went for antenatal care did that very late because they feared to be labeled prostitute. Labeling stigma was in all aspects including hospitals, households, and churches (Agunbiade, Titilayo, & Opatola, 2009). In my study, none of the respondent reported to be labeled at the church or hospital, but it was reported more from the community and household level. Regardless of where it is exhibited, labeling pose a setback in harmoniously addressing teenage pregnant in the community.

Teenage pregnant was viewed by adolescents as an emergency act that occurred accidentally and it happened because of bad luck. It was considered that not all adolescent who had unsafe sex ended up getting pregnant. On my views, this was an argument given by respondents due to lack of comprehensive information regarding sexual and reproductive health. This view was biased to one side of pregnant and didn’t consider the issue of new HIV and other STI’s infection. There are many factors which
explain why someone engaged in unsafe sex and not become pregnant; for example, one being not in fertile period or being infertile.

Girls and boys had two opposing feelings toward teenage pregnant and unsafe sex. All girls with a history of pregnancies had reported wanting to keep their pregnancies regardless of any challenges they would have gone through whereas boys wanted the pregnancy terminated through abortion. The fear of responsibilities ahead, fear of punishment from parents or guardians of both boy and girl partner, beliefs of being not the one who caused it and fear of laws can be the explanation as to why boys denied their pregnancy. This complies with the study conducted in Soweto, South Africa among adolescents (boys and girls) and young people (women and men) with a history of pregnancy during their teenage years. It showed boys reported denying the pregnancy and those who showed to accept remained to be an ideal acceptance that never happened. The girls reported that, boys didn’t want to assume financial and social obligations of parenthood (Kaufman, de Wet, & Stadler, 2001).

A study from Zambia observed that boys were not willing to accept the pregnancy and they wanted it terminated through abortion (Webb, 2000). Another study conducted in the US among unmarried girls between 15 to 26 years showed girls who had abortions were primarily pushed by either boyfriends or parents (Hatcher, 1973). This also corresponds to the study conducted in Tanzania among teenage girls from 14 to 19 years who had an abortion, which showed men who were responsible for pregnant provided funds to terminate the pregnancy, but they were not concerned about the overall welfare of their pregnant partners including psychosocial support (Leshabari, Mpangile, Kaaya, & Kihwele, 1994). These results show that, girls experience almost similar challenges of men denying their pregnancy regardless of their geographical location. The idea of termination of pregnancy was also supported by girls without a history of pregnancy, who reported to have scared their friends carrying pregnant as dangerous and may lead to death and the best solution they suggested was abortion.

All 20 respondents reported teenage pregnancy as bad and a burden. It was mentioned as bad due to its associated consequences such as blames, stigma and discrimination,
whereas it was mentioned as the burden because adolescents who borne children had difficulties to care the children by themselves due to young age; they had to depend on their guardians or relatives for social support, whom also had other responsibilities or had also young children whom they were caring for. Also, the physical, physiological changes and psychological effect happening to any pregnant girl could also explain why respondents regarded it as a burden. These changes need a prepared mind of persons who are ready to have and care for pregnancy. Despite these views which show adolescents were aware of the consequences associated with teenage pregnancy, they had still engaged in unsafe sex which leads to teenage pregnancy. This sheds the light on the need of the best approach to address all potential factors which persuade teenagers engage in unsafe sex.

6.5 Contributing factors toward teenage pregnant and unsafe sex

It is not bad for an adolescent to develop and have sexual drives “mihemuko” but rather how they behave in this period of their life that pose a threat. In this research respondent mentioned the issue of sexual arousal “mihemuko” as the factor which propels young people engage in unsafe sex and ultimately get pregnant, new HIV infections and other STI’s.

It is known that, when a child is born, the hormonal system of the body is immature, including sexual hormones and it matures gradually as the age goes; and the lack of these hormones will be considered as abnormal. This corresponds to the study of Udry et al., (1985) which narrated sexual arousal as biological changes associated with puberty being accounted by hormonal factors. It showed levels of testosterone to be associated with sexual activities in boys, independent of secondary sexual development, whereas girl's sexual interests are associated with testosterone levels, suggesting that social factors may play a greater role in their coital behaviour (Udry, Billy, Morris, Groff, & Raj, 1985). Sexual arousal is accompanied with pleasure, posing a challenge to control it as the child is transformed into a reproductive mature adult. (Brooks-Gunn & Furstenberg, 1989). Adolescence is the stage in which boys and girls need committed parents, guardians, teachers and community members to be around them for help and support so that they cross this stage safely.
Apart from sexual arousal, foolish age was reported as another factor which pushes adolescents to engage in unsafe sex. It is a risk period in adolescent’s sexual development because of the interrelationship between sexual development, cognitive development, and emotional development. Teenagers at this age lack the cognitive and emotional maturity that is necessary to make wise and healthy decisions regarding their sexuality and are ill-prepared to cope with the consequences of sexual activity, hence referred to as foolish age (Oswalt, 2005). In addition, foolish age is the time in which adolescents may fail to control their sexual drives once they ensue. They differ from adults because they are not fully capable of understanding complex concepts and inability to relate between behavior and consequences (WHO, 2004). Because of that, adolescents easily give in to unprotected sex which leads to pregnancy, acquisition STI’s and new HIV infections among ALWHA.

Envy was reported to be the problem among adolescents coming from both poor families that cannot afford their daily requirements such as food and those coming from the well-off family. Many respondents reported failure of teenagers to be satisfied with family’s social, economic condition as one of the problems which many adolescents faced. Five girls, five boys and both focus group discussions reported teens were envious of other people’s lifestyle. They wanted to have money, good clothing, cell phones, and have outings like other adolescents who come from families that can afford or like other fellow adolescents who get financial and material support from men in exchange for sex.

To ensure a stable flow of support from men, girls planned to get pregnant as the binding factor in their relationship. Girls were reported to use male sexual partner as the means of financial and other psychosocial supports. This corresponds to the study, which showed financial benefits as major motivations for girls to engage in sexual relations and have pregnant with older partners as it helped them secure economic support, increasing status among one’s peers and secure long term opportunities (Luke, 2003). Another study showed girls using pregnancy as a strategy persuade their partners to marry them (Calves, Anne Emmanuelle, Gretchen, & Parfait, 1996; Rasch, Silberschmidt, McHumvu, & Mmary, 2000; Gregson et al., 2002). Entrapment is not the
best way for young girls to get married or solve economic and other psychosocial challenges. This is because some girls who use this method end up being abandoned by men who impregnate them because they are already married to another woman and have children. For men who have not married, they deny the pregnancy, leaving the girls stranded. Also, this method puts girls at greater risk of getting pregnant and infections such as HIV, gonorrhea and Syphilis.

It was observed 16 out of 20 respondents were orphaned (one or both parents were dead). Lack of parental care provides unlimited freedom among adolescents and based on their age, they are not mature enough to make concrete and right decisions about their lives. This can be one of the explanations as to why more than half of adolescents in this study reported to have started sexual activities. Other studies have shown that the presence parents who have good communication, good supervision, and show love and concern for their children increases the possibility of their children avoiding early sexual activity, pregnancy, and parenthood than those parents who do not (Miller, B. 1998; Blum & Rinehard, 1998; Ibid).

Despite of that, one respondent who reported engaging in sexual activities had both parents alive. Respondent pointed the weakness of many parents or guardian of not being open to them. Failure to be open poses a barrier for them to get the appropriate information. Instead, they are misinformed by information from peers and most may even live with myth information which may ruin their lives. These findings correspond to the studies done in Tanzania and South Africa, which showed that, even in the presence of parents in the family, there is a communication gap between ALWHA with their parents, guardians or teachers and they rarely discuss issues related to sexuality including biological, physical, and emotional manifestations (Namisi et al., 2009). Parental weakness could be attributed to culture or personal upbringing of parents or guardian which didn’t give a platform for parents to be open to their children. It has been the culture for most of African countries to let aunties or respectable person from a particular community to communicate certain information to the growing children especially those who attain puberty. That is not the case as the world is changing
whereby most of African countries adapt a foreign life style of the nuclear family and abandon the culture of extended families. For that reason, it is the responsibility of parents or guardian themselves to take the lead in educating their adolescent children.

Even if parents don’t have formal education, I believe there is no parent or guardian who doesn’t have at least a trace of information regarding unsafe sex and teenage pregnancy. Parents may play a pivotal role in the impartation of knowledge related to unsafe sex and teenage pregnancy to their children because they have access to meeting their children every day in their houses. Many studies except few have indicated parent-child closeness is associated with reduced adolescent pregnant risk through teens remaining sexually abstinent, postponing intercourse, having fewer sexual partners, or using contraception more consistently (Miller, 2002). Parents or guardians who assume full responsibility as supervisors, controllers or monitors increase connectedness of their growing children and researchers have documented the association between adolescents’ sexual behavior and parental warmth, support, parent-child closeness, or connectedness (Miller, Benson, & Galbraith, 2001). Family environment also provides a conducive environment that favors children and their parents/guardian discuss face-to-face in parent/guardian-child relationship.

Even though there were only two respondents among study participants who reported and experienced sexual coercion, it remains to be one of the methods used by its perpetrator to gain sex among young people. Studies show that, about one in every three adolescent girls has been sexually abused and seven out of ten adolescent boys and girls have experienced physical or sexual violence, abuse and exploitation continue to undermine opportunities for adolescents throughout Tanzania (UNICEF-Tanzania, 2011 pp 6). Studies also show that, 10% of girls who had first sex before age 15 years contribute highly to unwanted adolescent pregnancies (WHO, 2014). Adolescents are at a formative stage of social and physical development, nonconsensual sex at a young age can set patterns that damage long-term physical and mental health (Jejeebhoy, 2005). Bad enough, the perpetrators of coercive sex in Tanzania are rarely reported due social cultural factors within the community. These include; feelings of guilt, shame, fear of not being believed, or even being reprimanded for what has occurred. The structures
and systems to protect children are either weak, under resourced or non-existent (UNICEF-Tanzania, 2015).

6.6 Protective factors toward unsafe sex and teenage pregnancy

To address the issue of unsafe sex and teenage pregnancy among adolescents who were born and live with HIV, several factors were mentioned that would help teens from engaging into unsafe sex and ultimately getting teenage pregnant. These factors were reported with different perspectives among adolescents. There were those who said it was not possible for adolescent living with HIV to abstain from sex and their suggestions were based on how they could have sex without getting pregnant and new infection whereas others had focused on total abstinence. The factors were then categorized into three groups; (i) abstinence factors, (ii) non-abstinence factors and (iii) other factors.

6.6.1 Abstinence factors

Some study respondents believed in waiting or postponing of sex until they get married. Factors such as good friends (positive peer pressure), cling on religious teachings and get involved in physical exercises were believed to help adolescent to get rid of early sexual intercourse.

With respect to peer pressure, adolescent respondents recommended hanging out with friends with an outstanding good character as the way of impartation of those characters to other young people. This finding complies with a study conducted in Mwanza, Tanzania which showed peer influence accounts (positive peer pressure) could be used as a positive strategy for information and behaviour formation (Matasha et al., 1998). This is because; there is evidence that this is the only reliable approach in motivation for behaviour modification among adolescents (WHO, 2002).

Respondents mentioned fear of God as the useful way for young people get rid of unsafe sex. All religions forbid any form of sexual activities before marriage. According to Christian bible, engaging in sexual immorality is regarded as unholy and brings impurity (NIV). In Islam premarital sex also known as “Zina” is regarded as an
abomination (Al-Isra’ 17: 3 2). This complies with a review article which showed religion playing a social control role because it provides consequences for deviance, such as guilt, shame, public embarrassment, and the threat or expectation of divine punishment (Ellison & Levin, 1998). Another study showed knowledge and fear of deviance consequences provides motivation for conformity to religious doctrines. Moreover, devotion to a religion was related to delayed sexual intercourse, which in turn lowers the number of teenage pregnancies and its associated complications, lower HIV and other STI’s infections (Hardy & Raffaelli, 2003).

Physical activities and sports were reported as one of the methods which can help an adolescent abstain from sexual activities despite of being sexually active. This finding corresponds to the study which showed that, girls who participate in sports have lower chance of having teenage pregnancy, less frequency to engage in sexual intercourse, reduced number of sexual partners and delay to start sexual activities as compared to those who are not involved in sports (Wade, 1998). Another study found adolescents who are physically active and engage in sports are less likely to get involved in unhealthy behaviors such as risky sexual activities and substance abuse than those not involved in group sports. (DiscoveryHealth.com, 2003). Despite sports being included in Tanzanian school’s curriculum, the formal sports program should be kept in place from the grass root levels such as village and wards. Open spaces set for recreation and sports should be maintained despite rapid and fast urbanization which is happening accompanied by erections of houses even in areas not allowed doing so. Parents and guardians should provide time for their children to engage in sports and exercises.

### 6.6.2 Non-abstinence factors (Family planning)

It is the right of adolescents to have adequate information and access to all forms of contraceptive methods. Throughout the study, respondents mentioned the three types of contraceptive methods, known as the 3C’s. These include condom use, calendar method and coitus interruptus. Even though another family planning method such as pills, injectable contraceptives and intrauterine devices (IUD’s) were not mentioned, it doesn’t underestimate their importance; instead they are part of a comprehensive sexual and reproductive health package. Even though condom was mentioned by both
boys and girls, its use was hindered by men denials on using it. Effectivity of coitus interruptus is determined by a boy or men, whereby calendar method is determined by a girl and there must be a good communication between partners to ensure they are effective in preventing teenage pregnancy.

Despite an increasing use of contraception in sub-Saharan Africa (Garenne, 2008), adolescent group lag behind in its use. According to an article which summarized data from the Demographic and Health Surveys (DHS) reported by Blank and Way (1998), sub-Saharan Africa still has relatively few adolescent women who are currently using contraceptives. The same article also showed the proportion of women aged 15-19 who reported that they were using family planning methods ranged from 2 percent in Niger, Rwanda, and Senegal to 23 percent in Cameroon (Blank & Way, 1998).

A survey conducted in Tanzania showed among adolescent girls between 15 to 19 years, only 10.7% used at least some method of contraception (such as pills, injectables, implants, male condoms and lactation amenorrhea method (LAM))(NBS&ICF-Macro, 2011). Another study conducted in the United States of America showed the likelihood of HIV-positive youth use contraception, particularly condoms, than those who were either HIV-negative or unaware of their status (Belzer et al., 2001). A similar study conducted in Uganda comparing surveys of adolescents 15 to 19 years, it was found that among those who knew they were HIV-positive, almost half (49.6%) reported ever-use of contraception and 39.3% currently use of condoms. Despite the higher number of adolescent using condoms, the majority of adolescents living with HIV/AIDS still do not use condoms and even if they are using, it is not consistent due to factors such as accessibility and men denials. Also, the use of contraceptive in the United States cannot be compared to those in developing countries such as Tanzania due to significant differences in their health systems and culture.

### 6.6.3 Other factors

Apart from abstinence and non-abstinence factors; sexual and reproductive health education and resilience have significant contribution in reducing, stopping and some point to not increase risk sexual behaviors such as multiple sexual partners or involving
in unprotected sex (UNICEF-Malaysia, 2008). On the other hand, these factors contribute in reducing the extent adolescent children engage in unsafe sex, increasing abstinence and ultimately reduce teenage pregnancies and new HIV infections or other STI’s (UNICEF-Malaysia, 2008).

Respondents mentioned sexual and reproductive health education to both parents and adolescents as one of the important components for a growing child. Adolescent’s inadequate or lack of a comprehensive education regarding sexual and reproductive health pose a threat to health. There is a need to make more emphasis on the sexual and reproductive health education to children as it will help reduce sexual activities which may lead them to new HIV infection, teenage pregnancies and infecting others.

Their response align with a review of 73 studies by Kirby (2002) which showed a strong indication that, sex and HIV education delayed or reduced sexual intercourse among teens (Kirby, 2002). Also, the findings of this study are consistent with reviews of programs evaluated in other countries that have also found that sex and HIV education programs do not increase any measure of sexual activity (Grunseit, Kippax, Aggleton, Baldo, & Slutkin, 1997). The education should come from all angles where they interact most. This includes from the health care clinics, from school and from the households.

Moreover, even though one may have adequate information regarding sexual and reproductive health, lack of resilience may outweigh it. Study participants mentioned resilience as one of the important components which depend on positive interaction between children, guardians or parents, community and school teachers. Family socioeconomic status differs from one family to the other ranging from poor to wealthy families. Loss of parents, lack of school support, food, good shelter and clothing triggers stress among family members with more on the children. Living with HIV/AIDS and attaining puberty may exacerbate stresses among growing children. Regardless of all these life conditions, a child needs to be empowered on how he or she can be resilient with such family life condition. This will help a child shape the child’s aspirations for things which are not within their family’s ability and thus protecting them from being tempted for money or any other material things. Studies show that, a child who is
resilient is the one who work well, play well, love well, confident, accomplished and connected adults (Werner & Smith, 1992, 2001).

There are four attributes which characterize a resilient child (Benard, 1991, 1993, 1995). Social competence; the ability to elicit positive responses from others, thus establishing positive relationships with both adults and peers, Problem-solving skills; the ability to plan, based on seeing oneself in control and on being resourceful in seeking help from others, Autonomy; a sense of one’s own identity and an ability to act independently and exert some control over one’s environment and Sense of purpose and future; having goals, educational aspirations, persistence, hopefulness, and a sense of a bright future (Benard, 1991, 1993, 1995)

6.7 Strength and limitation of the study

6.7.1 Strength of the Study:
Qualitative study design was appropriate for the study. It helped to explore the understanding of adolescent on how they relate safe sex practice to prevention of teenage pregnancy, new HIV infections and other STI’s, how they understood prevention of teenage pregnancy, how they felt when their friends became pregnancy and how they viewed safe sex and teenage pregnancy. It also helped generates textual narrations of the feelings and views from the study participants. The method provided the platform for the voices of study participants to be heard as related to unsafe sex and teenage pregnancy because there are few purely qualitative studies on similar subject that have been conducted in this group. Being born and lived in Tanzania where Swahili is spoken as the national language, I was able to conduct all in-depth interviews and focus group discussions using “Swahili” language. The “Swahili” language was also well spoken and understood by study respondents. The language helped the researchers and respondents to adequate explore and express freely their understanding, views and feelings respectively.
Use of female research assistant created a gender balance of researchers which in turn it created comfortable atmosphere to all participants (boys or girls) who came for interviews to freely express themselves.

Use of private room ensured privacy and confidentiality and researchers used an open, sympathetic and trustworthy approach, free of moral judgments, was considered to all respondents (Silberschmidta & Raschb, 2001).

Triangulation of method and data helped to increase credibility and dependability of the study. The use of Intra-method and data triangulation helped to increase confidence in the ensuing findings (Kimchi, Polivka, & Stevenson, 1991; Bryman & Bell, 2003) and get diverse views about a topic for the purpose of validation (Kimchi, Polivka, & Stevenson, 1991; Bryman & Bell, 2003). Through phenomenological approach, the researcher was able to ‘intrude’ more into the study by making clarifications and linkages, relating the findings to preceding research, to individual experience or even to rational opinions, and developing tentative theories (Lester, 1999).

Using semi-structured guides for both in-depth interview and focused group discussion provided flexibility in questioning the participants depending on how they gave their answer. It was easy to probe more for deeper understanding (McLeod, 2014) by asking question not in the interview guide whenever found necessary to do so. Respondents were able to express themselves in details because the question they were asked was open ended. This complies with how the qualitative data should be collected.

FGD helped to collect a lot of information far more quickly and at less cost than individual interviews. Because of its flexibility, it helped to discover attitudes and opinions that were not revealed in a one to one interview and helped to validate findings which were obtained from individual interviews.
6.7.2 Limitation

I only explored the views of the ALWHA, not those of their parents or guardians, teachers or community members to see how they really feel or think and react to teenage pregnancies. The study is one sided.

Use of a research assistant with similar medical background as the researcher could have reduced the ability of how issues are viewed. If the assistant had been of another background such as sociology or education, then a different perspective interpretation of what was said and not said might have been different thereby adding a different dimension.

I used purposive sampling in getting the study participants which might have caused selection bias. We had to select only those whom we thought they would be able to express themselves and yield good rich descriptions or narratives. History of the researcher working at an organization also might have introduced selection bias of where to conduct the research. In Dar es Salaam, there are many CTC which provide services to PLWHA.

Based to flexibility nature of the study, there was also a possibility of researcher’s data collection bias. The researcher had to use probe questions in order to garner more information. Variation in probing questions, the way of talking and smile would have influenced the way the researcher wanted the answers from the study respondents.

FGD and IDI consumed longer time, providing bulky of data that also made analysis and interpretation time consuming. Longevity of data collection could have impaired consistency in data collection. Adequate time was set to ensure data were collected and analysed carefully and adequately.

Our presence (researcher and research assistant) would have affected responses from the study participants while collecting the data.
Even though the researcher tried to be reflexive throughout the study, doctor-patient relationship raised to some study respondents. It happened some respondents after the interview; asked questions related to their health. This shows that, some respondents looked at me as a doctor rather than being a researcher.

All respondents were living in the urban city of Dar-es-Salaam which is the most developed city in Tanzania. They may not be representative of HIV positive adolescents living in rural or peri-urban communities.
CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS

7.0 Introduction
This is the last chapter of the thesis. It includes the recommendations, suggestions on the areas for further research and conclusion.

7.1 Recommendations
Based on what was observed, the following recommendations should be considered.

- A Simplified and Comprehensive Sexual and Reproductive Health Education (SCSRHE) are required and it should be tailored to all levels of the health system. The education will help adolescent to have skills on how they can get rid of teenage pregnancies and sexual transmitted infections. Failure to relate unsafe sex and teenage pregnant in the study indicated insufficiency in knowledge related sexual and reproductive health. Moreover; social, economic and cultural factors need to be addressed all together with education to help adolescents make own informed choices regarding to sexual life.

- Adolescent centred sexual and reproductive health (SRH). ASRH will target adolescents from different aspects putting them at the centre. Teachers, healthcare workers, youth peer educators and religious educators need a program that will enable them to work together in providing ASRHE. This will remove ASRHE variations from different stakeholders. A survey should be conducted at community levels to assess the needs to be included in the curriculum for teaching adolescents and guardians/parents. The curriculum that will be developed should create a mechanism of getting feedback from parents once adolescents receive teachings in the class. Teachers will assess the feedback from parents and try to see how they can help children (adolescent centred sexual and reproductive health)

- Adolescents living with HIV/AIDS need a repetitive and comprehensive reproductive health education. The qualitative nature of this study helped to highlights the voices of some adolescent children living with HIV/AIDS in Dar-es-Salaam, Tanzania regarding unsafe sex and teenage pregnancy. It’s unless their voices are heard and
worked on; there will be no community which will be a free or community with reduced teenage pregnancies, sexual transmitted infections and their associated consequences among young people.

- Based on literatures, the basic education (primary education) in Tanzania is free of charge; but that is not enough. In order to address the out of school problem which is linked to harmful sexual behaviors among adolescents, I recommend the government to hasten its new 2025 national Education and Training Policy (ETP), which aim at extending free basic education from the current standard seven level to standard twelve level (form four). This will increase number of years spent in schools for all adolescents regardless of their social economic status.

- To conduct a special parental care awareness campaign by using all forms of media. This awareness will help to transform parents or guardians to become more responsible to their children they care or children from the community they live in.

- Because safe sex is related to the use of family planning method such as condom; education is mandatory to all adolescents. More emphasis should be tailored to ensure adolescents have adequate information regarding family planning services and ability to access the services whenever they need them.

7.2 Areas of further research

- To conduct a study that will explore the views and feelings of health care workers and parents or guardian about unsafe sex and teenage pregnancy among ALWHA.

- To conduct a study that will help to understand the potential barriers for parents or guardians to provide sex education to ALWHA in the family, how parents/guardian-child communication about sex is practised within the family.

- To conduct a study that will explore healthy sex life among ALWHA.
7.3 Conclusion

The current study has shed light on how adolescent born and living with HIV/AIDS articulated their understanding of unsafe sex and teenage pregnancy, how they view unsafe sex and teenage pregnant, what feelings they have toward teenage pregnancy and unsafe sex, the challenges associated with disclosure of HIV status to sexual partners, contributing factors toward teenage pregnant and unsafe sex, protective factors toward unsafe sex and teenage pregnancy.

The study found some ALWHA engage in unsafe sexual activities as a mean of survival, a mean to support their families, and their lives are complicated. They need a multidisciplinary approach whereby all stakeholders (ASRH experts, doctors, nurses, counselors, parents/guardians, school teachers, religious leaders and others) need to work together. SRH among ALWHA should be addressed at both group and individual level. Group SRH education enable adolescents learn from each other (peer learning) and it is a simple way of delivering information whereas individual SRH education focus on one adolescent at a time as each adolescent differ from the other in term of family, social, economic and religious history.

Furthermore, all levels of health system should deliver a Simplified and Comprehensive Sexual and Reproductive Health Education (SCSRHE), a survey should be conducted at community levels to assess the needs to be included in the curriculum for teaching adolescents and guardians/parents, have special parental care awareness campaign by using all forms of media. Even though the finding of this study cannot be generalizable, these findings can be used in areas with similar setting.
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APPENDICES

APPENDIX I: Ethical clearance letter from the Regional Committees for Medical and Health Research Ethics (REC), Norway

Reg.nr: 2014/068

Vår referanse: 2014/068

Vår dato: 24.06.2014

Dens referanse: Dens dato: 13.05.2014

Johanne Sundby
Universitet i Oslo

2014/068 Graviditeter hos unge HIV smittede jenter i Tanzania

Vi viser til søknad om forhåndsgodkjenning av ovennevnte forskningsprosjekt. Søknaden ble behandlet av Regional komité for medicinsk og helsefaglig forskningsetikk (REC sør-est) i møtet 12.06.2014. Vurderingen er gjort med hjemmel i helseforskningsloven § 10, jf. forskningsetikklovens § 4.

Forskningsansvarlig: University of Oslo
Projektføder: Johanne Sundby

Projektbeskrivelse

Søknaden gjelder et prosjekt som skal gjennomføres i Tanzania.


Det skal foretas dybdestyv jarer og fokusgruppe intervjuer av ungdom som aldri har vært gravid, er gravide eller som har vært gravide for å avdekkes deres erfaring med temaet.


Komiteens vurdering

Prosjektet er lagt opp for å kunne vite mer om ungdommens kunnskap, holdninger og praksis angående sikker/risikofylt sex og graviditet. Dette er tema som absolutt er viktige for folkshelse og de langtidsiktige målsettingene kan sies å være helserelaterede. Komiteen oppfatter imidlertid prosjektet som mer samfunnssaglig og pedagogisk enn medisinsk, selv om det er helserelatert. Forskningsprosjektet faller derfor utenfor helseforskningslovens virkeområde og kan dermed gjennomføres uten godkjenning av REC innenfor de ordninger som gjelder for slike undersøkelser i Tanzania, for eksempel med hensyn til regler for tushetsplikt og personvern.

Vedtak

Prosjektet faller utenfor helseforskningslovens virkeområde, jf. § 2, og kan derfor gjennomføres uten...
APPENDIX II: Approval from the Norwegian social science data services

Norsk samfunnsvitenskapelig datatjeneste AS
NORWEGIAN SOCIAL SCIENCE DATA SERVICES

Johanne Sundby
Institutt for helse og samfunn Universitetet i Oslo
Postboks 1130 Blindern
0318 OSLO

Vår dato: 18.05.2015
Vår ref: 42769/3/MH/RH
Dette dato:
Dette ref:

TILBAKEEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 12.3.2015. All nødvendig informasjon om prosjektet forelå 30.4.15. Meldingen gjelder prosjektet:

42769 Knowledge, Attitude and Perception about Unsafe Sex and teenage Pregnancy: Qualitative study among Adolescents living with HIV/AIDS in Dar es salaam, Tanzania.

Daglig ansvarlig Student
Johanne Sundby
Alick Kayange

Personvernombudet har vurdert prosjektet på bakgrunn av den informasjon vi har fått om gjennomføringen, og finner at behandlingen av personopplysninger er omfattet av meldeplikten iht. personopplysningsloven § 7-27.

Personvernombudet registrerer at datainnsamlingen startet opp 1.10.2014. I brev dateret 6.3.2015 skriver Institutt for helse og samfunn at flere prosjekt ved masterprogrammet «International Community Health (ICH)» ved en feilaktig innstillinger ikke har blitt meldt til NSD etter at de ble vurdert til å falle utenfor helseforskningsloven av REK, og at det nå ryddes opp i dette.

Personvernombudet finner det positivt at instituttet har oppdaget avvikene og nå rydder opp. Vi anbefaler at instituttet fremover gir god opplevelse til forskare, studenter og veiledere om at meldeplikten til personvernombudet gjelder dersom det skal behandles personopplysninger til forskningsformål som ikke omfattes av helseforskningsloven. Prosjekter som omfattes av meldeplikten skal meldes senest 30 dager før oppstart. I prosjekter som foretar elektronisk behandling av sensitive personopplysninger skal det også foreligge tilskrivning fra personvernombudet eller konsesjon fra Datatilsynet før behandlingen tar til. Brudd på meldeplikten innebærer at det har vært foretatt behandling av personopplysninger uten gyldig behandlingsgrunnlag i henhold til personopplysningslovens bestemmelser.

Brudd på meldeplikten innebærer samtidig et brudd på Universitetet i Oslo sine prosedyrer for interkontroll med personvern i forskning. Det vises til avtale mellom Universitetet i Oslo og
Personvernombudet ved NSD. Personvernombudets forhåndskontroll av meldepliktige forskningsprosjekter inngår som en viktig del av den lovplagte internkontrollen Universitetet i Oslo gjennomført med sin behandling av personopplysninger. I avtalen mellom NSD og Universitetet i Oslo fremgår det at prosjekter som skal foreta behandling av personopplysninger skal meldes i god tid før innsamling og registrering tar til.

Prosjektvurdering


Personvernombudet finner derfor at personopplysninger kan behandles med hjemmel i personopplysningsloven § 8 første ledd og § 9 a) (samtykke).

Data ble samlet inn ved lydoptakt av intervju. Det behandles sensitive personopplysninger om seksuelle forhold og helseforhold.

Det er ikke opplyst om hvilke type oppsakssutstyr eller datamaskin som benyttes for behandling av personopplysninger. Personvernombudet legger til grunn at student og veileder har etterfulgt og fortsatt etterfølg. Universitetet i Oslo sine interne rutiner for data sikkerhet. Vi minner om at forskningsdata som inneholder personopplysninger som hovedregel bør lagres på Universitetet i Oslo i forskningsserver. Lagring på andre medier (som privat pc, mobiltelefon, minneplik-ske og) er mindre sikret og må avvikles med behandlingsansvarlig institusjon, og personopplysningsene bør kryperes.

Forventet prosjektstlutt er 30.05.2015. Ifølge prosjektmeldingen skal innsamlede opplysninger da anonymiseres. Anonymisering innebærer å bearbeide datamaterialet slik at ingen enkeltpersoner kan gjenkjenne. Det gjøres ved å:
- slette direkte personopplysninger (som navn/koblingsnøkkel)
- slette/omskrive indirekte personopplysninger (identifiserende sammenstilling av bakgrunnsoptilskriving som f.eks. bosted/arbeidssted, alder og kjønn)

Avslutning
Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med personvernombudet, samt personopplysningsloven med forskrifter.


Personvernombudet vil ved prosjektets avslutning, 30.05.2015, rette en henvendelse angående status for behandlingen av personopplysninger.
Ta gjerne kontakt dersom noe er ukjent.

Vennlig hilsen

Katrine Utaaker Segadal
Marianne Høgetveit Myhren

Kopi:
Institutt for helse og samfunn, Universitetet i Oslo
Alick Kayange, Olav M Troviks vei 10, H414, 0864 OSLO
APPENDIX III: Support letter from the University of Oslo, institute of Health and Society (Faculty of medicine)

To whom it may concern

Date: 8th July 2014
Your ref: 
Our ref: Line Law

Confirmation letter for Mr. Alick Austine Kayange
This is to confirm that Mr. Alick Austine Kayange, born 29 February 1986, has enrolled as a fulltime master student at the MPhil programme in International Community Health, at the University of Oslo. He was admitted in August 2013, and is expected to complete his degree by the end of June 2015.

Mr. Kayange has followed a normal study programme and has completed his examinations according to study plan. He is a hardworking and dedicated student. As part of the master thesis the students are required to conduct independent research in the 3rd semester. Mr. Kayange has chosen to do his field work in Tanzania, Institute of Health and Society fully support his chosen research project. Mr. Kayange will return to Norway in the 4th semester for analysis and write up his master thesis.

For any questions or need of clarification, please contact us.

Sincerely yours

Line Law
Project coordinator
University of Oslo, Norway
Phone: +47 22 85 06 25
Email: line.law@medisin.uio.no
APPENDIX IV: Ethical clearance letter from the National Institute for Medical Research (NIMR), Tanzania

THE UNITED REPUBLIC OF TANZANIA

National Institute for Medical Research
P.O. Box 9653
Dar es Salaam
Tel: 255 22 2121408/2121390
Fax: 255 22 2121380/2121360
E-mail: headquarters@nimr.or.tz
NIMR/HR/8/3 Vol. IX/1430

Ministry of Health and Social Welfare
P.O. Box 9083
Dar es Salaam
Tel: 255 22 2120362.7
Fax: 255 22 2110986

30th September 2014

Dr Alick A Kayange
PASADA
P.O Box 90225, DAR ES SALAAM,
Tanzania

CLEARANCE CERTIFICATE FOR CONDUCTING MEDICAL RESEARCH IN TANZANIA

This is to certify that the research entitled: Knowledge, Attitude, and Perception about Unsafe Sex and Pregnancy: Qualitative Study Among Adolescent Living with HIV/AIDS in Dar es Salaam, Tanzania, (Kayange A A et al) 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 offense and shall be liable on conviction to a fine, NIMR, Act No. 23 of 1999, PART III Section 10(2).

Approval is for one year: 30th September 2014 to 29th September 2015.

Name: Dr Mwenecele N Malecela

Signature

CHAIRPERSON MEDICAL RESEARCH COORDINATING COMMITTEE

CC: RMO
DED
DMO

Name: Dr Donau Mmanando

Signature

CHIEF MEDICAL OFFICER MINISTRY OF HEALTH, SOCIAL WELFARE
APPENDIX V: Letter of permission to conduct health research activities in Temeke municipality

Temeke Municipal Council

P.O.Box. 45232
Tel: 2850142

The Medical Office, Ye

Temeke-

REF: PERMISSION TO CONDUCT HEALTH RESEARCH ACTIVITIES IN TEMEKE MUNICIPALITY.

Please refer to the above heading.
Permission has been granted to Mr./Mrs./Ms./Prof./Dr. Alick Kayange
From (Institution) PASGAUTUC Address PO BOX 70228
Tel. No. 314561324 to collect data for research work at your institution.

The research title is "Knowledge, attitude and perception about unsafe sex and pregnancy: Qualitative study among adolescents of living with HIV/AIDS in Dar es Salaam, Tanzania."
S/he has submitted a proposal for the mentioned study to the MMOH Office as a pre-condition prior to authorisation.

The researcher has been instructed and agreed to submit the research progress reports and final results to the MMOH prior to any publications.

Data collection will start from 0.1/11/2014 to 30.1/2015
Sample size 35 people

This research work is part of academic fulfilment for Diploma/Advanced Diploma/Degree/Master/PhD /its part of the ongoing research in your institution.

I am kindly requesting you to give him/her the necessary assistance so as to accomplish this task timely.

Yours Sincerely

Dr. M. Mashomba
For, Temeke Municipal Medical Officer of Health

Copy 1. ..................................................................
2. ..................................................................
APPENDIX VI: Letter of permission to conduct health research activities at PASADA.

Ref. No./01/14

6th October 2014

Dr Alick A. Kayange
P.O. BOX 70225,
DAR ES SALAAM

RE: CLEARANCE CERTIFICATE FOR CONDUCTING MEDICAL RESEARCH IN TANZANIA IN RESPECT OF DR. ALICK A. KAYANGE

I acknowledge receipt of your letter dated 30th September 2014 on Clearance Certificate for conducting medical research in Tanzania.

PASADA wishes to inform you that, your request to conduct a research on the “Knowledge, Attitude, and Perception about Unsafe Sex and Pregnancy: Qualitative Study Among Adolescent Living with HIV/AIDS in Dar es Salaam, Tanzania, (Kayange AA et al)” has been accepted and you are required to observe all the requirements as stipulated in the PASADA’s Ethical Guidelines Policy For Conducting Research Involving Staff, Volunteers And Clients.

PASADA hopes that your research findings will be shared with the organization and there is going to be a mutual benefit gained out of the intended research.

Yours truly,

Leonard Richard
HRM

Copies: District Medical Officer Temeke (Research Unit - for Ethical clearance)
Executive Director – PASADA
Medical Director – PASADA
APPENDIX VII: Request for participation in a research project (In-depth interview)

a) Background:
I am a master student from the University of Oslo, Norway. I am planning to carry out field work in relation with masters in International community health study with the title “Knowledge, attitude and perception about unsafe sex and pregnancy: Qualitative study among adolescent living with HIV/AIDS in Dar es Salaam, Tanzania”. You are kindly invited to take part in the study. Participation in this study is voluntary and you have the right to accept or deny taking part in the study. You also have the right to understand and know what is going to take place in the study and ultimately make the informed decision of your participation.

b) Purpose of the study
This is the master research project which will enable me graduate in masters in international community health. More information related to unsafe sex and pregnancy among adolescent living with HIV/AIDS in Dar es Salaam, Tanzania is required and you are the right candidate to provide this information.

c) What is taking place in the research?
You will be involved in an in-depth interview in relation to the topic mentioned above. The interview will last for about an hour and it will be conducted in “Kiswahili”. I will be with my research assistant and together will guide you through the discussion. I (He/she) will be asking you open ended questions related to safe sex and pregnancy. So that I don’t miss any important information during our discussion, I ask your permission so that I take notes and tape record the discussion.

d) Potential benefits, harm and confidentiality by taking part in the study
There are no instantaneous benefits to you by participating in this research. The information you will share will be helpful for future development of programs addressing the issue of teenage pregnancy. This in turn will benefit the whole society of Tanzanians and the world at large. There are no any financial benefits to you; however you will be reimbursed travel costs incurred during the course of study. As the topic focuses on
sensitive issues related to safe sex, pregnancy and HIV/AIDS, there might be some of the topics that will make you uncomfortable and disturb your emotions. You have the right not respond to those topic/questions and you may decide not continue with the interview at any time you feel doing so. All information you will share during the interview will remain confidential and be used for research purpose only. The data will be processed anonymously. Only the researcher and the research assistant will have access to list of names and audio recorded materials which will be deleted when the study finishes. However, the results will be documented in my desertion in completion of the master program and none of your identity will appear in the dissertation.

e) Voluntary participation
You have been selected because you attend care and treatment at PASADA. Participation in the study is voluntary and your participation will not affect the services you get even if you withdraw from the study at any time. And if in future you need further clarifications or have any questions, you may contact the researcher at the following contacts;
Alick Austine Kayange
P.O.Box 65597
Dar es Salaam, Tanzania
Phone: +255754098266, E-mail: Kayangealick@yahoo.com
Or
Alick Austine Kayange
Institute of Health and Society, Faculty of Medicine
Post Boks 1130 Blindern, 0370 Oslo, Norway
Phone: +47 96742244, E-mail: a.a.kayange@studmed.uio.no

&

Supervisor’s contacts
Professor Johanne Sundby
University of Oslo, Department of Community Medicine
Postboks 1130, Blindern 0318 OSLO
Email johanne.sundby@medisin.uio.no
Phone +47-22850598, Fax +47-22850590
**Consent for participation in the study (In-depth interview).**
I have understood all information given in this form and therefore; I am willing to participate in the study.

-----------------------------------
(Study participant’s name, signature and date)

I confirm that I have given information about the study.

-----------------------------------
(Researcher’s/ research assistant’s name, signature and date)

**APPENDIX VIII: Request for participation in a research project (Focus group discussion)**

**a) Background:**
I am a master student from the University of Oslo, Norway. I am planning to carry out field work in relation with masters in International community health study with the title “Knowledge, attitude and perception about unsafe sex and pregnancy: Qualitative study among adolescent living with HIV/AIDS in Dar es salaam, Tanzania”. You are kindly invited to take part in the study. Participation in this study is voluntary and you have the right to accept or deny taking part in the study. You also have the right to understand and know what is going to take place in the study and ultimately make the informed decision of your participation.
b) Purpose of the study
This study is the master research project which will enable me graduate in masters in international community health. More information related to unsafe sex and pregnancy among adolescent living with HIV/AIDS in Dar es salaam, Tanzania is required and you are the right candidate to provide this information.

c) What is taking place in the research?
You will be involved in a focus group discussion in relation to the topic mentioned above. The discussion will involve 6 to 8 study participants of similar age group and gender lasting for about two hours. It will be conducted in “Kiswahili” and break will be given whenever necessary. I will be with my research assistant and together will guide you through the discussion. I (He/she) will be asking you open ended questions related to safe sex and pregnancy. So that I don’t miss any important information during our discussion, I ask your permission so that i take notes and tape record the discussion.

d) Potential benefits, harm and confidentiality by taking part in the study
There are no instantaneous benefits to you by participating in this research focus group discussion. The information you will share will be helpful for future development of programs addressing the issue of teenage pregnancy. This in turn will benefit the whole society of Tanzanians and the world at large. There are no any financial benefits to you; however you will be reimbursed travel costs incurred during the course of study. As the topic focuses on sensitive issues related to safe sex, pregnancy and HIV/AIDS; there might be some of the topics that will make you uncomfortable and disturb your emotions. You have the right not respond to those topic/questions, decide not contribute in the group discussion and you may even decide not continue with the discussion at any time you feel doing so.
All the information you will share during the interview will remain confidential and be used for research purpose only. The data will be processed anonymously. Only the researcher and the research assistant will have access to list of names and audio recorded materials which will be deleted after the study finishes. However, the results
will be documented in my desertion in completion of the master program and none of your identity will appear in the dissertation.

e) Voluntary participation
You have been selected because you attend care and treatment at PASADA. Participation in the study is voluntary and your participation will not affect the services you get even if you withdraw from the study at any time. And if in future you need further clarifications or have any questions, you may contact the researcher at the following contacts;

Alick Austine Kayange
P.O.Box 65597
Dar es Salaam, Tanzania
Phone: +255754098266, E-mail: Kayangealick@yahoo.com

Or

Alick Austine Kayange
Institute of Health and Society, Faculty of Medicine
Post Boks 1130 Blindern, 0370 Oslo, Norway
Phone: +47 96742244, E-mail: a.a.kayange@studmed.uio.no
&

Supervisor’s contacts
Professor Johanne Sundby
University of Oslo, Department of Community Medicine
Postboks 1130, Blindern 0318 OSLO
Email johanne.sundby@medisin.uio.no
Phone +47-22850598, Fax +47-22850590

Consent for participation in the study (Focus group discussion)
I have understood all information given in this form and therefore; I am willing to participate in the study.
APPENDIX IX: Request for participation in a research project (Parent/Guardian)

a) Background:
I am a master student from the University of Oslo, Norway. I am planning to carry out field work in relation with masters in International community health study with the title “Knowledge, attitude and perception about unsafe sex and pregnancy: Qualitative study among adolescent living with HIV/AIDS in Dar es salaam, Tanzania”. I kindly request the permission for your child to take part in the study. Participation in this study is voluntary and you have the right to accept or deny your child taking part in the study. You also have the right to understand and know what is going to take place in the study and ultimately make the informed decision of your child’s participation.

b) Purpose of the study
This study is the master research project which will enable me graduate in masters in international community health. More information related to unsafe sex and pregnancy among adolescent living with HIV/AIDS in Dar es salaam, Tanzania is required and she/he is the right candidate to provide this information.

c) What is taking place in the research?
Your child will be involved in an in-depth interview in relation to the topic mentioned above. The interview will last for about an hour and it will be conducted in “Kiswahili”. I will be with my research assistant and together will guide your child through the discussion. I (He/she) will be asking him/her open ended questions related to safe sex
and pregnancy. So that I don’t miss any important information during our discussion, I ask your permission so that I take notes and tape record the discussion.

d) Potential benefits, harm and confidentiality by taking part in the study
There are no instantaneous benefits to your child by participating in this research. The information he/she will share will be helpful for future development of programs addressing the issue of teenage pregnancy. This in turn will benefit the whole society of Tanzanians and the world at large. There are no any financial benefits to him/her; however he/she will be reimbursed travel costs incurred during the course of study. As the topic focuses on sensitive issues related to safe sex, pregnancy and HIV/AIDS; there might be some of the topics that will make him/her uncomfortable and disturb his/her emotions. He/she have the right not respond to those topic/questions and he/she may decide not continue with the interview at any time he/she feel doing so. All information he/she will share during the interview will remain confidential and be used for research purpose only. The data will be processed anonymously. Only the researcher and the research assistant will have access to list of names and audio recorded materials which will be deleted when the study finishes. However, the results will be documented in my dissertation in completion of the master program and none of his/her identity will appear in the dissertation.

e) Voluntary participation
He/she have been selected because she/he attends care and treatment at PASADA. Participation in the study is voluntary and his/her participation will not affect the services he/she get even if he/she withdraws from the study at any time. And if in future you/he/she need further clarifications or have any questions, the researcher can be contacted through the following address.;
Alick Austine Kayange
P.O.Box 65597
Dar es Salaam, Tanzania
Phone: +255754098266, E-mail: Kayangealick@yahoo.com
Or
Alick Austine Kayange
Institute of Health and Society, Faculty of Medicine
Post Boks 1130 Blindern, 0370 Oslo, Norway
Phone: +47 96742244, E-mail: a.a.kayange@studmed.uio.no

&

**Supervisor’s contacts**
Professor Johanne Sundby
University of Oslo, Department of Community Medicine
Postboks 1130, Blindern 0318 OSLO
Email johanne.sundby@medisin.uio.no
Phone + 47 22 85 05 98, Fax + 47 22 85 05 90

**Consent for participation in the study (Parent/Guardian)**
I have understood all information given and therefore; I am willing my child to participate
in the study.

----------------------------------------------------------------------------------------------------------------
(Parent’s/Guardian’s name, signature and date)

I confirm that I have given information about the study.

----------------------------------------------------------------------------------------------------------------
(Signed, role in the study, date)
APPENDIX X: In-depth interviews guide for non-pregnant adolescent girls or boys between 15-19 years

Introductory part:
Researcher or/and research assistant greets and invite the study participants to the study. Researcher or/and research assistant make a brief introduction about themselves to the study participant (Names and reason of conducting the study). Researcher or/and research assistant provide consent form to the study participants, respond to any question (s) they have and collect back the signed consent form. Researcher or/and research assistant ask permission to record the interview through audio tape recording and notes taking

Theme 1: Knowledge.
   i. What do you understand about safe sex? Can you explain safe sex methods you know?
   ii. Which safe sex method you think is the best method? Can you explain why?
   iii. Do you remember when your first time to have sexual intercourse was? How do you practices safe sex?
   iv. What do you understand about teenage pregnancy? Can you explain the relationship between safe sex practice and prevention of teenage pregnancy?
   v. Can you explain the relationship between safe sex practice and prevention of new HIV infection and STI's? Can you tell me what are the importance of safe sex practices

Theme 2: Attitude:
   i. How do you feel about teenage pregnant? What opinion can you give when your friend disclose her pregnancy status to you?
   ii. What might be the reason caused her to become pregnant? Why do you think your friend became pregnant? How your friends look at you when you refrain from doing sex?

Theme 3: Perception.
   i. Is it normal thing to see a teenage pregnant girl in your community?
   ii. What are your views about teenage pregnancy? Can you explain what will you do in case you (your girlfriend) get pregnancy?

APPENDIX XI: In-depth interviews guide for non-pregnant adolescent girls or boys between 15-19 years

Introductory part:
Researcher or/and research assistant greets and invite the study participants to the study. Researcher or/and research assistant make a brief introduction about themselves to the study participant (Names and reason of conducting the study). Researcher or/and research assistant provide consent form to the study participants, respond to any question (s) they have and collect back the signed consent form. Researcher or/and research assistant ask permission to record the interview through audio tape recording and notes taking

Theme 1: Knowledge.
vi. What do you understand about safe sex? Can you explain safe sex methods you know?
vii. Which safe sex method you think is the best method? Can you explain why?
viii. Do you remember when your first time to have sexual intercourse was? How do you practices safe sex?
ix. What do you understand about teenage pregnancy? Can you explain the relationship between safe sex practice and prevention of teenage pregnancy?
x. Can you explain the relationship between safe sex practice and prevention of new HIV infection and STI’s? Can you tell me what are the importance of safe sex practices

Theme 2: Attitude:
iii. How do you feel about teenage pregnant? What opinion can you give when your friend disclose her pregnancy status to you?
iv. What might be the reason caused her to become pregnant? Why do you think your friend became pregnant? How your friends look at you when you refrain from doing sex?
Theme 3: Perception.

iv. Is it normal thing to see a teenage pregnant girl in your community?

v. What are your views about teenage pregnancy? Can you explain what will you do in case you (your girlfriend) get pregnancy?


APPENDIX XII: In-depth interviews guide for pregnant adolescent girls between 15-19 years

Introductory part:
Researchers or research assistant greets and invite the study participants to the study. Researchers or research assistant make a brief introduction about themselves to the study participant (Names and reason of conducting the study). Researchers or research assistant provide consent form to the study participants, respond to any question(s) they have and collect back the signed consent form. Researchers or research assistant ask permission to record the interview through audio tape recording and notes taking.

Themes:

i. What do you understand about safe sex? Can you explain safe sex methods you know?

ii. Which safe sex method you think is the best method? Can you explain why?

iii. Do you remember when your first time to have sexual intercourse was? Can you explain how?

iv. Can you explain the relationship between safe sex practice and prevention of teenage pregnancy?

v. Can you explain the relationship between safe sex practice and prevention of new HIV infection and STI’s? Can you tell me what are the importance of safe sex practices?

vi. How do you feel being pregnant? Can you explain how did you react when you realized you were pregnant?
vii. How do friends look at you after realizing you are pregnant?
viii. Is it normal thing to see a teenage pregnant girl in your community?
ix. What are your views about teenage pregnancy?

APPENDIX XIII: In-depth interviews guide for women between 19-25 years who were pregnant at teenage stage

Introductory part:
Researcher or/and research assistant greets and invite the study participants to the study. Researcher or/and research assistant make a brief introduction about themselves to the study participant (Names and reason of conducting the study). Researcher or/and research assistant provide consent form to the study participants, respond to any question (s) they have and collect back the signed consent form. Researcher or/and research assistant ask permission to record the interview through audio tape recording and notes taking

Themes:
i. What do you understand about safe sex? Can you explain safe sex methods you know?
ii. Which safe sex method you think is the best method? Can you explain why?
iii. Do you remember when your first time to have sexual intercourse was? How do you practice safe sex?
iv. Can you explain the relationship between safe sex practice and prevention of teenage pregnancy?
v. Can you explain the relationship between safe sex practice and prevention of new HIV infection and STI's? Can you tell me what are the importance of safe sex practices
vi. How did you feel after realizing you were pregnant? Can you explain how did you react when you realized you were pregnant?
vii. How did friends look at you after realizing you were pregnant?
viii. Is it normal thing to see a teenage pregnant girl in your community?
ix. What are your views about teenage pregnancy?

APPENDIX XIV: Focus group discussion (FGD) guide for non-pregnant adolescent girls (or boys) between 15-19yrs

**Introductory part:**
Researcher or/and research assistant greets and invite the study participants to the study. Researcher or/and research assistant make a brief introduction about themselves to the study participant (Names and reason of conducting the study). Researcher or/and research assistant ask for oral consent to the study participants, respond to any question (s) they have and collect back/ confirm the signed consent form. Researcher or/and research assistant ask permission to record the interview through audio tape recording and notes taking

**Themes:**
i. What do you understand about safe sex? Can you explain safe sex methods you know?
ii. Can you explain the time should a young girl (boy) start sex?
iii. Which safe sex method you think is the best method? Can you explain why?
iv. What do you understand about teenage pregnancy? Can you explain the relationship between safe sex practice and prevention of teenage pregnancy?
v. Can you explain the relationship between safe sex practice and prevention of new HIV infection and STI's? Can you tell me what are the importance of safe sex practices
vi. How do you feel about teen pregnant? What opinion can you give when your friend disclose her pregnancy to you?
vii. What might be the reason caused her to become pregnant? Why do you think your friend became pregnant? How your friends look at you when you refrain from doing sex?
viii. Is it normal thing to see a teenage pregnant girl in your community?
ix. What are your views about teenage pregnancy?
x. Can you explain what will you do in case you (your girlfriend) get pregnancy?

APPENDIX XV: Focus group discussion (FGD) guide for women between 20-25 years

Introductory part:
Researcher or/and research assistant greets and invite the study participants to the study. Researcher or/and research assistant make a brief introduction about themselves to the study participant (Names and reason of conducting the study). Researcher or/and research assistant provide an oral consent to the study participants, respond to any question (s) they have. Researcher or/and research assistant ask permission to record the discussion (s) through audio tape recording and notes taking.

Themes:

i. What do you understand about safe sex?
ii. Can you explain safe sex methods you know?
iii. Can you explain the right time should a young girl (boy) start sex?
iv. Which safe sex method you think is the best method in prevention of Pregnancy? Can you explain why?
v. Do you remember when your first time to have sexual intercourse was? Was it intentional? Can you explain further?
vi. Do you think it is easy for a teenager to practice safe sex? Explain your experience.
vii. What do you understand about teenage pregnancy?
viii. How do you feel about teenager becoming pregnant?
ix. Is it normal thing to see a teenage pregnant girl in your community?
x. What are your views about teenage pregnancy?
xi. Can you explain the relationship between safe sex practice and prevention of teenage pregnancy?
xii. Can you explain the relationship between safe sex practice and prevention of new HIV infection and STI's?

APPENDIX XVI: Translated consent form in “swahili”

MWALIKO KUSHIRIKI KATIKA UTAFITI (Mahojiano ya Kina).

a) Utangulizi
Mimi ni mwanafunzi kutoka Chuo Kikuu cha Oslo, Norway. Ninatarajia kufanya utafiti ikiwa ni sehemu ya kukamilisha masomo yangu ya shahada ya uzamili. Lengo la utafiti huu ni kuangalia "Maarifa, Tabia na Mtazamo kuhusu ngono salama na mimba za utotoni kwa vijana walio katika umri-balehe wanaoishi na maambukizi ya VVU / UKIMWI katika mji wa Dar es salaam, Tanzania". Ninaomba ushriki wako katika utafiti huu. Kushiriki katika utafiti huu ni hiari na una haki ya kukubali au kukataa kushiriki katika utafiti. Pia una haki ya kuelewa na kujua nini kinakwenda kufanyika katika utafiti na hatimaye kufanya maamuzi sahihi ya ushiriki wako.

b) Madhumuni ya utafiti.
Huu ni utafiti ambao utawawezesha mimi kukamilisha na kuhitimu masomo yangu ya shahada ya uzamili katika chuo kikuu cha Oslo. Lengo la utafiti huu ni kuangalia "Maarifa, Tabia na Mtazamo kuhusu ngono salama na mimba za utotoni kwa vijana walio katika umri-balehe wanaoishi na maambukizi ya VVU / UKIMWI katika mji wa Dar es salaam, Tanzania". Wewe ni mtu muhimu sana kuwezesha kupatikana kwa taarifa hizi muhimu.

c) Je, ni mambo yepi yatakayofanyika katika utafiti huu?
Utashiriki katika mahojiano na kina kuhusiana na mada zilizotajwa hapo juu. Mahojiano yatadumu kwa takribani saa moja na yatafanyika katika lugha ya "Kiswahili". Nitakuwa pamoja mtafiti msaidizi na kwa pamoja tutaendesha majadiliiano. Mimi (au mtafiti msaidizi) nitakuuliza (atakuuliza) maswali ya wazi yanayokuswa ngono salama na mimba za utotoni. Sio kila ambacho kitazungumzwa kitaandikwa kwa mara moja, hivyo ili kuweza kupata kila taarifa muhimu itakayotolewa wakati wa majadiliiano yetu, naomba ruhusa yako ili mimi kuchukua maelezo kwa kurekodi majadiliiano yetu

d) Faida, madhara na usiri kwa kushiriki kwako katika utafiti huu.
Hakuna faida ya papo kwa papo wa wewe kushiriki katika utafiti huu. Taarifa utakayokusanywa itasaidia sasa na kwa maendeleo ya baadaye katika mipango ya kushughulikia kuwasiliana na ngono salama, mimba na VVU / UKIMWI, huenda kuna baadhi ya maswali yake. Taarifa zote zinaharibiwa mara baada ya utafiti kukamilika. Hata hivyo, matokeo ya utafiti huwa kwenza kuwasiliana na mtafiti kwa njia za mawasiliano zifuatazo;

e) Ushiriki wako wa hiari
Ndugu mshiriki, umaechaguliwa kwa sababu wewe unahudhuria huduma za matibabu katika kituo cha PASADA. Kushiriki katika utafiti ni kwa hiari na ushiriki wako hauathiri kupata huduma hata kama wewe utaamua kujiondoa wakati wowote wa utafiti. Na kama katika siku zijazo unahitaji ufafanuzi zaidi au una maswali yoyote, unaweza kuwasiliana na mtafiti kwa njia za mawasiliano zifuatazo;
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Alick Austine Kayange
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University of Oslo, Department of Community Medicine
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Email johanne.sundby@medisin.uio.no
Phone + 47 22 85 05 98, Fax + 47 22 85 05 90

Ridhaa kwa ajili ya kushiriki katika utafiti (Katika mahojiano ya kina).
Mimi nimelewa maelezo yote yaliyotolewa katika fomu hii na kwa hiyo; Mimi niko tayari kushiriki katika utafiti.

(Jina la mshiriki katika utafiti, sahihi na tarehe)

Mimi nathibitisha kutoa taarifa na maelezo yote yanayohusu utafiti.

(Jina la Mtafari / msaidizi wa utafiti, sahihi na tarehe)

MWALIKO KUSHIRIKI KATIKA UTAFITI (FGD).

a) Utangulizi
Mimi ni mwanafunzi kutoka Chuo Kikuu cha Oslo, Norway. Ninatarajia kufanya utafiti ikiwa ni sehemu ya kukamilisha masomo yangu ya shahada ya uzamili. Lengo la utafiti huu ni kuangalia "Maarifa, Tabia na Mtazamo kuhusu ngono salama na mimba za utotoni kwa vijana walio katika umri-balehe wanaoishi na maambukizi ya VVU / UKIMWI
katika mji wa Dar es Salaam, Tanzania”. Ninaomba ushiri wako katika utafiti huu. Kushiriki katika utafiti huu ni hiari na una haki ya kukuza kushiriki katika utafiti. Pia una haki ya kuelewa na kujua nini kinakwenda kufanyika katika utafiti na hatimaye kufanya maamuzi sahihi ya ushiri wako wako.

b) Madhumuni ya utafiti.
Huu ni utafiti ambao utawezesha mimi kukamilisha na kuhitimu masomo yangu ya shahada ya uzamili katika chuo kikuu cha Oslo. Lengo la utafiti huu ni kuangalia "Maarifa, Tabia na Mtazamo kuhusu ngono salama na mimba za utotoni kwa vijana walio katika umri balehe wanaoishi na maambukizi ya VVU / UKIMWI katika mji wa Dar es Salaam, Tanzania". Wewe ni mtu muhimu sana kuwezesha kupatikana kwa taarifa hizi muhimu.

c) Je, ni mambo yepi yatakayofanyika katika utafiti huu?
Utashiriki katika mahojiano pamoja na washiriki wengine 6 hadi 8 katika kikundi, kuhusiana na mada zilizotajwa hapo juu. Mahojiano yatadumu kwa takribani saa moja na yatafanyika katika lugha ya "Kiswahili". Nitakuwa pamoja mtafiti msaidizi na kwa pamoja tutaendesha majadiliano. Mimi (au mtafiti msaidizi) nitakuuliza (atakuuliza) maswali ya wazi yanayohusu ngono salama na mimba za utotoni. Sio kila ambacho kitazungumzwa kitaandikwa kwa mara moja, hivyo ili kuweza kupata kila taarifa muhimu itakayotolewa wakati wa majadiliano yetu, naomba ruhusu yako ili mimi kuchukua maelezo kwa kurekodi majadiliano yetu.

d) Faida, madhara na usiri kwa kushiriki kwako utafiti huu.
isipokuwa mtafiti na mtafiti msaidizi ataweza kuwa na majina na sauti zilizorekodiwa. Vitu hivi vitaharibiwa mara baada ya utafiti kukamilika. Hata hivyo, matokeo ya utafiti huu yatahifadhiwa ikiwa ni sehemu ya kukamilisha masomo yangu ya shahada ya uzamili na hakutakuwa na taarifa yako inayokuhusu wewe yeyote ileitakuwa kumbukumbu katika kukimiwa yangu katika kukamilisha bwana mpango na hakuna utambulisho wako itaonekana katika dissertation.

e) Ushiriki wako wa hiari
Ndugu mshiriki, umechaguliwa kwa sababu wewe unahudhuria huduma za matibabu katika kituo cha PASADA. Kushiriki katika utafiti ni kwa hiari na ushiriki wako hauathiri kupata huduma hata kama wewe utaamua kujiondoa wakati wowote wa utafiti. Na kama katika siku zijazo unahitaji ufafanuzi zaidi au una maswali yoyote, unaweza kuwasiliana na mtafiti kwa njia za mawasiliano zifuatazo;
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Ridhaa kwa ajili ya kushiriki katika utafiti (Katika mahojiano ya kina).
Mimi nimeelewa maelezo yote yaliyotolewa katika fomu hii na kwa hiyo; Mimi niko tayari kushiriki katika utafiti.
MWALIKO KUSHIRIKI KATIKA UTAFITI (Ruhusa ya Mazazi/Mlezi).

a) Utangulizi

Mimi ni mwanafunzi kutoka Chuo Kikuu cha Oslo, Norway. Ninatarajia kufanya utafiti ikiwa ni sehemu ya kukamilisha masomo yangu ya shahada ya uzamili. Lengo la utafiti huu ni kuangalia "Maarifa, Tabia na Mtazamo kuhusu ngono salama na mimba za utotoni kwa vijana walio umri-balehe wanaoishi na maambukizi ya VVU / UKIMWI katika mji wa Dar es Salaam, Tanzania". Ninaomba ruhusa ili motto/kijana wako aweze kushiriki katika utafiti huu. Kushiriki katika utafiti huu ni hiari na una haki ya kukubali au kukataa kushiriki katika utafiti. Pia una haki ya kuelewa na kujua nini kinakwenda kufanyika katika utafiti na hatimaye kufanya maamuzi sahihi ya ushiriki wako.

b) Madhumuni ya utafiti.

Huu ni utafiti ambao utawawezesha mimi kukamilisha na kuhitimu masomo yangu ya shahada ya uzamili katika chuo kikuu cha Oslo. Lengo la utafiti huu ni kuangalia "Maarifa, Tabia na Mtazamo kuhusu ngono salama na mimba za utotoni kwa vijana walio umri-balehe wanaoishi na maambukizi ya VVU / UKIMWI katika mji wa Dar es Salaam, Tanzania". Wewe ni mtu muhimu sana kuwezesha kupatikana kwa taarifa hizi muhimu.

c) Je, ni mambo yepi yatakayofanyika katika utafiti huu?

Mtoto au kijana wako atashiriki katika mahojiano ya kina kuhusiana na mada zilizotajwa hapo juu. Mahojiano yatadumu kwa takribani saa moja na yatafanyika katika lugha ya "Kiswahili". Nitakuwa pamoja mtafari msaidizi na kwa pamoja tutaendesha majadiliano. Mimi (au mtafari msaidizi) nitakuuliza (atakuuliza) maswali ya wazi yanayohusu ngono salama na mimba za utotoni. Sio kila ambacho kitazungumzwa kitaandikwa kwa mara moja, hivyo Ili kuweza kupata kila taarifa muhimu itakayotolewa wakati wa majadiliano yetu, naomba ruhusa yako ili mimi kuchukua maelezo kwa kurekodi majadiliano yetu.
d) Faida, madhara na usiri kwa kushiriki kwako katika utafiti huu.

e) Ushiriki wako wa hiari

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Mimi nimeelewa maelezo yote yaliyotolewa katika fomu hii na kwa hiyo; Mimi niko tayari kushiriki katika utafiti.

(Jina la mzazi, sahihi na tarehe)

Mimi nathibitisha kutoa taarifa na maelezo yote yanayohusu utafiti.

(Jina la Mtafiti / msaidizi wa utafiti, sahihi na tarehe)
### Gantt chart-work plan

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“DAR ES SALAAM, TANZANIA breaks record on teenage pregnancy”.

“I was in form two when I got pregnant. I was 16 years old. When my parents knew, they chased me away from home. I returned to the man who caused pregnant. I gave birth to child but died several months later due to malaria. I went back to my parents to plead them to forgive me and take me back to school, they chased me again and I decided to wander around in streets. I got the second pregnant and this time I was 18 years old”.

“Teenage pregnant doubled between 2011-2013. Lack of power negotiation on family planning use, irresponsible families, and irresponsible community poses challenges that render more teenage pregnancy.”

Translated from Mwananchi News paper of 20th December 2014.