SEXUAL AND REPRODUCTIVE HEALTH AMONG ADOLESCENTS LIVING IN ORPHANAGES IN DAR ES SALAAM

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SEXUAL AND REPRODUCTIVE HEALTH AMONG ADOLESCENTS LIVING IN ORPHANAGES IN DAR ES SALAAM

By

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A dissertation submitted in (partial) Fulfillment the Requirements for the Degree of Master of Public Health of Muhimbili University of Health and Allied Sciences

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CERTIFICATION

The undersigned certifies that they have read and hereby recommends for acceptance by Muhimbili University of Health and Allied Sciences a dissertation entitled ***Sexual and Reproductive Health among Adolescents Living in Orphanages in Dar es Salaam*** in fulfillment of the requirement for the degree of Master of Public Health of Muhimbili University of Health and Allied Sciences.

…….

Dr. Stephen S. Kishinhi

(Supervisor)

Date.....

DECLARATION AND COPYRIGHT

I, **Joyce Mdamu**, declare that this **dissertation** is my own original work and that it has not been presented and will not be presented to any other university for similar or any other degree award.

Signature..... **Date**: .....

ACKNOWLEDGEMENT

First and foremost I would like to thank the Almighty God, because without him this study would not have been possible. Very special thanks go to my parents for their financial and moral support.

I extend my sincere appreciation to my supervisor, Dr. Stephen S. Kishinhi for his tireless guidance and commitment throughout the conception and production of this work, without his valuable advice this dissertation would not have been possible.

I also acknowledge the staff of the School of Public Health and Social Sciences for their constructive criticism during the process of developing the research proposal.

And last but not least, I wish to thank all the research participants for their patience and cooperation during data collection.

DEDICATION

I dedicate this dissertation to my lovely son, Gyan Mwalongo, my parents Mr. Mdamu & Mrs. Mariana Mdamu and to my brothers Desiderius and Bonaventure.

ABSTRACT

Background: Sexual and Reproductive Health (SRH) is a women's right, It is important to all women especially the adolescent who are facing some critical changes in their body and lack knowledge on how to handle such changes. Adolescent orphans are more likely to be illiterate on the issues related to SRH than their peer. They live in the orphanages with little or no parental guidance from low skilled caregivers; some of them are not attending schools and lack health care. In Tanzania, Little is known about knowledge, attitude and practice (KAP) of adolescent orphans regarding sexual SRH. Therefore this study determined the KAP on sexual and reproductive health among adolescents living in orphanages in Dar es Salaam, Tanzania.

Objective of the study: The broad objective of this study was to determine the level of knowledge, attitude and practice on SRH among adolescent orphans in Dar es Salaam.

Material and Methods: A cross sectional study was conducted in the three districts of Dar es Salaam involving 418 adolescent orphans aged 12 -18 years. The selection of orphanages was done purposively where in each district three centers were selected. Structured interviews and observation were done at nine orphanages; Data were collected by trained interviewers using structured questionnaire and observational checklist covering socio-demographic information as well as KAP regarding SRH. Data were entered into computer software for cleaning and analyzed using Statistical Package for Social Science (SPSS) version 20. Statistical associations were tested using chi –square test and *p*- value at 5% significance level. Knowledge were assessed in three levels: "good knowledge" with 80-100%, "moderate knowledge" with 50-79% and "poor knowledge" with <50%.

Results: Among 418 adolescent orphans 55.3% were male and 44.7% were female. Only 48% of adolescent orphans were aware of SRH services. Brochures/journals 43.1%, friends 42.6% and television/radios 41.4% were found to be the source of information to adolescent orphans. More than two –third 64.3% of adolescent orphans

had moderate knowledge about ways of HIV and AIDS prevention and transmission. Age group (chi- square 43.10 p=0.00), education level (chi square 41.04 p=0.00) was significantly associated with reproductive health knowledge on family planning.

Conclusions: Generally, the study revealed that there is poor knowledge, appropriate practice and favorable attitude of adolescent orphans regarding different SRH-related issues. Socio-demographic characteristics found to have association with knowledge level on family planning methods and HIV/ AIDS prevention.

Recommendation: It is important to educate adolescents about issues related to SRH, so that they can safeguard themselves against various sexual transmitted infections and unwanted pregnancies. Also the government should put strategies to increase awareness and knowledge on SRH in orphanage centers that are tailored to the need of adolescent orphans

Key words: Adolescent, orphan, Sexual and reproductive health

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ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
HIV	Human Immune Virus
OVC	Orphan Vulnerable Children
SRH	Sexual and Reproductive Health
STIs	Sexually Transmitted Infections
TDHS	Tanzania Demographic Health Survey
THMIS	Tanzania HIV/AIDS and Malaria Indicator Survey
UNICEF	United Nations Children's Fund
WHO	World Health Organization

OPERATIONAL DEFINITION OF TERMS

Adolescent orphan: is defined as a child from age 12 to 18 years (this is the transitional and sexual active period).

Orphan: is defined as a child who lost one or both parents and those children who found themselves in one way or another are living in orphanages.

Orphanage: is defined as residential childcare facility that is intended to care for orphans children and vulnerable children from the time of their admission until their age of maturity (0-18years).

Caregiver: a person who plays the key caring role for the orphans and vulnerable children in the orphanages.

Reproductive health knowledge: is defined as awareness/ knowledge which adolescent orphans are expected to have on Family planning, STI's and HIV/AIDS

Reproductive health practice: is defined as utilization of SRH services, testing of HIV, communication and discussion on sexual and reproductive health between adolescent orphans and caregivers.

CHAPTER ONE

INTRODUCTION

1.1 Background information

The number of orphans has been constantly raising over the last decade in many low income countries especially in Sub-Saharan Africa (SSA) where it was estimated 142 million of orphans in 2011(1). The increase in number was attributed by global crises such as HIV and AIDS, poverty, natural disasters and conflicts (2). Tanzania being in SSA was estimated to have 2.6 million orphans, and orphan hood has increased from 11% to 17.6% of all children (3).Traditionally, orphaned children were cared by their close relatives or extended family, but in cities like Dar es Salaam which are experiencing a large rural to urban migration, the traditional social care of extended family is no longer exists, forcing many children to streets and orphanages for survival.

UNICEF defined an orphan as a child who has lost one or both parents. Orphaned children found themselves alone in the world of adulthood, they face challenges including family dissolution, depression, malnutrition, lack of access to education and health care, homelessness, stigma, discrimination, abuse, increased risk for HIV and sexually transmitted infections (STIs), unplanned and unwanted pregnancies(4) . Orphaned street children sacrifice their life to meet their need and that of their younger siblings the condition that make them at higher risks of being abused.

Institutional care for orphaned children is uncommon in SSA and culturally viewed as least desirable, primarily because of the potential for unhealthy psychological development. Orphanages may cause unhealthy psychological development to the children because of number of reasons including issues related to insufficient emotional nurturance and inadequate skill level of caregivers (5). Most orphanages in

Tanzania are run by non-governmental organizations that is primarily supported by foreign sponsorship (6).

Care giving to the orphans is surrounded by many challenges that include lack of skills among caregivers. Caregivers are packed with many responsibilities while at work giving them less time to interact with the orphans (7). This situation leads to many orphans at high risk of experiencing neglect that occurs most typically in the form of socio-emotional neglect (8).

Study done in Kenya indicated that good sexuality dialogue between parents and adolescents promotes a range of protective sexual behaviors such as delayed sexual debut, secondary sexual abstinence, and reduced number of sexual partners (9). Initiation of such conversation with children before sexual debut has been shown to be effective in reducing sexual risk behaviors among adolescents (7).

Tanzania government has been struggling to provide care to vulnerable children. To address the issue the government has embarked on a series of measures including development of the National Plan of Action for Most Vulnerable Children (NPA-MVC) for 2007-2010 and the ratification of a number of international human rights instruments (6). To support the effort put forward by the government organizations and individuals has established foster care centers or adopted vulnerable children from different parts of the country especially in big cities such as Dar es Salaam, Mwanza, Arusha and Mbeya.

Despite all these efforts done by the government with the collaboration of stakeholders to overcome the challenge of vulnerable children in the country through establishment of orphanages, caring and educating children living in orphanages is still a dilemma. Therefore this study was aimed at determining the level of knowledge, attitudes and practices on sexual and reproductive health among adolescent orphans living in orphanage in Dar es Salaam, Tanzania.

1.2 Problem statement

In 2011 there were approximately 142 million orphaned children worldwide, most of whom reside in the developing world, including Sub-Saharan Africa and Asia (1). Governments in SSA are faced with the challenge on providing care and support for this growing population of orphans. Tanzania being a country in SSA is also experiencing such an increase, It is estimated that one in eight children who are less than 18 years of age already lost one or both parents (10).

The reproductive and sexual health of adolescents has been recognized as an important health concern and has been the focus of considerable global attention for many years (11). The proportional of sexually active adolescents including adolescent orphans has been on the increase worldwide including Tanzania (12). Adolescent orphans' reproductive health needs remain poorly understood and inadequate addressed, therefore adolescent orphans are often engage in risk sexual behaviors which increase their susceptibility to HIV and AIDS, STIs pregnancy and school dropout.

Despite the fact that, Ministry Health of Community Development Gender, Elderly and Children provide training manual on school health education, which states, reproductive health is among human rights. The manual among other things covers basic knowledge on HIV/AIDS and STIs, safe and healthy life style, sex and sexuality, and responsible services for adolescent including adolescent orphans (6), it has been found that in many cases, several misconceptions exist among them and there are gaps in their knowledge on SRH.

There is a need to promote and strengthen sexual and reproductive health knowledge in Tanzania especially among adolescent who are living in orphanages. Currently knowledge, attitude and practice on reproductive health among adolescent orphans is not known.

1.3 Conceptual frame work

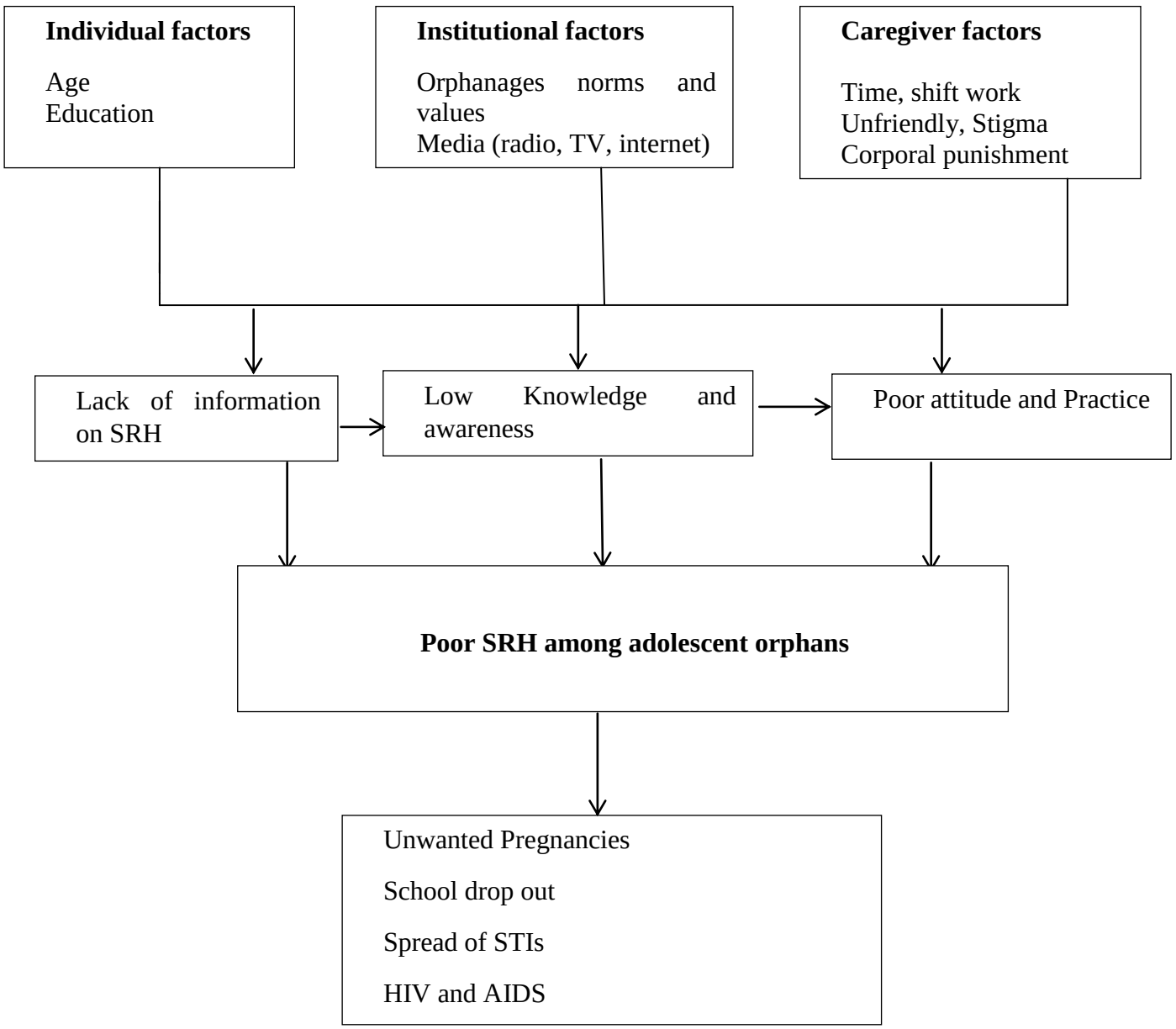

Figure 1: Conceptual frame work SRH and adolescent orphans

Conceptual Framework on SRH for adolescent living in orphanages

The proposed conceptual framework describes the key elements of enabling Knowledge on Sexual and Reproductive Health (SRH) among adolescent orphans.
This conceptual framework has three guiding principles.

1. **At the individual level**, there is a need to focus on empowering adolescent orphans through efforts that build them on knowing themselves and their age period where they are in and how to cope with it.
2. **At the caregiver level**, there is a need to build relationships that support and reinforce positive health behaviors of adolescent orphans. This may include interventions that target those who are close to them who will influence the sexual and reproductive experiences of adolescent orphans, such as teachers, care givers and peers.
3. **At institutional level**, there is a need to create positive social norms and community support for adolescents to practice safer behaviors and access for SRH information and services. There is a need to promote laws and policies related to the health, social and educational spheres to build broad societal norms in support of SRH and helping adolescent orphans realize their SRH needs.

1.4 Rationale of the Study

Due to vulnerability of adolescent orphans and their needs for sexual and reproductive health services, knowledge in sexual and reproductive health services is necessary for them to access and utilize the services offered. This study aimed at improving SRH among adolescent living in orphanages in Dar es Salaam, Tanzania. Findings from this study will provide better understanding on the level of knowledge and awareness among adolescent orphans regarding sexual and reproductive health. Furthermore, information obtained from this study provide clear picture on the service provision on SRH in orphanages centers, as well as giving empirical information on what adolescent orphans know and how they utilize services on SRH. In additional the results obtained will inform programmers, policy and decision makers, on how to

improve provision of knowledge, change of attitudes and encourage on utilization towards SRH among adolescent who are living in the orphanages.

1.5 Research Questions

1. What is the proportional of adolescent orphans who are knowledgeable on sexual and reproductive health?
2. What attitude and practice adolescent orphans have towards sexual and reproductive health?
3. Is there any association between adolescent orphan socio-demographic characteristics and knowledge on SRH?
4. What are the sources of information on sexual and reproductive health among adolescent orphans?

1.6 Objectives

1.6.1 Broad objective

The main objective of this study was to determine the level of knowledge, attitude and practice on sexual and reproductive health among adolescent orphans in Dar es Salaam.

1.6.2 Specific objectives

Study specific objective are as follows:

1. To determine the proportional of adolescent orphans who are knowledgeable and aware on sexual and reproductive health.
2. To assess attitudes and practices of adolescent orphans on sexual and reproductive health.
3. To determine association between socio-demographic characteristics and knowledge on SRH among adolescent orphans.
4. To determine the main source of information on sexual and reproductive health among adolescent orphans.

CHAPTER TWO

LITERATURE REVIEW

This section identifies the extent of orphans and factors which affect them on sexual and reproductive health and make them vulnerable to sexual and reproductive health problems such as unwanted pregnancy, school dropout, STIs and HIV/AIDS. Not much has been documented or researched in the area of knowledge and practice on sexual and reproductive health specific to orphans living in orphanages. However some literature is available on adolescent in general that can be applicable to orphans too.

2.1 Orphans population

The statistics about orphan children are devastating: it was estimated 142 million orphaned youth worldwide in 2011, and the number continues to increase due to global crises such as poverty, natural disasters, armed conflicts, and HIV/AIDS (1). It is estimated that more than 15 million children under 18 years old have been orphaned by AIDS and around 11.6 million of these children live in sub-Saharan Africa. Currently, there are more than one billion adolescents 10-19 year, 70% of whom live in low income countries (13).

The number of orphans in Tanzania is increasing every day due to various causes HIV and AIDS being one of them. It exceeds the capacity of not only the extended families and the available orphanages in Tanzania. In addition situations in the orphanages are seriously challenging. Data on the prevalence of orphan hood in Tanzania shows that 18 percent live with their mothers but not their fathers; 6 percent live with their fathers but not their mothers; and 16 percent live with neither of their natural parents. Among children under age 18, urban children are more likely not to live with either parent than rural children (3).

2.2 Sexual and reproductive health

Good SRH is a state of complete physical, mental and social well-being in all matters relating to the reproductive system. It implies that people are able to have a satisfying and safe sex life, the capability to reproduce, and the freedom to decide if, when, and how often to do so. Adolescents must have knowledge of key SRH topics and issues if they are to make informed decisions to protect their health and well-being (14).
Many adolescents get their SRH education from poorly informed sources such as their peers. Inaccurate beliefs concerning levels of risk associated with particular behaviors and the effectiveness and side-effects of different types of contraceptives can be strong enough to prevent adolescents from accurately perceiving the potential consequences of their behaviors.

Sexual and reproductive growth and development is one of the remarkable changes during this period, and it is when parents are expected to socialize their children, in which parent-adolescent SRH communication is one. Communication helps to transmit values, beliefs and expectations about SRH matters to their adolescents. Evidence has shown that the communication protects the young from engaging in risky sexual practices and associated adverse health (15). SRH is of great importance to adolescent orphans as they are in their tender age and hence facing several challenges including their living setting (orphanages), relationship with their caregivers and making important decision, which may affect their life. Adolescent orphans face difficulties in making decisions and escape some dangers such as unwanted early pregnancies, STIs and HIV/ AIDS.

2.3 Knowledge on sexual and reproductive health

Adolescents develop more self-consciousness indicated in their self-assessment of how others see them. In many cases adolescents consider themselves grown up and mature enough to have sex yet they have inadequate knowledge about the consequences of unprotected sex (13).

World Health Organization on their surveys done among 15–19 years old, often reveal an alarming poor knowledge on specific areas as whether a girl can become pregnant the first time she has sexual intercourse, how to use a condom correctly, whether there are other STIs aside from HIV, and how they are transmitted (16).

Adolescent need access to protective information and skills before they become sexually-active in order to reduce their risk of contracting HIV and other sexually transmitted infections (STIs), and of experiencing unintended pregnancies and very early childbearing (17). The challenge is on how to determine specific information to give very young adolescents, from what sources, at what ages and in what ways. One of the first steps in addressing these questions is to understand what are the current sexual and reproductive health knowledge and needs of very young adolescents.
A study done on adolescents show that school children in the rural area of Mtwara region in Tanzania lack credible knowledge about safe sex (18). Adolescent who stays with parent's shows poor knowledge and practice on reproductive health is a big concern because people assume the source of knowledge to them will be easier than orphans who are not living with parents. The living arrangement of orphans put them also to lack knowledge on SRH because of the nature of caregivers- orphan ration which is often high with mainly careless and insensitive communications (8).

2.4 Sexual risks among adolescent orphans

Every year millions of young people contract sexually transmitted infections (STIs) and these STI increase the likelihood of HIV transmission (19). Most of adolescent orphans in Sub- Sahara Africa have had sex before the age of 18 and most of them it was not their will to have sex (17). Multiple sex partners are very common among young people in Sub - Sahara Africa.

In Tanzania mainland, 9.7% of young women and 10.2% of young men aged 15-24 had sexual intercourse before age 15, while 51.6% of young women and 43.9% of young men aged 18-24 had sexual intercourse before 18 (20).

A study conducted in Western Kenya indicate that adolescent living with only one parent or not living with either parent, are more likely than those in two-parent households to be sexually active, to have multiple concurrent sexual partners, and to have had casual sex in the previous year, and not used condoms (7). Adolescent orphans are less likely than non-orphan adolescents to have access to educational opportunities as well as good health outcomes. The case study report in Tanzania, Thurman and others indicate that 52% of double orphans drop out of school majority being girls who take up household responsibilities of caring for themselves and their siblings (21). The adolescent orphaned may be at risk or vulnerable to adverse sexual and reproductive health outcomes such as HIV, STI and teenage or unwanted pregnancies due to early and more risky sexual experiences associated with poor household circumstances and reduced educational opportunities.

Without the protective factor of having parents, adolescent orphans are more vulnerable to HIV infection as well as other sexually transmitted infections and unwanted pregnancy (22).

Therefore, the adolescent orphans need to be protected in order to prevent them from sexual risks which will lead to unwanted pregnancies and those complications including STIs and HIV and AIDS.

2.5 Family planning knowledge and use

Knowledge of contraception is almost universal in Tanzania. The contraceptives aim at preventing pregnant to the individuals in reproductive age and they are not preventing STIs and HIV except for male and female condoms. The most commonly known methods among both men and women are the birth control pill, injecTable, and male condoms (3)**.** Most of adolescent did not have access to this contraceptives as a result the use of contraceptives among adolescents in most countries become very low (23).

Adolescents including adolescent living in orphanages find it difficult to access SRH because the few services available are not friendly to them and they are basically

designed for adults. In addition adolescent in general lack awareness of services available also they fear stigma associated with seeking sexual and reproductive health care (24).

More than half of pill users and users of injecTable obtain their contraceptives from dispensaries. Public and private district hospitals are the primary source for female sterilization (65 percent and 14 percent, respectively). Private pharmacies and shops are the most important sources (81 percent) for male condoms (3).

World health organization on their surveys and focus groups done among 15–19 years old, often reveal an alarming poor knowledge on specific areas as whether a girl can become pregnant the first time she has sexual intercourse, how to use a condom correctly, whether there are other STIs aside from HIV, and how they are transmitted (16). Adolescents including adolescent orphans who stays in the orphanages need access to protective information and skills before they become sexually-active in order to reduce their risk of contracting HIV and other sexually transmitted infections (STIs), and of experiencing unintended pregnancies and very early childbearing (17). The challenge is on how to determine specific information to give very young adolescent orphans living in orphanages, from what sources, at what ages and in what ways. One of the first steps in addressing these questions is to understand what are the current sexual and reproductive health knowledge and needs of very young adolescents.

2.6 Orphan care in Tanzania

In recent years, the number of orphans and other vulnerable children has grown beyond the capacity of households and communities to handle. Most of the individuals in the families and community failed to play their major traditional role of providing care and protections to orphaned children. Children move away from their families due to various reasons such as abandonment, neglect, abuse, and lack of meeting their basic needs. Some may decide to go and stay in the streets and some of them may go to the street for begging (25). As a result these children find themselves ending in

orphanages. It is also reported that besides biological and environmental factors, the care giving conditions in orphanage care are one reason for the developmental delay and the difficulties of orphaned children.

Unfortunately, caregivers in orphanages are often untrained and overloaded, which can lead to unresponsive and emotionally distant care giving. This often is associated with unhealthy caregiver-child ratios, where few caregivers are responsible for many children.

A study done in Tanzania by Hecker and others investigating African orphanages reported a lack of adequate care giving (5).The majority of orphanages in Tanzania are run by non-governmental organizations. Some non-governmental organizations (NGOs) are locally run, but most are primarily supported by foreign sponsorship (6). Less than ten percent of orphans receive some type of support from the government, which is usually school related assistance, while less than five percent receive governmental medical or social support.

CHAPTER THREE

METHODOLOGY

3.1 Study design

Cross-sectional study was used to determine the level of knowledge attitude and practice on sexual and reproductive health among adolescent orphans aged 12 - 18 years living in orphanages in Dar es Salaam, Tanzania.

3.2 Study area

The study was conducted in Dar es Salaam which is the largest commercial city in Tanzania. The city is divided in to three districts namely Ilala, Temeke, and Kinondoni. The population of Dar es Salaam is estimated to be 4 million with an annual growth rate of 8 percent.

There are 94 registered orphanage centers in Tanzania. Out of them 19 centers are located in Dar es Salaam (MOHCDGEC). The centers are distribution in all three districts of Dar es Salaam; Temeke (6), Ilala (5) and Kinondoni (8) orphanages. These registered orphanages are run by non- governmental organization, faith based organization, private owned, and government.

3.3 Study population

The study involved 424 adolescent orphans; boys and girls aged between 12 and 18 years who are residing in 9 selected orphanages.

3.4 Sample size calculation

$$n = \frac{z^2\, p\,(1-p)}{d^2}$$

Whereby

n= minimum sample size required

z = Confidence level at 95% (standard value of 1.96)

p = expected proportion of adolescent orphans who have knowledge, attitude and practice on sexual and reproductive health. (Since P was unknown, 50% was used)

d = Margin of error at 5% (standard value of 0.05)

$$= n\ \frac{(1.96)^2 \times 0.5(1-0.5)^2}{(0.05)^2} = 385$$

Adjusting for non-response, 10% of the estimated sample size was added

[n= 385+39=424]

Therefore the required sample size of the adolescent orphans was 385. By adding 10% of 385 in case of non-adolescent orphans, then the minimum sample size was 424 adolescent orphans.

3.5 Sampling procedure

Multistage sampling procedure was used in this study to obtain the study sample.

Stage one: A list of all 19 registered orphanages in Dar es Salaam was obtained from the Ministry of Health, Community Development, Gender, Elderly and Children.

Stage two: Nine orphanages were randomly selected and three orphanages were selected in each district (Ilala, Kinondoni, and Temeke). The selected orphanages

were Friends of Don Bosco, Chakuwama, Mabibo, Mbagala group, New hope family, SOMBEPA, Kurasini, Safinati and Mwana.

Stage three: Selected participants were obtained through convenient sampling (adolescent who were available to the centers and agree to participate) from 9 orphanages in Dar es Salaam. Participants were identified by caregivers and their socio-demographic data were verified from orphanage registration book. Therefore in every orphanage the target was to select at least 10% (5% girls and 5% boys) of the total population who were willing and interested to participate in the study. The orphans who were involved in the study were selected based on the total number of orphans aged 12-18 per orphanage.

Approximately 45 to 50 adolescent orphans were selected per orphanage depending on the number of orphans found in the orphanage.

3.6 Inclusion criteria

Only adolescent orphans aged 12 -18 years who reside on a registered selected orphanage.

3.7 Study variables

3.7.1 Dependent variables

The dependent variable of interest in this study was SRH.

3.7.2 Independent variables

The independent variables were adolescent orphan's socio-demographic characteristics including (age, sex years of staying in the orphanage, level of education) and source of information on SRH.

3.8 Data collection

3.8.1 Recruitment and training of research assistants.

Two research assistants a psychologist and social worker were recruited to assist during data collection. Their selection based on their availability and prior experience on working with adolescents and having research knowledge. The selected research assistants received one day training on data collection from the study participants.

The training covered the aim of the study, orienting the research assistant to the study protocol, tools and familiarizing them with necessary skills for data collection. Role play method was used to ensure that the training was understood by research assistants. Research assistants took part in pretesting of the questionnaire.

3.8.2 Pre testing of interview schedule

Prior to data collection, pilot study was conducted in one orphanage (Hananasifu found in Kinondoni district) which was not included in the study and the research instrument was administered to 10 adolescent orphans. This provided an opportunity for cleansing of the study objectives and instruments. During the pilot study an informed written consent was sought from head of the orphanage and adolescent orphans before commencing an interview. The necessary corrections were made subsequently.

3.8.3 Data collection tool and techniques

Quantitative data was collected using a structured interview schedule, which comprise both open and close ended questions. The questionnaire was prepared in English then translated into Kiswahili, the research tool contained questions which aimed at capturing socio-demographics characteristics of the adolescent orphans, knowledge on STIs, family planning, HIV and AIDS, attitudes towards HIV and AIDS and sexual issues and practice on the utilization of SRH services.

Selection of adolescent orphans aged 12- 18 years in orphanages was done with the help of caregivers and head of the orphanages. A letter of introduction from each municipal director was presented to the head of orphanages, and assigned the team to

respective caregivers. Head of orphanages introduced the team to the caregivers of the selected orphanages. Caregivers were responsible for introducing the research team to the respective adolescent orphans. To know if adolescent orphans are aged 12 -18 years, we were verifying the social demographic characteristics in the registration book.

Every respondent were interviewed individually ensuring maximum privacy and confidentiality. The research team conducted the entire interview and information was filled in the appropriate sections of the questionnaire.

3.9 Ethical consideration

The study was conducted in the line with the existing standard ethical guide lines. To ensure protection of participants the research proposal was presented to Muhimbili University of Health and Allied Sciences (MUHAS), Senate for Research and Publication Committee for review and approval. Permission to conduct the study was obtained from Kinondoni, Ilala and Temeke Municipal directors. Copies of the permission letter were submitted to the head of orphanages. Participants were provided with clear information on potential risks and benefits of participating in the study. They were also assured of anonymity and that the information provided by them would remain confidential and only used for study purpose. Participation was voluntary and adolescent orphans were allowed to withdraw from the study at any time.

There was a 20 minutes health education on Sexual and Reproductive Health issues that was given by a researcher to the adolescent orphans who were interviewed at the end of every data collection day.

3.10 Data management and analysis

The questionnaires from the field were checked for accuracy and completeness before entering in the computer every day. Open questions were coded and categorized based on the main theme of the response. Data were entered into computer software for cleaning and analysis using the Statistical Package for Social Science (SPSS version 20). Analysis was done according to the objectives.

Statistical associations were tested using Chi- square test and *p*-value at 5% significance level (two –tailed test). Frequencies of continuous and categorical variables (Age, sex and education) means and standard deviation of ages were calculated. Cross tabulation were used to show distribution of different variables (Age, sex, education and year lived in orphanages).

The knowledge of SRH was assessed with 12 multiple-choice questions—each with 6 to 12 correct responses. The corresponding maximum score for each question was 12 and 6; the minimum score was 0 points. Based on a modification from the study done in Male on "knowledge ,attitude, and practice of dengue fever prevention among the people in Male" (26) , The score of each question was categorized into three levels of knowledge:

- Good knowledge: a score of 80–100 % (9–12 and 5–6 out of 12, and 6 points),
- Moderate knowledge: a score of 50–79 % (6–8 and 3–4 out of 12 and 6 points),
- Poor knowledge: a score <50 % (0–5 and 0–2 out of 12 and 6 points).

Attitudes on SRH were assessed with 6 attitudinal statements (e.g. "A person can get HIV and AIDS the first time he/she has sex"). Based on three point Likert scales for each statement, participants could choose between three possible response categories: "agree", "neutral", or disagree". For positive attitudinal statements, each participant's response was then labeled as either favorable (agreeing with the positive attitudinal statement based on scientific facts) or unfavorable attitude (disagreeing with the positive attitudinal statement based on scientific facts or neutral). For negative attitudinal statements, only participants who chose the response category disagree

were considered as having a favorable attitude. The overall percentage for favorable attitudes for each adolescents orphan was then calculated.

A similar procedure was used to assess practice of adolescent Orphans regarding SRH-related issues. For four practice statements (e.g. “Ever tested for HIV”), participants could choose between presence of practice (considered as good practice = 1 point) or absence (considered as poor practice = 0 points) (25).

CHAPTER FOUR

RESULTS

This Chapter presents the findings on knowledge, attitude and practices on sexual and reproductive health among adolescent orphan aged 12- 18 years, who live in registered orphanages in Dar es Salaam. The findings include socio-demographic characteristics of the adolescent orphans, level of knowledge, attitudes and practice towards SRH related issues and source of information on SRH related issues. Also association between social demographic characteristics and knowledge on SRH related issues are presented.

4.1 Socio demographic characteristics of the adolescent orphans

A total of 418 adolescent orphans 12 - 18 years were interviewed and majority were males 231 (55.3). The mean age was 14.8 (SD=2.1) years and majority of adolescent orphans 170 (40.7) were in the age group 16- 18 year. Concerning level of education most of the adolescent orphans were in primary school level 259 (62.0).

Table 1. Socio demographic characteristics of the adolescent orphans (N =418)

Variables		Number (%)
Sex	Male	231 (55.3)
	Female	187 (44.7)
Age groups (years)		
	12-13	143 (34.2)
	14-15	105 (25.1)
	16-18	170 (40.7)
Level of education		
	No education	11 (2.6)
	Primary education	259 (62.0)
	Secondary education	120 (28.7)
	Technical education	28 (6.7)

4.2 Knowledge of adolescent orphans on sexual and reproductive health

The results of knowledge on SRH related issues of adolescent orphans are presented in Table 2. Before assessing the depth of knowledge on SRH related issues, the responded were asked questions about awareness on SRH related issues. Of 418 respondent 215 (51.4%) did not heard about SRH services and only 24 (5.8%) had ever utilized the SRH services.

More than half of the adolescent orphans 232 (55.5%) did not know the period during the menstrual cycle when the pregnancy is most likely to occur. Most of the responded 313 (74.9%) had heard about family planning methods.

To assess the depth of knowledge on adolescent orphans regarding family planning methods, respondent were asked about different methods that can prevent pregnancy. The majority 354 (84.7%) had poor knowledge on different methods that can prevent pregnancy (less than five out of 12 method known).The respondent, who did not heard about Family panning method were included with those with poor knowledge. Condoms, oral contraceptive pills and injecTable were the most known family planning methods.

Among 418 adolescent orphans, 379 (91.3%) had heard about diseases that can be transmitted through sexual contact (STIs). To establish the depth of knowledge of adolescent orphan on STIs adolescent orphans were asked about illnesses that can be transmitted sexually. More than half of adolescent orphans 353 (84.4%) had poor knowledge about different types of STIs. Also they were asked about signs of STIs, 308 (73.7%) had poor knowledge on the signs of STIs as presented in Table 2. The most know types of STI s were gonorrhea and syphilis.

Majority of adolescent orphans 410 (98.7%) have generally heard about HIV and AIDS and 384 (92.5%) were aware that HIV and AIDS cannot be cured. To determine the depth of knowledge on HIV and AIDS transmissions and prevention, adolescent orphans were asked specific questions as to how one can get HIV virus and how one can protect oneself against it. Majority of the adolescent orphans 269 (64.3%) had moderate knowledge about HIV and AIDS transmission

Table 2: Knowledge levels of Adolescent orphans on sexual and reproductive health.

Variable	*Poor knowledge Number (%)*	*Moderate knowledge Number (%)*	*Good knowledge Number (%)*
Methods of family planning	354 (84.7)	64 (15.3)	0.00
Types of STIs	353 (84.4)	65 (15.6)	0.00
Signs of STIs	308 (73.7)	110 (26.3)	0.00
Ways of HIV and AIDS transmission	141 (33.7)	269 (64.4)	8 (1.9)
Prevention of HIV and AIDS	295 (70.6)	123 (29.4)	0.00

4.3 Attitudes and Practices on SRH

The results on SRH attitudes and practices of the adolescent orphans are presented in Table 3. Majority of adolescent orphans 321 (76.8%) agreed with the statement that "a person can get HIV and AIDS the first time he or she had sex" and 282 (67.5%) correctly disagreed with the statement that "by looking carefully, one can know if someone has HIV/AIDS".

Most of adolescent orphans 397 (95.0%) had favorable attitude towards the risk for acquiring HIV and AIDS by agreeing with the statement "a person having multiple sex partners has a high risk of acquiring HIV and AIDS". Also 172 (41.2%) had

unfavorable attitude towards the statement “discussing condom or contraceptives with adolescent orphans promotes promiscuity”.

The majority of adolescent orphans 344 (82.3%) did not test for HIV and AIDS. Regarding practice of caregiver – orphans communication most of the adolescent orphans 359 (85.9%) stated that they did not have discussion on SRH with their caregivers. Majority of the adolescent orphans 227 (54.6%) preferred discussing SRH with friends and 84 (20.2%) did not discuss SRH related issues with anyone as shown in Table 3.

Table 3 Attitudes and practices of adolescent orphans on SRH

Attitude statement	***Agree n (%)***	***Disagree n (%)***	***Neutral n (%)***
A person can get HIV/AIDS the first time he/she has sex	321 (76.8%)	65 (15.6%)	32 (7.7%)
By looking careful one can know if Someone has HIV/AIDS	79 (18.9%)	282 (67.5%)	57 (13.6%)
Early age Premarital sex is supported	355 (84.9%)	36 (8.6%)	27 (6.5%)
There is nothing wrong for boys/girls to have sexual intercourse if they love each other.	72 (17.2%)	284 (67.9%)	62 (14.8%)
Discussing condom or contraceptives adolescent orphans promotes promiscuity	172 (41.2)	172 (41.2%)	74 (17.7%)
A person having multiple sex partners has a high risk of acquiring HIV	397 (95.0)	7(1.7%)	14 (3.4%)
Practices	***Yes n (%)***	***No n (%***	
Ever tested for HIV/AIDS	74 (17.7%)	344 (82.3%)	
Ever utilized any SRH services	26 (6.2%)	392 (93.8%)	
Practice of caregiver –orphan communication	59 (14.1%)	359 (85.9%)	
Prefer group for SRH issues discussion			
Friends	227 (54.6%)		
School teachers	67 (16.1%)		
Health professionals	28 (6.7%)		
Caregivers	10 (2.4%)		
None	84 (20.2%)		

4.4 Association of demographic characteristics and knowledge on family planning methods among adolescent orphans living in orphanages in Dares Salaam.

Table 4, shows the association of demographic characteristics with knowledge on family planning as shown in the Table adolescent orphans sex, age, education and time lived in the orphanages were associated with knowledge on family planning methods. Male adolescent orphans 199 (86.1%) were found to have poor knowledge than female 155 (82.9%), but this association between knowledge on family planning and sex was not statistically significant (chi square 0.85 and p = 0.36). Age 12- 13 shows poor knowledge 139 (97.2%) on family planning methods. this association between age and family planning knowledge were statistically significant (chi square 43.10 and p =0.00). Adolescent with primary education 241 (93.1%) stated to have high level of poor knowledge on FP, this was statistically significant (chi 41.04 and p=0.00). Those adolescents who lived in orphanages for 5-8 years had poor knowledge 114 (89.1%). The association is not statistically significant (chi square 5.59 and p=0.06) and the mean year lived in orphanages was 6.4, SD = 3.0 and the minimum year lived was 1 and maximum is 16 years.

Table 4 Association of socio demographic characteristics and knowledge on family planning methods

Variable		*Poor knowledge*	*Moderate knowledge*	X^2	*p- value*
sex					
	Male	199 (86.1%)	32 (13.9%)	0.85	0.36
	female	155 (82.9%)	32 (17.1%)		
Age groups					
	12-13	139 (97.2%)	4 (2.8%)	43.10	0.00
	14-15	94 (89.5%)	11(10.5%)		
	16-18	121 (71.2%)	49 (28.8%)		
Education level					
	No education	10 (90.9%)	1 (9.01%)	41.04	0.00
	Primary education	241 (93.1%)	18 (6.9%)		
	Secondary education	85 (70.8%)	35 (29.6%)		
	Technical education	18 (64.3%)	10 (35.7%)		
Years lived in orphanage					
	1-4	114 (89.1%)	14 (10.9%)	5.59	0.06
	5-8	163 (85.3%)	28 (14.7%)		
	9-16	77 (77.8%)	22 (22.2%)		

4.5 Association of demographic characteristics and knowledge on HIV and AIDS prevention methods

Table 5 shows the association between adolescent orphan's socio demographic characteristics and ways of HIV and AIDS preventions. Males adolescent orphans 165 (71.4%) had poor knowledge if compared with females adolescent orphans. This association was not statistically significant chi square 0.18 and p= 0.67). Adolescent orphans who were in age 12-13 shows greater percentage of poor knowledge 129 (90.2%) compared to other ages. This association between adolescent orphans age and ways of HIV and AIDS prevention was statistically significant (chi square 52.16 and p= 0.00). Adolescent orphans with primary school level of education 213 (82.2%) had poor knowledge, this was statistically significant (chi square 48.01 and p=0.00). Adolescent orphans who lived 5-8 years in the orphanages 131 (68.6%) had poor knowledge on ways of HIV and AIDS preventions compared to adolescent who lived 1-4 years and 9-16 years. This association was statistically significant (chi 10.22 and p=0.01).

Table 5 Association of demographic characteristics and knowledge on HIV and AIDS prevention methods

Variable		*Poor knowledge*	*Moderate knowledge*	X^2	*p- value*
sex					
	Male	165 (71.4%)	66 (28.6%)	0.18	0.67
	female	130 (69.5%)	57 (30.4%)		
Age groups					
	12-13	129 (90.2%)	14 (9.8%)	52.16	0.00
	14-15	76 (72.4%)	29 (27.6%)		
	16-18	90 (52.9%)	80 (47.1%)		
Education level					
	No education	8 (72.7%)	3 (27.3%)	48.01	0.00
	Primary education	213 (82.2%)	46 (17.8%)		
	Secondary education	58 (48.3%)	62 (51.7%)		
	Technical education	16 (57.1%)	12 (42.9%)		
Year lived in orphanage					
	1-4	103 (80.5%)	25 (19.5%)	10.22	0.01
	5-8	131 (68.6%)	60 (31.4%)		
	9-16	61 (61.6%)	38 (38.4%)		

4.6 Source of information on SRH

Among 418 adolescent orphans, 180 (43.1%) read the information on SRH from brochures/ journals, followed by friends 178 (42.6%) and television/radio 173 (41.4%) as shown in Table 6.

Table 6 Source of information on SRH

Source of information	***Number (%) n=418***
School teachers	172 (41.2)
Caregivers	58 (13.9)
Friends	178 (42.6)
Brochures/ journals	180 (43.1)
Health professionals	59 (14.1)
Television/Radios	173 (41.4)
None	53 (12.7)

CHAPTER FIVE

DISCUSSION

5.1 Knowledge of Adolescent orphans on sexual and reproductive health

The results of this study revealed that 74.9% adolescent orphans who live in orphanage in Dar es Salaam have heard about family planning, even though majority of the adolescent orphans 84.7% had poor knowledge about different methods of family planning. The most known methods to adolescent orphans were condom, oral contraceptive pills and injecTables. This results was in line with findings which was done in Zimbabwe in the year 2006 documented that almost all adolescent orphans heard about family planning and 81.4% did not have knowledge on family planning (4). Regarding known methods the finding were similar with results from demographic health survey were condoms, oral contraceptive pills and injecTables were the main known methods to adolescents (3).

The results in this study indicate that 91.3% had heard about diseases that can be transmitted through sexual contact (STIs) but often had poor knowledge on the signs and symptoms of STIs. Comparable findings were also observed in the study done in Ethiopia at KAP on SRH with young people with disability including orphans, were 76.5% of the adolescent orphans heard about STIs and 53.3% had poor knowledge on different types of STIs (27).

The results on the study were high in HIV and AIDS awareness rate at 98.7% among interviewed adolescent orphans. Also the findings indicate moderate knowledge on HIV and AIDS transmission 64.3%, but the results indicate poor knowledge 70.6% on HIV and AIDS prevention.

This HIV and AIDS results were in line with findings from Tanzania were almost all adolescent orphans had awareness of HIV and AIDS , and 50 % of the adolescent were able to mention three or more ways of HIV and AIDS transmission (18).

5.2 Attitudes and Practices on SRH

Majority of adolescent orphans (82.3%) had never tested for HIV and AIDS. Similar finding were reported from Zimbabwe, only one out 10 adolescents reported ever been tested for HIV and AIDS (4).

Result of this study also indicates that 85.9% of the adolescent orphans did not practice caregiver –orphans communication on SRH. The fact could be caregiver did not know what and how to discuss this SRH issues because they are not informed. Similar finding were reported in Kenya were orphans adolescent lacked communication with caregivers due to caregiver compelled to take care on the additional children and caregiver - orphans bond fails to develop and make communication even harder (7).

Almost half of the adolescent orphans (54.6%) discussed SRH with their friends. This finding support previous study in 2011 in Malaysia on knowledge of sexual and reproductive health among adolescent attending school in Kelantan in which 65.2% of the adolescent discuss SRH with friends (28).

5.3 Socio demographic characteristics associated with knowledge on family planning methods

Findings from this study indicate that most of male adolescent orphans (86.1%) found to have poor knowledge on family planning methods. No association was established between sex and knowledge in family planning (chi square 0.85 and p- value 0.36). This result were consistent with that of the study done in Dar es Salaam, Tanzania in which male adolescent students found to have poor knowledge on contraceptives methods (12).

The difference in level of knowledge between males and females adolescent orphans may relate to their differences in perception of the consequences of pregnancy in females and the fact that females reach puberty at an earlier age than males adolescent.

In this study adolescent orphan's age was significantly associated with knowledge on family planning methods. It was documented that adolescent orphans with poor knowledge were in age 12-13 years compared to older age groups (p=0.00). This findings are similar with the survey findings conducted by Babette Pfander consultant (29).

Poor knowledge in family planning in age 12-13 can be partly explained by the fact that this group is marked as children by society and most of them being in primary school level of education were knowledge of family planning is not taught.

Another important findings from this study was that adolescent orphans with primary education level were significantly more likely to have poor knowledge on FP compared with the other level of education secondary and technical (chi square 41.04 and p=0.00).

Although the association between time lived in the orphanages and family planning knowledge was not statistically significant (p=0.06), adolescent orphans who lived 1-4 years in the orphanages had poor 89.1% poor knowledge on family planning compared with other adolescent who lived more years. However, it is possible that adolescent who lived 1-4 years is more likely to be in primary education level.

5.4 Socio-demographic characteristics associated with knowledge on HIV and AIDS prevention methods

The result in this study showed that male had poor knowledge on HIV and AIDS prevention 71.4% compared to female adolescent and this association was not statistically significant.

In this study adolescent orphans who fall under 12-13 age group reported to have poor knowledge (90.2%) compared to other ages (p= 0.00).

This finding is similar to the study done in Ethiopia which indicate that adolescent that adolescent who fall under 15-19 years had higher knowledge if you compare with those who fall in 10-14 years (30). The possible explanation would be as age increases exposure for SRH also increases.

Adolescent orphans with primary level of education were significantly associated with poor knowledge on HIV and AIDS. Adolescent orphans with primary level of education were significantly more likely to have poor knowledge than secondary and technical level of education (chi square 48.01 and p= 0.00). The fact could be this age group thought they are very young to be infected with HIV and AIDS so they did not take into consideration the ways of HIV preventions.

5.5 Source of information on SRH among adolescent orphans

The results from this study show that the main source of information about SRH was brochures/ journals. Adolescent orphans 43.1% get information about SRH from brochures and journals. The fact is there are many HIV and AIDS brochures and journals and these are the ones which adolescents orphans are referring too. Proper education concerning SRH is of greater importance to adolescent orphans living in orphanage in Dar es Salaam. The findings are contrary with that from Nigeria which indicate that the main source of information is school (31). This shows that in order to improve quality of information that adolescent orphans receive on SRH it is necessary to have classes of SRH education in Orphanages.

CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.1 CONCLUSION

Generally, it was found that there is a poor knowledge among adolescent orphans with regard to SRH related issues such as family planning methods, types and signs and symptoms of sexual transmitted infection (STIs) and means of HIV and AIDS prevention, Also the study found that there is lack of appropriate practice and favorable attitude of adolescent orphans living in orphanages regarding different SRH. Socio demographic characteristics found to have association with knowledge level on family planning methods and HIV and AIDS prevention.

6.2 RECOMMENDATION

1. Government should put strategies to increase SRH awareness and knowledge on adolescent's orphans, specifically SRH education programs and services that are tailored to the need of adolescent orphans living in orphanages.

2. Further studies should be conducted on the area of SRH related information and services utilization of adolescent orphans in Tanzania, to better understand important factors that prevent adolescent orphans from having knowledge, favorable attitudes and appropriate practices that will improve the current situation.

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APPENDICES

Appendix 2a: Informed consent, English version

MUHIMBILI UNIVERSITY COLLEGE OF HEALTH SCIENCES
DIRECTORATE OF RESEARCH AND PUBLICATIONS
CONSENT FORM.

ID NO ☐ ☐ ☐

Consent to participate in study

Greetings!

My name is……. I am a University student pursuing Master's degree in Public Health at Muhimbili University of Health and Allied Sciences.

Purpose of the study

Purpose of study is to determine knowledge and practice on sexual and reproductive health among adolescent living in orphanages in Dar es Salaam.

What Participation Involved

If you agree to join this study, you will be required to answer a series of question that have been prepared for the study in through interview in order to obtain the intended information regarding knowledge attitude and practice on Sexual and reproductive health among adolescents orphans living in orphanages in Dar es Salaam.

Confidentiality

All information that will be collect will be kept confidentially and will be used only for this study. The form will not bear your name but we will use only the identification number.

Risks

You will be asked questions about knowledge, attitude and practice on Sexual and reproductive health related issues. Some questions could potentially make you feel uncomforTable, you may refuse to answer any particular question and stop the interview at any time. We do not expect any harm to happen to you because of participating in this study.

Rights to Withdraw and Alternatives

Participating in this study is completely voluntary. You can choose not to participate in this study and even if you have already accept to participated in the study you can quit at any time if you feel so. Refusal to participate or withdrawal from the study will not involve penalty or loss of any benefits to which you are otherwise entitled

Benefits

The information provided will help to increase understanding on influencing knowledge, attitude and practice on SRH related issues among adolescent orphans living in orphanages in Dar es Salaam region and communicate the findings to policy makers in the region for improvement of SRH services in the orphanages.

Payment

You will not receive any payment for participating in this study. However, a token of soda and biscuit will be given.

In Case of Injury

We do not anticipate that any harm will occur to you as a result of participation in this study.

Who to contact

If you have questions about this study, you should contact the Principal Investigator **JOYCE MDAMU**, from Muhimbili University Of Health and Allied Sciences, P.O .Box 65001, Dar es-salaam.

Chairman person,

Senate Research and publications committee

Muhimbili University of Health and Allied Sciences

P.O. Box 65001, Dar es Salaam.

Do you agree?

Participant agrees…… Participant does not agree ……

I have read the contents in this form. My questions have been answered. I agree to participate in this study.

Signature of participant ……

Signature of Research Assistant_____

Date of signed consent _____

Appendix 2b: Informed consent form- Swahili version

CHUO KIKUU CHA AFYA NA SAYANSI YA TIBA MUHIMBILI
KURUGENZI YA TAFITI NA UCHAPISHAJI MUHIMBILI

FOMU YA RIDHAA

Namba ya utambulisho……

Ridhaa ya kushiriki katika utafiti .

Habari! Jina langu ni …….mwanafunzi washahada ya uzamili ya Afya ya Jamii katika chuo kikuu cha Afya na Sayansi ya Tiba cha Muhimbili.

Madhumuni ya utafiti.

Utafiti huu unalenga kupima uelewa juu ya elimu ya afya kuhusu ujinsia na uzazi, kwa watoto yatima walio katika kipindi cha balehe ambao wanaishi katika vituo vyakulelea watoto yatima katika mkoa wa Dar es Salaam.

Nini kinahitajika ilikushiriki.

Ikiwa utakubali kushiriki katika utafiti huu unahitajika kujibu mfululizo wa maswali yaliyotayarishwa rasmi kwaajili ya utafiti huu, ili kupata taarifa zilizokusudiwa kuhusu elimu ya afya ya ujinsia na uzazi.

Usiri

Taarifa zitakazo kusanywa kupitia dodoso hii zitakuwa ni za siri na zitatumika kwa ajili ya utafiti huu tu. Dodoso hii haitatumia jina lako, tutatumia namba tu kama kitambulisho.

Hatari

Hatutegemei kutokea madhara yeyote kutoka na naushiriki wako katika utafiti huu.

Haki ya kushiriki

Ushiriki wako katika utafiti huu ni wa hiari. Unaweza kuchagua kutoshiriki , au kujitoa kutoka kwenye ushirikiwa utafiti hata kama ulishakubali kushiriki. Kujitoa kwenye ushiri huu hakutakuwa na adhabu yoyote au kupoteza shahiki zako

Faida.

Hakuna faida ya moja kwa moja utakayoipata kutokana na kushiriki katika utafiti huu. Japokuwa kutakuwa na faida kwa vituo vya kulelea watoto yatima ,pamoja na taasisi mbalimbali za serikali ambazo zinatoa huduma kwa watoto walio katika kipindi cha balehe na hasa watoto yatima.

Malipo

Hakutakuwa na malipo yoyote kwa kushiriki katika utafiti huu. Kutakuwa na soda na biscuit kama kiburudisho wakati wa kujibu maswali ya utafiti.

Nani wa kuwasiliana nae

Kama utakuwa na swali lolote kuhusu utafiti huu, unatakiwa kuwasiliana na mtafiti mkuu JOYCE MDAMU, kutoka Chuo kikuu cha afya na tiba cha Muhimbili, sanduku la Barua 65001, Dar es salaam.

Ikiwa utakuwa na swali kuhusu haki zako kama mshiriki unaweza kuwasiliana na Mwenyekiti bodi ya Utafiti na Uchapishaji,sanduku la barua 65001, Dares salaam.

Je unakubali?

Mshiriki amekubali……. Mshiriki hajakubali……

Nimesoma maelezo katika fomu hii maswali yangu yamejibiwa nakubali kushiriki katika utafiti

Sahihi ya msaidizi wautafiti……..

Tarehe ya kutia sahihi ya kushiriki……

Appendix 1a. Questionnaire: English version

For official use only
Questionnaire no……..
Name of the Orphanage …….
Date of Interview……

Introduction

I am…… from Muhimbili University of Health and Allied Science, Dar es Salaam. I am undertaking a research in this Region to determine the level of knowledge and practice on sexual and reproductive health among adolescent orphans in Dar es Salaam. I will appreciate if you agree to participate in this important research because your responses and opinion are very important in improving public health in our country. I am assuring you that all the information you will provide will be kept in secret.

DIRECTIONS:
Please answer the questions that will be asked based on your understanding.

DEMOGRAPHIC INFORMATION

Circle where appropriate and fill in the blanks where it is required

SN	Questions	Responses
1	Sex	1. Male 2. Female
2	How old are you?	……
3	Level of education	1. Primary 2. Secondary 3. College 4. None
4	How long have you resided in the orphanag	1. Month…….. 2. Years……

SECTION 1: AWERNESS AND KNOWLEDGE ON SEXUAL AND REPRODUCTIVE HEALTH

5	Have you heard of SRH services	1. Yes 2. No
6	A woman can get pregnant on the very first	1. Yes

	time that she has sexual intercourse	2. No
7	A woman is most likely to get pregnant if has sexual intercourse half way between her periods.	1. Yes 2. No
8	Have you ever had a boy /girlfriend? I mean someone to whom you were sexually emotionally attracted and whom you dated	1.Yes 2. No (If no go to question 10)
9.	How old were you at the time you first had Sex?	Age…… Years
10	Have you heard of Family Planning Methods	1. Yes 2. No (If answered No, go to question 12
11.	Mention the most known Family Planning Methods	1. Condom 2. Pills 3. Injections 4. Withdraw 5. Calendar 6. IUD (Intrauterine device) 7. Emergency contraception 8. Abstinence 9. Washing genital after intercourse 10. Norplant 11. Sterilization 12. Others
12.	Have you heard of STIs	1. Yes **2.** No (If No go to question 15)
13.	Mention most known types of STIs	1. Gonorrhea 2. Syphilis 3. Trichomoniasis 4. Chlamydia 5. Human papilloma virus 6. Herpes simplex
14.	Mention signs of STIs	1. Discharge from genital area 2. Pain during urination 3. Sores /ulcers in genital area 4. Swelling on genital area 5. Don't know 6. Others
15.	Have you heard of HIV/AIDS	1. Yes

		2. No
16.	Is it possible to cure HIV/AIDS	1. Yes 2. No
17	Mention ways of HIV and AIDS Transmission	1. Un safe sexual intercourse 2. Sharing sharp objects like lazar blade 3. Unsafe blood transfusion 4. During pregnancy and child birth 5. Through breast milk 6. Others
18.	Mention ways of HIV and AIDS Prevention	1. Abstain from sexual intercourse 2. Use condom in every act of sexual Intercourse 3. Remain faithful to one partner 4. Avoid contaminated sharp objects 5. Don't know 6. Others
19	What are your main source of SRH Information	1. School teachers 2. Caregivers 3. Friends 4. Brochures /Journals 5. Health professionals 6. TV/Radio 7. None 8. Other

ATTITUDE QUESTIONS

20	A person can get HIV/AIDS the first time he/she has sex	1. Agree 2. Disagree 3. Neutral
21.	By looking careful one can know if some one has HIV/AIDS	1. Agree 2. Disagree 3. Neutral
22.	Early age Premarital sex is accepTable	1. Agree 2. Disagree 3. Neutral
23.	There is nothing wrong for boys/girls to have sexual intercourse if they love each	1. Agree 2. Disagree

	other.	3. Neutral
24	Discussing condom or contraceptives with young people promotes promiscuity	1. Agree 2. Disagree 3. Neutral
25	A person having multiple sex partners has a high risk of acquiring HIV	1. Agree 2. Disagree 3. neutral

PRACTICE QUESTIONS

26	Have ever tested for HIV/AIDS	1. Yes 2. No
27	Have you ever utilized any SRH services	1. Yes 2. No
28	Did you communicate with caregiver on SRH issues	1. Yes 2. No
29	With whom did you prefer to discuss issues On SRH	1. Friends 2. School teachers 3. Friends 4. Health professionals 5. Care givers 6. None

Appendix 1b: Questionnaire – Kiswahili Version

DODOSO KUHUSU ELIMU YA UJINSIA NA AFYA YA UZAZI KWA WATOTO YATIMA WALIO KATIKA KIPINDI CHA KUBALEHE WAISHIO KATIKA VITUO VYA VILIVYO SAJILIWA MKOA WA DAR ES SALAAM.

Kwa matumizi ya ofisi tu Dodoso namba…….. Jina la Kituo ……. Tarehe ya mahojiano……

MAELEKEZO:
Tafadhali jibu maswali utakayoulizwa kadri ya uelewa wako

TAARIFA BINAFSI

Zungushia jibu sahihi/ jaza nafasi wazi kama ilivyoelekezwa

Na	Swali	Majibu
1	Jinsia	1. Mme 2. Mke
2	Una miaka mingapi?	……
3	Kiwango chako cha elimu	1. Haujasoma kabisa 2. Elimu ya msingi 3. Elimu ya sekondari 4. Chuo(ufundi VETA)
4	Umeishi katika kituo kwamuda wa miaka	1. Miezi…….. 2. Miaka……

Maswali juu ya uelewa kuhusu Ujinsia na Afya ya Uzazi

5	Umewahi kusikia kuhusu Ujinsia na afya Ya uzazi	1. Ndio 2. Hapana	
6	Mwanamke anaweza kupata mimba mar kwanza tu atakapojamiiana.	1. Ndio 2. Hapana	
7	Mwanamke yuko katika hali ya hatari zaidi kupata ujauzito iwapo atajamiiana siku ya Katikati ya mzunguko wake	1. Ndio 2. Hapana	
8	Umewahi kuwa na rafiki wa kiume/kike? Yule ambaye unavutiwa nae kihisia na Umewahi kujamiina nae	1.Ndio 2. Hapana (Kama hapana nenda swali no 10)	

9.	Ulikuwa na miaka mingapi ulipojamiina Kwa maraya kwanza?	…….	
10	Umewahi kusikia kuhusu njia za uzaz mpango?	1. Ndio 2. Hapana (Kama hapana n enda swali no 12)	
11.	Taja njia za uzazi wa mpango unazozifahamu.	1. Kondomu 2. Vidonge vya uzazi wa mpango 3. Sindano za uzazi wa mpango 4. Kukojoa nje 5. Kutumia kalenda 6. Kitanzi 7. Vidonge vya uzazi wa mpango vya dharura 8. Kuacha kabisa kujamiina 9. Kuosha sehemu za siri baada ya kujamiina 10. Vipandikizi 11. Kufunga kizazi 12. Nyinginezo	
12.	Umewahi kusikia kuhusu Mgonjwa ya Zinaa.	1. Ndio **2.** Hapana (Kama hapana nenda swali No 15)	
13.	Taja magonjwa ya zinaa yanayofahamika Zaidi	1. Gonorrhea /kisonono 2. Syphilis /Kaswende 3. Trichomoniasis 4. Chlamydia 5. Human papilloma virus 6. Herpes simplex/ Pangusa	
14.	Taja dalili za magonjwa ya zinaa	1. Kutoka uchafu sehemu za siri	

		2. Maumivu wakati wakukojoa 3. Vidonda sehemu za siri 4. Kuvimba sehemu za siri 5. Sifahamu 6. Nyinginezo
15.	Umewahi kusikia kuhusu VVU na UKIMWI	1. Ndio 2. Hapana
16.	Je inawezekana kutibu VVU na UKIMWI	1. Ndio 2. Hapana
17	Taja njia za maambukizi ya VVU na UKIMWI.	1. Ngono zembe 2. Kushea vitu vyenye ncha kali kama nyembe 3. Kuongezewa damu isiyo salama 4. Kutoka kwa mama kwenda 5. kwa mtoto kipindi cha mimba na wakati wa kujifungua 6. Kupitia maziwa ya mama kipindi cha kunyonyesha 7. Nyinginezo
18.	Taja njia za kuzuia maambukizi ya VVU na UKIMWI	1. Kuacha kabisa kujamiiana 2. Kutumia kondomu kwa kila ten kujamiina 3. Kuwa mwaminifu kwa mpenzi mmoja 4. Kuacha kushea vitu vyenye incha kali 5. Sifahamu 6. Nyinginezo
19	Wapi imekuwani chanzo chako cha taarifa kuhusu Ujinsia na afya ya uzazi	1. Walimu 2. Walezi 3. Marafiki 4. Vipeperushi na majarida 5. Watoa huduma wa afya 6. Luninga na Redio 7. Hakuna 8. Nyinginezo

20	Mtu anaweza kuambukizwa VVU kwa Mara ya kwanza tu akijamiiana	1. Nakubali 2. Sikubaliani 3. Sikubali /Sikatai	
21.	Unaweza kumtambua mtu mwenye VVU Kwa kumtazama vizuri kwa ukaribu	1. Nakubali 2. Sikubaliani 3. Sikubali /Sikatai	
22.	Ni sahihi Kujamiiana katika umri mdogo	1. Nakubali 2. Sikubaliani 3. Sikubali /Sikatai	
23.	Hakuna madhara yeyote kwa msichana na mvulana kujamiina kama wanapendana.	1. Nakubali 2. Sikubaliani 3. Sikubali /Sikatai	
24	Kujadili kuhusu kondomu na uzazi wa Mpango kunachochea vitendo vya kujamiiana	1. Nakubali 2. Sikubaliani 3. Sikubali /Sikatai	
25	Mtu mwenye wapenzi wengi yuko katika Hatari kubwa ya kupata maambukizi ya VVU	1. Nakubali 2. Sikubaliani 3. Sikubali /Sikatai	

26	Umewahi kupima VVU na UKIMWI	1. Ndio 2. Hapana	
27	Umewahi kutumia huduma yeyote ya afya yauzazi	1. Ndio 2. Hapana	
28	Umewahi kuongea na mlezi wako kuhusu mambo ya Ujinsia na afya ya uzazi	1. Ndio 2. Hapana	
29	Nani uko nae huru zaidi kujadili masuala Yako binafsi yahusuyo ujinsia na afya Ya uzazi.	1. Marafiki 2. Walimu 3. Walezi 4. Watoa huduma wa afya 5. Hakuna	

ASANTE KWA USHIRIKI WAKO