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**&**

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**MASTER OF SCIENCE IN COMMUNITY ECONOMIC DEVELOPMENT**

**(2007)**

**FAMILY LIFE EDUCATION PROJECT FOR FEMALE**

**ADOLESCENTS IN TEMEKE MUNICIPALITY,**

**DAR-ES-SALAAM**

**PASIENS STEPHEN MAPUNDA**

**“A PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF  
REQUIREMENTS FOR THE MASTER OF SCIENCE IN COMMUNITY  
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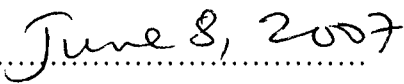
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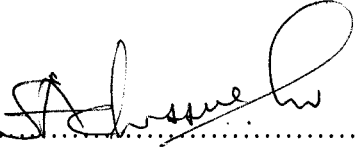
**DECLARATION**

I, Pasiens Stephen Mapunda, do hereby declare to the Senate of Southern New Hampshire University of America at the Open University of Tanzania that, this Project Report is my own original work where cited and that it has never been submitted for a similar higher degree award in any other university.

**Student**Signature ..... Date ..... 

## SUPERVISOR'S CERTIFICATION

I, Dr. Simon A. C. Waane, have read the Project Report, and found in to be in a form acceptable for submission to the Southern New Hampshire University for an award of Master of Science (MSc) degree in Community Economic Development (CED).

Signature  .....

Date ..... 27.07.2007 .....

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## **DEDICATION**

This work is dedicated to my father, the late Stephen Kasuluali Putire Mapunda who inspired me to study hard and strive for excellence and; to my mother Theopister Masilingi for her kind support during my early days of schooling.

## **ABBREVIATIONS AND ACRONYMS**

AIDS	Acquired Immune Deficiency Syndrome
CBOs	Community Based Organizations
CED	Community Economic Development
FLE	Family Life Education
HIMS	Health Information Management System
HIV	Human Immune - deficiency Virus
IPPF	International Planned Parenthood Federation
MSc	Master of Science
NGOs	Non Governmental Organizations
OUT	Open University Of Tanzania
PATH	Pathfinder
RCHS	Reproductive and Child Health Services
SNHU	Southern New Hampshire University
SPSS	Statistical Package for Social Science
STI	Sexually Transmitted Infection
UMATI	Family Planning Associations of Tanzania (''Chama cha Uzazi na Malezi Bora Tanzania'' in Swahili)
UNFPA	United Nations Population Fund
UNICEF	United Nation International Child Education Fund
URT	United Republic of Tanzania
VETA	Vocational Education Training Authority
WHO	World Heath Organization

## **ABSTRACT**

As adolescents mature and become sexually active, they face serious health risks and yet their access to appropriate information, guidance, or health care services is very limited. In sub-Saharan Africa there is a rise in overall adolescent fertility rates and an increase in childbearing among women who do not appear to be married and drop out of school due to pregnancy. In an attempt to rectify the situation one Non Governmental Organization, the Family Planning Association of Tanzanian (UMATI) has established a Teenage Mother Centre in Temeke Municipality, Dar-es-Salaam.

The root cause of the problem emanates from the fact that the young girls do not know that by engaging in unprotected sex they could easily become pregnant. The adolescents engage in unsafe sexual intercourse because they desire to have gifts, presents and other social needs from boy or men friends. Most of the parents could not provide their daughters what the male friends did. The young girls that drop out from school due to pregnancy differ and do so at different levels. The first group is formed by girls who are very bright and arrangements are being made to place them in secondary schools. The second group requires training in vocational skills so that they can be self employed and the third group are to be helped to complete their basic primary school education. A study conducted to assess the reproductive knowledge, attitudes and practices among female adolescents in the Municipality revealed that there is limited reproductive knowledge among young girls mainly due

to limited access to reproductive health information. A Trainer's Manual on adolescence has been developed by the researcher in an attempt to fill the gap. Addressing this problem of female adolescent school drop out due to pregnancy will enable the youths to complete primary school and thereafter become socio-economically productive members of the community.

## **EXECUTIVE SUMMARY**

There are more than one billion people (adolescents) aged 10 to 19 in the world (UNFPA, The State of World Population, 2003 report). As adolescents mature and become sexually active, they face serious health risks and yet their access to appropriate information, guidance, or health care services is very limited. An increase in overall adolescent fertility rates and rise in childbearing among unmarried young women/adolescents have been widely observed in sub-Saharan Africa. Serious adolescent reproductive health problems have also been encountered in the region.

In Tanzania, adolescent reproductive health problems remain a major challenge. A number of initiatives have been made to address this problem, among them is the establishment of the Teenage Mothers' Centre in Temeke Municipality, Dar es Salaam Region. The project was established by the Family Planning Association of Tanzania, UMATI, with an aim of helping girls who had been forced out of primary schools due to pregnancy to complete their studies and, where possible enable them pursue further studies. It also aims to equip them with skills in order to make them economically independent.

Despite these efforts the number of girls dropping out of primary schools in Tanzania due to pregnancy has been increasing over the years. The latest Ministry of Education and Vocational Training statistics show that pregnancy accounted for 6.2% of the total cases of dropout from primary schools in 2006, up from 5.6% in 2005 and 5.2% in 2004.

The problem of adolescent pregnancy is largely caused by inability of their families to satisfy social needs for the girls, lack of family life education and inadequate reproductive knowledge.

Failure to address these problems will lead to increased school drop out among female adolescents, increased number of young parents out of marriage, continued lack of specific practical reproductive (protective) knowledge to the youths, increased number of single parents, increased number of children that are not being cared by both parents, failure to complete primary education and failure to secure formal or gainful employment, hence the young girls may not be able to be self reliant, thereby perpetuating poverty.

An assessment of reproductive knowledge, attitudes and practices among female adolescents in Temeke Municipality showed limited reproductive knowledge among the young girls mainly due to limited access to reproductive health information. More than half of them 64/122 (52.5%) have not received any reproductive health information and family life knowledge. Only 14-21% reported to have some reproductive knowledge, especially on adolescence and the menstrual cycle. A number of the girls do not know that by engaging in unprotected sex they could easily become pregnant. Others engaged in sex due to their great desire for gifts, presents and other social needs from boy or man friends, an indication that some parents can not provide their daughters what the male

friends give them. According to the study, 36% of the girls engage in sex for money, 8% for leisure, 6% in anticipation of marriage and 50% don't know.

Therefore, it is recommended that the adolescents be equipped with appropriate reproductive knowledge and family life education, to enable them grow into responsible adults who would be socio-economically useful to the society. In response to that, the researcher has come up with a family life education project for female adolescents in schools. The project has been developed on the premise that if the female adolescents get the appropriate family life education, reproductive health knowledge and skills they will not become pregnant and hence will not drop out of school.

The primary objective of the project is to increase the level of reproductive knowledge of female adolescents by increasing their access to information regarding bodily growth and associated physiological changes in order to make them responsible adolescents. Its specific objectives are:

- (i) To educate the female adolescents about their bodily growth and changes during adolescence
- (ii) To educate them about their reproductive organs and functions
- (iii) To educate them about normal bodily reproductive related physiological functions.
- (iv) To educate them about their sexuality in relation to the normal bodily changes and functions with regard to fertility.

The project will be implemented in 3 pilot primary schools in Temeke Municipality, through UMATI, the host organization. The schools will be selected from different wards, one school per ward. It will be a two-year project targeting adolescents in standards five and six, for easy follow-up because they will still be in school during the project period. A total of sixty pupils will be trained in each school per year.

A set of tools have been identified and some already developed for implementation of the project. The tools include project proposal including an implementation plan, training guidelines (trainers guide and pupils' handout), and monitoring and evaluation tools. These will be the key outputs by the end of the project, in addition to the overall project implementation report, which will be produced upon successful completion of the project.

By the end of the 2<sup>nd</sup> year of implementation of the project, it is also expected that a total of 360 pupils (120 per school) and 6 primary school teachers will have been trained in adolescent sexual reproductive health. The three project schools will have been enabled to train pupils in adolescence issues.

In conclusion, the project envisages that with effective training of female adolescents in school on adolescence and reproductive health, the girls will not become pregnant and hence will not drop out of school. Instead they will grow up into responsible adults who are socio-economically useful to the society.



## **CHAPTER 1: COMMUNITY NEEDS ASSESSMENT**

Reproductive health information and family life education are some of the critical needs of young people as they grow up into adulthood. Reaching the youth especially adolescents in school and out of school with relevant information on their reproductive knowledge, health and family needs is particularly important in influencing their sexual behaviour and attitudes towards becoming responsible adults.

As adolescents mature and become sexually active, they face serious health risks yet their access to appropriate information, guidance, or health care services is very limited. In sub-Saharan Africa several observations have been made that include rise in overall adolescent fertility rates and an increase in childbearing among women who do not appear to be married. Tanzania is no exception to these trends in the African region (Population and Development Review 25(1): 85-120).

This study on, Reproductive Knowledge, Attitudes and Practices among Female Adolescents in Temeke Municipality is one of the initiatives to establish the gaps in the reproductive health and family life knowledge, skills and attitudes of young people, especially adolescents in school and out of school, with the objective of finding ways of helping the young people to grow into socially responsible and economically useful members of the society.

## **1.2 Community Profile**

Temeke District is one of the three municipalities of Dar es Salaam Region. The District has a total population of 813,667 out of which 164,238 (Temeke Municipal Education Statistics, 2007) are children in primary schools. The Municipality has in the past experienced high drop out of girls from school due pregnancy, leading to establishment of the “Teenage Mothers Centre” in the district, the first of its kind in the whole of Tanzania. The Centre was established in 1986 by the Family Planning Association of Tanzania (UMATI), with an aim of helping young girls forced out of school due to pregnancy, to complete their studies, and where possible equip them with skills that would make the youths economically independent.

Even though the centre has done generally well in addressing the plight of teenage mothers, how to curb the problem before it occurs remains a major challenge. The number of girls dropping out of primary schools in Tanzania due to pregnancy has been increasing over the years. A drop out rate is defined as the percentage of pupils who leave the school without completing the grade they were in during a school year. According to the 2006 Ministry of Education report, the first cause of dropping out of school is truancy (77.3%) while pregnancy is the second major cause of dropping out from school (6.0%). The other causes in order of frequency, are deaths (5.6%), illnesses (2.2%), parent guardian illnesses (1.3%), lack of all types of school needs (7.6%), and others (0.0). The latest Ministry of Education and Vocational Training statistics show that pregnancy accounted for the 6.0% of the total 57,887 cases of dropout from primary

schools in 2006, up from 5.6% in 2005 and 5.2% in 2004. In 2006, 38 adolescent girls in all three municipalities (Temeke, Ilala and Kinondoni) of Dar es Salaam Region dropped out of primary schools due to pregnancy. The statistics shows the drop out rate is highest among the standard five to seven pupils. In comparison, only 4 boys dropped out from school during the reporting period.

### **1.3 What are the Community Needs?**

The increasing number of primary school dropouts due to pregnancy is an indication that more girls are engaging in unsafe sex at a tender age. Other than the unwanted pregnancies, this situation exposes the adolescent girls to other health risks such as sexually transmitted infections and HIV/AIDS. Studies have also shown that pregnancy is a leading cause of death for young women aged 15 to 19 worldwide, with complications of childbirth and unsafe abortion being the major factors. For both physiological and social reasons, women in this age group are twice as likely to die in childbirth as those in their twenties. Girls under age 15 are five times as likely to die as those in their twenties (*UNFPA*). Girls who are not fully developed physically encounter difficulties in sex, pregnancy and labour. Obstructed labour is especially common among young women giving birth for the first time. Young women who get pregnant before their bodies have fully matured therefore risk complications during childbirth. Obstetric fistula is the most devastating disability that can happen to a young woman who survives a difficult childbirth. During obstructed labour, the prolonged pressure of the baby's head against the mother's pelvis cuts off the blood supply to the soft tissues

surrounding her bladder, rectum and vagina. The injured tissue then rots away, leaving a hole, or fistula, that leaves her leaking urine and/or faeces. She may also suffer from frequent bladder infections, ulceration of the genital area and nerve damage to her legs.

Other than the associated health risks, adolescent pregnancies lead to increased number of young single mothers, failure to complete primary education, failure to gain formal employment and the girls may not be self-reliant.

Subsequently, widespread adolescent pregnancy poses a serious socio-economic problem that could lead to poor quality of life, poverty and even death. This underscores the need for the following:

- (a) Studies to find out why female adolescents get pregnant and drop out of schools.
- (b) A greater focus on the reproductive knowledge, health and family life education needs of young people especially female adolescents who are the most vulnerable group.
- (c) Specific programmes that aim at supporting teenage mothers to realise their full potential in life in order to become responsible and useful members of the society.

#### **1.4 Why Female Adolescents get Pregnant**

In August 2006, the researcher conducted a survey in Temeke Municipality to establish why female adolescents get pregnant and drop out of school. The hypothesis of the study was that lack of family life education, inadequate reproductive knowledge and other social needs for female adolescents are the major causes of teenage pregnancies.

**(a) Objectives of the Study**

The primary objective of the study was to assess family life education and reproductive health knowledge, practices and needs of female adolescents in school and out school and to establish why the adolescents get pregnant.

Specific objectives of the study were as follows:

- (i) To establish the proportion of female adolescents who know about reproductive biology and stages of human development with regard to adolescence and the associated biological and psychological changes.
- (ii) To establish the proportion of female adolescent who know about Sexually Transmitted Infections (STIs) including HIV/AIDS, and more so their modes of transmission.
- (iii) To establish proportion of female adolescents who know about safe sex practices.
- (iv) To establish the proportion of female adolescents who know about methods for protection against pregnancy and STIs including HIV/AIDS.
- (v) To establish the proportion of female adolescents who know the consequences teenage pregnancy.
- (vi) To establish the proportion of female adolescents who practice safe sex/use protection.
- (vii) To establish why female adolescents engage in sex before marriage.

- (viii) To establish how and where the female adolescents get family life education and reproductive health information.
- (ix) To establish where the female adolescents would like to get family life education and reproductive health information.
- (x) To assess the general attitude of the female adolescents towards teenage pregnancy and other negative influences such as substance/drug abuse.

#### **(b) Key Research Questions**

In order to achieve the above objectives, the study focused on the following key research questions:

- (i) Are female adolescents knowledgeable about their reproductive biology and stages of human development such as adolescence and biological changes including menstrual cycle?
- (ii) Are female adolescent knowledgeable about Sexually Transmitted Infections (STIs) including HIV/AIDS, and more so their modes of transmission?
- (iii) Are female adolescents knowledgeable about safer sex practices?
- (iv) Are female adolescents knowledgeable about methods for protection against pregnancy and STIs including HIV/AIDS?
- (v) Are female adolescents knowledgeable about consequences teenage pregnancy?
- (vi) Do female adolescents practice safe sex/use protection?
- (vii) Why do female adolescents engage in sex?

- (viii) How do female adolescents access family life education and reproductive health information?
- (ix) Where do female adolescents prefer to get family life education and reproductive health information?
- (x) What attitude do female adolescents have towards teenage pregnancy and other negative influences such as substance/drug abuse?

### **(c) Methodology**

The Study to assess family life education and reproductive health knowledge, practices and needs of female adolescents in school and out of school and to establish why the adolescents get pregnant, was a descriptive cross-sectional survey utilizing both quantitative and qualitative approaches in data collection. The study involved female adolescents in primary schools and adolescent mothers out of school. Trainers at the Temeke Teenage Mothers Centre also participated in the survey.

The study sample was identified through the convenience sampling method, whereby participants in the study were chosen from the nearest and most convenient people to survey. All the participants were residents of Temeke. A total of 122 female adolescents in primary school, 10 adolescent mothers and 5 teenage mothers' trainers participated in the study.

Information was collected through literature review on the subject, structured interviews using a set of standard questionnaire (see Appendix ii), as well as focus group discussions targeting the same areas of concern as in the questionnaire with the teenage mothers and their trainers. The use of a standard questionnaire made it possible for the female adolescents to respond to the raised questions at the same time with minimal supervision. The method was particularly chosen because it is easy to administer. A total of 35 questions were asked in relation to family life education, reproductive health knowledge, practices, needs and attitudes of the female adolescents. Most of the questions were multiple choice types, which made it possible for the respondents to choose the most appropriate response depending on the question. The respondents were aged between 11 and 19 years and all of them were able to read, write and follow basic instructions.

The questionnaires were administered by qualified primary school teachers and youth trainers. The questions were reviewed and agreed upon by the teachers and the survey administrators. The interviewees were briefed and given instructions on how to proceed with the exercise. They were all given the same amount of time (one hour) to complete the questionnaire.

At the community level, a visit was organised to the Temeke Teenage Mothers Centre to collect the necessary information. The centre has a classroom, offices and other service rooms but does not have a dormitory, an indication that the teenage mothers do not live at the centre. Out of the 10 teenage mothers who participated in the study, six lived with



their parents while the remaining 4 lived with guardians. They all confirmed having children who were in the age range of 6 months to 2 years. The parents and the guardians are the main breadwinners to the teenage mothers and their children. Something found in common was that all of them got pregnant while in school and dropped out.

A focus group discussion was conducted with the teenage mothers given their practical experience of pregnancy and child bearing. It was found that the young girls do not know that by engaging in unprotected sex they could easily become pregnant. Apart from pleasure, the adolescents engage in unsafe sexual intercourse because they desire to have gifts, presents and other social needs from boy or men friends that cannot be provided by the parents or guardians. Most of the parents could not provide their daughters what the male friends did. Another focus group discussion was conducted with trainers of the teenage mothers just to verify the information provided by the teenage mothers and to gain an in-depth understanding of the kind of support the teenage mothers get at the centre, considering that the trainers were not the primary target group for the assessment.

The Quantitative data collected from the interviews with female adolescents was organized and analyzed using SPSS, and findings presented according to the key variables of the study.

#### (d) Key Variables

The following were the key variables of the study:

- (i) Reproductive health and family life knowledge of the female adolescents.
- (ii) Reproductive health and family life practices of the female adolescents.
- (iii) Access to reproductive health information and family life knowledge by the female adolescents.
- (iv) Attitude of the female adolescents towards reproductive health, family life and related issues.

#### (e) Major findings

The table below highlights the major findings from the survey by each of the key variables:

S/N	Key Variable	Major Findings
(i)	Reproductive health and family life knowledge	<ul style="list-style-type: none"> <li>▪ 35% - 40% of the respondents were aware of the various STIs including HIV/AIDS and their modes of transmission.</li> <li>▪ Only 14% - 21% reported to have some reproductive health knowledge concerning adolescence, menstrual cycle and unsafe periods.</li> <li>▪ 47% of the female adolescents are aware that adolescent pregnancy and dropping out of school can grossly affect youth development.</li> </ul>

(ii)	Reproductive health and family life practices	<ul style="list-style-type: none"><li>▪ About 37% - 46% practice safe sex /use protection</li><li>▪ With regard to why the female adolescents engage in sex before marriage:<ul style="list-style-type: none"><li>○ 6% in anticipation of marriage</li><li>○ 8% for Entertainment/leisure</li><li>○ 36% engage in sex for money</li><li>○ 50% do not know why</li></ul></li></ul> <div><p>Why do girls engage in sex</p><table><caption>Data for 'Why do girls engage in sex'</caption><tr><th>Reason</th><th>Percentage</th></tr><tr><td>I don't know</td><td>50%</td></tr><tr><td>They want to get money</td><td>36%</td></tr><tr><td>Entertainment /leisure</td><td>8%</td></tr><tr><td>Marriage</td><td>6%</td></tr></table></div>	Reason	Percentage	I don't know	50%	They want to get money	36%	Entertainment /leisure	8%	Marriage	6%
Reason	Percentage											
I don't know	50%											
They want to get money	36%											
Entertainment /leisure	8%											
Marriage	6%											
S/N	Key Variable	Major Findings										
(iii)	Access to reproductive health information and family life education.	<ul style="list-style-type: none"><li>▪ 52% of the respondents have not received any prior information on reproductive health and family life. 48% reported to have had some information.</li><li>▪ 31% said they get reproductive health and family life information from their teachers in school while 14% said they get such information from their parents.</li><li>▪ A good number of the respondents (47%) would like to get family education and reproductive health information.</li><li>▪ 96% of the respondents said they would like to get family life education and reproductive health knowledge at school.</li></ul>										

(iv)	Attitude towards reproductive health, family life education and other related issues.	<ul style="list-style-type: none"> <li>▪ 53% of the respondents disapproved of the act of getting pregnant while studying and admit that it is a big burden.</li> </ul> <p>37% - 40% disapproved of alcoholism and substance/drug abuse due to their bad consequences.</p>
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### **(e) Implications of the Findings**

The results from the survey indicate a significant gap in the reproductive knowledge, attitudes and family life education needs of the adolescents. The fact that only between 14-21% of the adolescents have some knowledge about their reproductive biology, clearly points to this problem. The limited knowledge about the various STIs including HIV/AIDS and the modes of transmission further illustrate the magnitude of the problem. Consequently, all this leads to unsafe sex practices, the result of which are unwanted pregnancies, school dropouts, transmission of STIs including HIV/AIDS, as the immediate effects.

Further socio-economic problems associated with the above mentioned consequences include possibility of death of the adolescent mother and the child due to complications related to the pregnancy, lack of home support to the adolescent mother by the time the family notes the pregnancy, denial by the child's father leading to inability to bring up the child by both parents as expected, and possibility of the mother getting into prostitution and other illegal practices due to economic pressure.

Apart from the gap in the reproductive knowledge of the adolescents, the study also shows that sex practices among the adolescents are to a large extent influenced by external factors. Thirty six percent of the adolescents practices sex for money. The reason for this could be inability of the families to meet the basic needs of the adolescents and lack of proper guidance by the parents and teachers to the adolescents during this trying age.

The lack of supportive environment at home and school is clearly illustrated by the fact that only 14% of the adolescents get reproductive health information and family life knowledge from the parents while 31% get such information from their parents. This limited support provided by the parents and teachers could be attributed to the culture of silence surrounding the whole issue of sexually and lack of the reproductive health information in different forms within the homes and the school environment.

However, the most illuminating finding is that 90% of the adolescents would prefer to be provided with reproductive health and family life education at school. This indicates that there is an urgent need to shift focus to the schools as potential centres for dissemination of reproductive health and family life information to the adolescents.

Although the female adolescents are widely affected by the consequences resulting from inadequate reproductive health information and family life knowledge, the study indicates that these adolescents disapprove of teenage pregnancy and are concerned of its consequences. For example 53% of the respondents disapproved of the act of being pregnant while still in school and consider it to be a big burden when it occurs. Apart

from that 37-40% disapproved of alcoholism and substance abuse due to their bad consequences. This implies that the adolescents generally have a positive attitude towards their reproductive health but mainly fall trap to undesired sexual practices due to lack of sufficient knowledge on their reproductive health and family life needs.

#### **(g) Conclusion and Recommendation**

The study shows that there is a need to equip the adolescent girls with appropriate reproductive health information and family life knowledge so that they can grow up as responsible and socio-economically useful members of the society. The study also revealed that the preferred timing of this intervention is when they are in school. The study therefore, recommends implementation of a well structured training programme for the female adolescents in school, with a focus on increasing their reproductive and family life knowledge, as way of averting the problem of adolescent pregnancy and other associated problems and consequences.

## **CHAPTER 2. PROBLEM IDENTIFICATION**

The study on Family Life Education, Reproductive Health Knowledge and Attitudes of Female Adolescents in Temeke Municipality has clearly demonstrated that lack of appropriate reproductive health information and family life knowledge are some of the major challenges facing the adolescents. Female adolescents are often the most at risk group especially when they become pregnant while still in school.

Starting a family is challenging for almost everyone, but it can be extremely challenging and stressful for adolescents. Adolescents who are poverty stricken face even more severe challenges. Many poor adolescents risk not only the health and lives of themselves but also their children. Adolescent mothers often have poor eating habits, and may smoke, drink alcohol and take drugs, increasing the risk that their babies will be born with health problems. The adolescent mothers are least likely to get early and regular prenatal care. A serious risk of not receiving prenatal care is birth complications. Birth complications are life threatening to the mother and her infant. These complications can be harmful to the infant by impairing cognitive development, especially later on in life.

Babies born to poor adolescent mothers may be abused or neglected, developing serious medical or mental illnesses. These babies are more likely to grow up in poverty, without proper guidance and education, and become teenage parents themselves. Poor adolescent mothers also give birth to low-birth weight babies which can result in serious health

defects. Babies with low-birth weight are more likely to die in their first month of life than normal weight babies (Bornsteind & Lamb, 1992).

In Tanzania the number of adolescent girls dropping out of primary schools due to pregnancy has been increasing over the years. In 2006, pregnancy accounted for 6.2% of the total cases of dropout from primary schools, up from 5.6% in 2005 and 5.2% in 2004. In 2006, 38 adolescent girls and only 4 boys in Dar es Salaam Region dropped out of primary schools due to pregnancy, some of which were reported in Temeke Municipality.

This situation can be changed by providing the adolescents with the relevant and adequate reproductive health information and family like knowledge so as to avert the teenage pregnancies and drop outs from schools. This intervention should preferably be provided in the school environment and the study conducted in Temeke has shown that 90% of the adolescents prefer to be provided with this kind of information while in school.

Subsequently, the study on Family Life Education, Reproductive Health Knowledge and Attitudes of Female Adolescents in Temeke District has recommended implementation of a well structured training programme for the female adolescents in school, with a focus on increasing their reproductive and family life knowledge, as way of averting the adolescent pregnancies and other associated problems and consequences.



The project envisages that with more information to the females adolescents on their reproductive biology especially knowledge of normal bodily growth, changes and functions during adolescence, would enable them adopt a more responsible behaviour at this stage and avoid the unwanted pregnancies.

### **2.1 Project Goal**

The goal of the project is to support female adolescent to grow into responsible and socio-economically useful members of the society by providing them with the relevant reproductive health information and family life knowledge.

### **2.2 Objectives**

The main objective of the project is to increase the level of reproductive knowledge of female adolescents by increasing their access to information regarding bodily growth and associated physiological changes in order to make them responsible adolescents.

The specific objectives of the project are:

- (i) To educate the female adolescents about their bodily growth and changes during adolescence
- (ii) To educate them about their reproductive organs and functions
- (iii) To educate them about normal bodily reproductive functions such as the menstrual cycle.

- (iv) To educate them about their sexuality in relation to the normal bodily changes and familiarizes them with knowledge on safe and unsafe periods.

### **2.3 Host Organization**

The project will be implemented in Temeke Municipality by the Family Planning Association of Tanzania (UMATI) in collaboration with the Project Co-ordinator, Temeke Municipal Council Authorities, the administration of the schools selected for implementation of the project, teachers, pupils and community members. UMATI was established in 1959 as a Family Planning Association of Dar es Salaam. The Association was officially registered in 1960 and it became a national organization in 1967. It is an autonomous, not for profit, non-political, voluntary national NGO providing Sexual and Reproductive Health (SRH) education, information and services in Tanzania. UMATI is a member of the International Planned Parenthood Federation (IPPF).

The Association is recognized as a leader in SRH programmes in the country, including pioneering in family planning (FP) services, Family Life Education for youths, and providing integrated clinic and Community based service delivery approaches. Since its inception, the Association has been responding to various national and international challenges for its growth. This move has contributed to the accumulated experience in Sexual and Reproductive Health (SRH) information services provision in the country.

The Association involves itself in addressing the emerging challenges in the endeavour to provide youth focused SRH services. UMATI services mainly target young people between 10-24 years of age.

The Family Planning Association of Tanzania (UMATI) is a major partner of the Ministry of Health and Social Welfare in providing family planning information, education and counselling. Its formation was necessitated by the huge unmet need for parenthood education for the youth. It is credited with the establishment of the Teenage Mothers Centre in Temeke District in Dar es Salaam Region. The Centre supports adolescent girls who have been forced out of primary schools due to pregnancy, to complete their studies, and where possible enable them pursue further studies, and also to equip them with skills in order to make them economically independent.

UMATI has therefore been chosen as the host organization for implementation of the **“School-based Reproductive Health and Family Life Education Project for Female Adolescents in Temeke Municipality”** based on its broad experience in the Municipality and especially in working with teenage mothers, its well established networks, as well as, the goodwill it enjoys in the Municipality are also expected to facilitate effective implementation of the project in the Municipality.

The Municipal authorities, especially the Education, Health, Community Development and Social Welfare Departments, will be closely involved in the implementation of the

project. According to Government procedures the respective local level is the lead implementer of government policies at the community level. Involvement of the Municipal authorities will therefore ensure that implementation of the project is carried out in line with the existing government policies.

Managements of the schools selected for implementation of the project are on the other hand expected to provide the necessary administrative support required for successful implementation of the project. The recruited teachers will likewise play an important role in implementation of the conducting the actual training to the pupils.

The community will be sensitized about the project in order to gain their acceptance and moral support for its delivery to the pupils. Their sound understanding of the project's goal and objectives would be crucial in creating a supportive environment for the female adolescents to learn more about reproductive health and family life.

Through this collaborative effort, the project hopes to impart the necessary reproductive knowledge and family life education to the female adolescents in Temeke District as a way of helping them to realise their full potential in life.

### **CHAPTER 3. LITERATURE REVIEW**

Adolescents' sexuality and the associated reproductive health problems is a very important and relevant public health problem in Tanzania and other third world countries. The literature available on this subject is very wide. The researcher has reviewed the literature that has touched on the scope and magnitude of the problem globally, in developed and the developing countries. The sources range from books, papers, official documents/reports, reviews and journals to websites. The review include information on adolescent fertility, early marriage, adolescent childbearing, policies and programmes to address the reproductive health problems focusing on the female adolescents.

#### **3.1 Theoretical Review**

The World Health Organization (WHO) defines adolescents as individuals between 10 and 19 years of age. The broader term "youth" encompasses the 15- to 24-year-old age group. Adolescence is a period of transition, growth, exploration, and opportunities. At the same time, adolescents typically are poorly informed about how to protect their sexual health. As a result, they may be susceptible to unwanted pregnancies, the health risks associated with early pregnancy, unsafe abortions, STIs, and HIV. Adolescents' circumstances and needs vary tremendously depending on individual characteristics such as age, sexual activity, schooling, and employment status, as well as their position within the range of the adolescent years. The young people worldwide face social, economic, and health challenges that were unimaginable even a decade ago. While young people's

health and educational prospects are improving, and marriage and childbearing are occurring at later, more mature stages of life compared with previous generations, some serious concerns remain. Despite increasing attention given worldwide to education, 121 million children worldwide are out of school, with 9 million more girls than boys. Educating girls is essential to reducing child mortality, HIV/AIDS, and other diseases. Furthermore, educated women will most likely have healthy children who will complete schooling. (UNICEF, 2003).

In the Least Developed Countries, only 22 percent of boys and 13 percent of girls are able to continue their education beyond the primary level. In Burundi, the Central African Republic, Mali, and Niger, fewer than 10 percent of girls receive at least seven years of schooling. Youth with low levels of education experience severely limited future prospects for economic self-sufficiency (AGI, 1998). Adolescents are a large and growing segment of the population. More than half of the world's population is below the age of 25, and four out of five young people live in developing countries (WHO/UNFPA/UNICEF, 1999). During adolescence, young people develop their adult identity, move toward physical and psychological maturity, and become economically independent. Although adolescence generally is a healthy period of life, many adolescents often are less informed, less experienced, and less comfortable accessing family planning and reproductive health services than adults (PATH/Outlook, 1998). Adolescents may experience resistance or even hostility from adults when they attempt to obtain the reproductive health information and services they need.

They, therefore, may be at increased risk of sexually transmitted infections (STIs), HIV, unintended pregnancy, and other health consequences that can affect their futures and the future of their communities for many years to come. In addition, gender inequities, particularly unequal power in relationships, may limit their ability to use contraceptives or seek reproductive health services. Young women are reaching menarche earlier and, in some countries, marrying later (AGI 1998). As a result, a significant number of adolescents of childbearing age around the world are sexually active, and an increasing proportion of sexual activity is occurring outside of marriage (PRB/CPO 1994). Surveys show that about 43 percent of women in sub-Saharan Africa and 20 percent of 20-year-old women in Latin America have had premarital sex. In some developed countries, the rates are higher: 68 percent of adolescents in the United States and 72 percent in France have had premarital sex by age 20 (AGI, 1998).

Along with increased exposure to STIs and unintended pregnancy, adolescents who engage in sexual activity outside of marriage may face social stigmas, family conflicts, problems with school, and the potential need for unsafe abortion. Married adolescents who become pregnant may not encounter the same social risks as their unmarried counterparts, but they may face the same complications from STIs and to the health risks of early pregnancy. Each year, 15 million adolescents aged 15 to 19 years give birth, accounting for up to one-fifth of all births worldwide. In the developing world, an average of 40 percent of women give birth before the age of 20, ranging from a low of 8 percent in East Asia to a high of 56 percent in West Africa (Noble et al. 1996). In many developed regions, only about 10 percent of adolescents begin childbearing as early.

In the United States, however, about 19 percent of adolescent women give birth by age 20 (Noble et al. 1996; United Nations 1995).

Age and moral issues are often conflated in views of the problem of teenage pregnancy. Many believe that teenagers (and others) should not engage in sexual activity until marriage. Teenage pregnancy in industrial nations is usually outside of marriage, and it carries a social stigma in many communities and cultures for that reason. The rates of teenage pregnancy also vary widely within many countries. For example, in the UK, the 2002 teenage pregnancy rate was as high as 100.4 per thousand young women in the London Borough of Lambeth, and as low as 20.2 in the Midlands local authority area of Rutland. As an example, in the state of Texas, it is illegal for teens to have sexual intercourse even if it is consensual. Punishment often includes juvenile prison for the male teen and community service for the female. It appears that such laws have a minimal effect on teenage pregnancies with one study citing a reduction of only 0.9%. Being a teenage mother can be difficult. Many face prejudice and stigma from their communities. The teenage mothers loose friends, become isolated and very much less informed due to limited interactions.

Therefore, access to reproductive health information and services is critical, but this alone will not necessarily result in young people adopting safer sexual behaviours. Like adults, young people require motivation to make healthy decisions about their sexual behaviour; adopting healthy sexual attitudes and behaviours cannot happen in a vacuum. Indeed, it is becoming increasingly clear that adolescent sexual and reproductive health



is closely linked with educational and economic opportunities (Esim, 2001). Early marriage, adolescent pregnancy, abortion, and STIs often curtail adolescents'—especially girls'—ability to obtain an education and learn skills that can help them develop livelihood options. Conversely, developing economic options and skills at a young age can significantly influence a person's future social and economic mobility; it also decreases their exposure to health risks, improves fertility outcomes, and enhances overall well-being.

However, much still needs to be done to ensure adequate information and services to the world's young people. Focusing on adolescent reproductive health is both a challenge and an opportunity for health care providers. Adolescents often lack basic reproductive health information, skills in negotiating sexual relationships, and access to affordable confidential reproductive health services. Many do not feel comfortable discussing sexuality with parents or other key adults with whom they can talk about their reproductive health concerns (PATH/Outlook 1998). Likewise, parents, health care workers, and educators frequently are unwilling or unable to provide complete, accurate, age-appropriate reproductive health information to young people. This often is due to their own discomfort about the subject or the false belief that providing the information will encourage increased sexual activity (Baldo et al. 1993). In addition to STI and pregnancy risks, many young people who are sexually active have been forced into sexual relationships either through violence or for economic reasons, and are in need of counselling, information, and contraceptive services.

Young women are reaching menarche earlier and, in some countries, marrying later (AGI 1998). As a result, a significant number of adolescents of childbearing age around the world are sexually active, and an increasing proportion of sexual activity is occurring outside of marriage (PRB/CPO 1994). A recent study of 14 countries throughout the world found that for never-married young people, particularly men, sexual intercourse appears to be very sporadic and probably involves a number of partners over time. The lower incidence of non marital sexual activity among young women raises the possibility that in countries where very high proportions of young men initiate sexual activity before age 15 and young women postpone having sex, young men may be initiating intercourse mostly with sex workers (Singh et al. 2000).

In Sub-Saharan African countries like Senegal, adolescents live in a socioeconomic climate that is between traditional society with its well-structured rites and customs and an extroverted modern society. They are often plunged into uncertainty and into a search of themselves. With a weak and not-yet-determined personality, sexuality erupts into their life experience (UNICEF Report 2003). In Tanzania, a recent UNICEF report estimates that three million school-aged children are out of school, half of them girls. Among factors preventing girls from finishing school are adolescent pregnancy and forced early marriage because of economic gains for the family. Another factor is gender-biased socialization in school, which reinforces traditional gender roles by promoting assertive behaviour for boys and passive behaviour for girls. Girls are also expected to care for the sick and young siblings, preventing them from attending school regularly (Mzingira, J).

The school period is also a time of biological changes, but access to sex education is often non-existent. Tanzania's parenthood system has changed enormously: the extended family system, which allowed grandparents to teach grandchildren on community values, is disappearing more and more. Many communities have abandoned the traditional training, *jando* for boys and *unyago* for girls that prepared children at the age of 13 for the transition from childhood to adulthood. This training prepared them for the roles and responsibility of parenthood, and addressed issues related to sexuality, gender roles, taking care of the community, children and neighbours.

Some form of traditional training has been going on at a small scale. Until recent years the special traditional sexual health training has been given to boys and girls at age 13, openly discussing sexual and reproductive issues. Girls were taught how to become good mothers (*unyago*) and boys were taught how to become good fathers (*jando*). New socio-economic patterns, urban-to-rural migration and formal education systems have led almost all 120 ethnic groups in Tanzania to abandon this traditional sex education. Currently, a big gap in sex education exists, as the primary school system has no reproductive and sexual health curriculum. Many boys and girls enter puberty before completing their primary school. Hence, at this important stage in their lives, boys and girls are forced to learn about sex and sexuality from their peers.

### **3.2 Empirical Literature Review**

Despite these challenges, programs that offer accurate information, access to contraceptives and other reproductive health services, as well as the motivation young

people need to protect themselves, can make a difference. Adolescents are a central resource for their countries' health and development in the present as well as in the future. But even more important, young people have the basic human right to receive the information and services necessary to protect themselves from STIs, early pregnancy, and their associated poor outcomes. Adolescence is a time of tremendous opportunity and change. It also is a time of heightened vulnerabilities. Programs that can provide information, ensure access to services, and develop life skills are crucial to the future of this population. Targeting young people for health information and services can be a gateway to promoting healthy behaviors. Working together, parents, community leaders, and health professionals can create programs that address young people's needs and help them to enjoy a healthy adolescence and to become healthy and responsible adults (UNICEF 1998).

If programs link adolescent reproductive and sexual health with broader youth development they can take a holistic approach to young people's concerns. These programs can help young people develop the skills, self-esteem, and motivation necessary to postpone or "take a break" from sexual intercourse, while also helping to develop life skills that can serve them well into adulthood. Programs recognizing that adolescents can engage in healthy, fulfilling sexual relationships, rather than focusing only on the negative outcomes, may go far in reaching young people with important information.

Although few programs have been rigorously evaluated, guidelines on building successful programs and reaching young people are emerging. Well-designed youth programs consider the many factors that shape young people's lives and influence sexual behaviour and reproductive health decision-making.

The Key strategies for reaching and serving youth include:

- developing youth-friendly services;
- involving youth in program design, implementation, and evaluation;  
training providers to attend to the special needs and concerns of adolescents;
- encouraging community advocacy efforts to support youth development and promote positive adolescent health behaviours;
- implementing programs that provide complete and accurate sexual health information; and
- incorporating skills-building exercises into youth programs to help young people improve their self-esteem,
- develop their communication skills about sexuality and strengthen their ability to negotiate safer sexual practices.

Adolescent programs work best when they provide life skills education in addition to sexual health information and services (WHO/UNFPA/UNICEF 1999). Programs should help young people develop skills and talents that offer them opportunities for economic viability and develop their sense of having a potentially successful adulthood. Such opportunities, combined with reproductive health information and services, can help

motivate youth to postpone sexual activity by helping them understand the long-range impact of their decisions and the importance of planning their futures. Both young men and women may need reproductive health education, including information on sexuality, contraception, reproduction, abstinence, abortion, STIs, and gender roles. Adolescent sexuality is a sensitive subject in all cultures. Programs that offer reproductive health services to adolescents can expect to encounter some resistance from their community. Programs recognizing that adolescents can engage in healthy, fulfilling sexual relationships, rather than focusing only on the negative outcomes, may go far in reaching young people with important information.

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- Adolescent sexuality is a sensitive subject in all cultures. Programs that offer reproductive health services to adolescents can expect to encounter some resistance from their community.

In Tanzania, despite government endorsement through the 1994 National Policy Guidelines and Standards for Family Planning Provision that made Adolescent Sexual Reproductive Health (ASRH) information and services accessible to adolescent's concern remains that providing information to youth might provoke irresponsible sexual behaviour. For a long time, non-governmental organizations worked virtually alone in providing ASRH information and services to youth — often small-scale efforts with little governmental involvement. While public health delivery networks offered great potential for providing sustainable services, youth faced any number of hurdles to access, including the timing of service provision, the attitudes of service providers, and limited privacy in health facilities.

However, there are now a number initiatives, projects and programs in country that address the adolescent issues. These programs are implemented by several local and international organizations. Among the pioneers in this area is UMATI. The other programs are linked with the African Youth Alliance (AYA) which is a collaborative program between the United Nations Population Fund (UNFPA), the Program for Appropriate Technology in Health (PATH), and Pathfinder International. The three expert development groups have come together to form a unique and significant alliance to reduce the incidence and spread of HIV/AIDS and other Sexually Transmitted

Infections (STIs) and improve overall adolescent reproductive health in Botswana, Ghana, Tanzania and Uganda. By partnering with governments, nongovernmental organizations (NGOs), community-based and youth-serving groups, AYA aims to make a big difference in young people's lives by providing resources and support to encourage their healthy behaviour.

The African Youth Alliance is funded through the US Committee for the UN Population Fund. AYA reaches young people between the ages of 10 and 24, with an emphasis on 10-19-year-olds. Its goal is to help the four program countries: AYA works to foster a supportive community and political environment for adolescent sexual and reproductive health (ASRH) through advocacy activities at national and community levels. AYA and its advocacy partners employ the following strategies to develop this support: youth involvement and participation, partnership with the media, community mobilization and participation in project activities, and social networking and coalition formation. The program works through; Behaviour Change Communication (BCC), establishment of youth-friendly services, institutional capacity building of in-country partner organizations, integrates ASRH into livelihood skills development programs. AYA works with a range of agencies, charities and community-based organizations. The key collaborators dealing with adolescent issues are;

#### **UMATI:**

UMATI leads the way for youth-friendly services and behaviour change communication, by collaborating with media and using peer counsellors to conduct outreach activities to



expand ASRH access and services to young people. The teenager Mother Centre signifies their role in youth care. UMATI collaborates with AYA as well.

### **Marie Stopes Tanzania**

Marie Stopes Tanzania collaborates with youth-serving organizations to promote services, and help deploy peer promoters to conduct activities at school and workplaces in the seven isolated communities. This is all rather informal.

### **Ministry of Health**

The Reproductive and Child Health Section of the Ministry of Health and Social Welfare take a lead role to adapt the complimentary National Training Guide for ASRH and develop a minimum package for high quality youth-friendly services.

### **Radio Tanzania Dar es Salaam**

Focuses on ASRH policy and program issues as well as contribute to adolescents' behaviour change. There is a weekly, 30-minute program each week with programs on policy and advocacy.

### **Africa Media Group**

The Africa Media Group's priority audience is youth aged 10-24. AYA advocates raising awareness of ASRH issues among youth and the public at large. Using television, they provide a forum for discussion, debate, dialogue and information sharing on issues about adolescent sexuality, HIV and STI prevention, teen pregnancy, and abortion.

### **Chama cha Wanawake Kupambana na Ukimwi Arusha (CHAWAKUA)**

CHAWAKUA (Women Fighting against HIV/AIDS in Arusha) focuses on providing out-of-school youth and community members in Arusha Municipality with information on ASRH and life-planning skills in order to promote positive attitudes and safer sexual practices.

### **Infectious Diseases Centre**

The Infectious Diseases Centre will work to scale up ASRH services in Dar es Salaam. Located in Ilala (one of the three municipalities in Dar es Salaam), this public-owned facility is used by youth for STI management and HIV voluntary counselling and testing. It is the only specialized ASRH site among 56 existing public health service delivery points in the city.

### **Tanzania Gender Networking Programme**

The Tanzania Gender Networking Programme advocates for mainstreaming gender and ASRH issues among AYA's country partners in all 10 project districts.

### **Tanzania Youth Awareness Trust Fund (TAYOA)**

TAYOA works with out-of-school youth in Ilala, Temeke, and Kinondoni in Dar es Salaam to improve adolescent health using life-planning skills education, peer education, and media (such as videos) to help decrease the incidence of STI/HIV and unwanted pregnancies. Their behaviour change communication activities help link youth to the Infectious Diseases Centre and UMATI. TAYOA also conducts community mobilization activities and work with parents to increase community support for ASRH.

### 3.3 Policy Review

Adolescents' circumstances and needs vary tremendously depending on individual characteristics such as age, sexual activity, schooling, and employment status, as well as their position within the range of the adolescent years. Access to reproductive health information and services is critical, but this alone will not necessarily result in young people adopting safer sexual behaviours. Like adults, young people require motivation to make healthy decisions about their sexual behaviours; adopting healthy sexual attitudes and behaviours cannot happen in a vacuum. Indeed, it is becoming increasingly clear that adolescent sexual and reproductive health is closely linked with educational and economic opportunities (Esim 2001). Early marriage, adolescent pregnancy, abortion, and STIs often curtail adolescents'—especially girls.

One in every five people in the world is an adolescent – defined by WHO as a person between 10 and 19 years of age. Out of 1.2 billion adolescents worldwide, about 85% live in developing countries and the remainders live in the industrialized world. Adolescents are generally thought to be healthy. By the second decade of life, they have survived the diseases of early childhood, and the health problems associated with ageing are still many years away. Death seems so far removed as to be almost unthinkable. Yet many adolescents do die prematurely. Every year, an estimated 1.7 million young men and women between ages of 10 and 19 lose their lives – mostly through accidents, suicide, violence, pregnancy-related complications and other illnesses that are either preventable or treatable.

## **World Health Organisation**

The World Health Organisation (WHO), along with its partners, United Nations Children's Fund (UNICEF) and United Nations Fund for Population Activities (UNFPA), advocate an accelerated approach to promoting the health and development of young people in the second decade of life. The Common Agenda outlines the action needed to provide adolescents worldwide with the support and the opportunities to:

- Acquire accurate information about their health needs
- Build the life skills needed to avoid risk-taking behaviour
- Obtain counselling, especially during crisis situations
- Have access to health services (including reproductive health services)
- Live in a safe and supportive environment

Central to this approach is the recognition that the underlying causes of young people's health and development problems are closely related. The solutions to these problems are also similar and inter-related.

In 1994, the International Conference on Population and Development (ICPD) Programme of Action called for organizations to initiate or strengthen programs to better meet the reproductive health needs of adolescents (ICPD 1994; Alcala 1995). The importance of adolescent health is now acknowledged, and numerous programs have been developed to address their reproductive health needs. However, much still needs to be done to ensure adequate information and services to the world's young people.

Teenage pregnancy results from women under the age of 20 having sexual intercourse and becoming pregnant. Barring medical and physical concerns, problems of teenage

pregnancy arise from individual, family, and social factors. These include but are not limited to culture, religion, moral values and beliefs, law, education, economic circumstances, lack of support structures (including access to care and other resources), and mental and emotional well-being. Data supporting teen pregnancy as a social problem in industrial nations include lower educational levels, higher rates of poverty, and other poorer "life outcomes" in children of teenage mothers.

The overall global and national policies are in favour of youth development and their social welfare. There a number of policies that aims at developing and safe guarding children and adolescents. In this regard the objectives of the National Policy for Youth Development (1996) are to; quote” The National Policy for Youth Development”

- i. To improve the life of Youths, Men and Women by developing them in Sectors of economy, culture, politics, up-bringing, education and health.
- ii. To sensitise youths and society in awareness, promotion and defending youth rights according to the national constitution.
- iii. To associate departments, institutions and various organisations in implementing youth development programmes with the aim of mitigating economic, social, political and culture negative effects.
- iv. To prepare youth physically, mentally, economical, politically and culturally so that they can take -over various responsibilities as good citizens, parents and leaders in a society.

- v. To enable youths participate in the struggle to bring social and national development “unquote”

The stated objectives can not be attained if the adolescents are not safe guided and given the necessary and appropriate information that will enable them to go through the adolescence period uneventfully. If the parents, guardians and teachers are not keen, the adolescent will not go through this period smoothly. Some of them could become school truants, drunkards, drug addicts, or become pregnant and drop out of school.

### **Employment Policy**

The Employment Policy (1997) also directs that a conducive environment must be created for the un-employed like the poor youth to employ themselves by directing more re-sources to the self employment sectors that will after they have completed at least the compulsory primary school education that enables them to write and read.

### **Community Development Policy**

The other supportive policy is on Community Development. The (1996) Policy gives guidelines on how communities (of the adolescents are part of it) will be helped to build their capacity to implement their responsibilities. The Policy also states clearly the responsibilities of different concerned parties in speeding up community development in the country.

The major objective of the Community Development policy is to enable Tanzanians as individuals or in their families and/or groups or Associations to contribute more to the government objective of self reliance and therefore bring about development at all levels and finally have a remarkable national growth (Tanzania Community development policy).

### **Child Development Policy**

The Child Development Policy (1996) also emphasizes on the development of a child as related to his/her physical, intellectual, moral and spiritual growth. In order for a child to grow well she/he needs to be cared for, given guidance and brought up in accordance with the norms of the community. The objectives are geared towards educating the children, to guide, protect and develop them. It emphasizes on enabling the communities to understand and be involved in the upbringing of the children. The roles and responsibilities of everybody should be stipulated so that we altogether help the youth to become responsible citizens. It also touches on the need to have laws to deal with people who abuse children.

### **Tanzanian Health Policy**

Likewise, the Tanzanian Health Policy (1990) objectives are indeed very supportive for the vulnerable groups that include the adolescents. Its overall objective is to improve the

health and well-being of all Tanzanians, with a focus on those most at risk and to encourage the health system to be more responsive to the needs of the people. Although the National Health Policy contains no specific reference to youth reproductive health, some health provisions, however, are addressed to youth in school. The policy states that school children will be made a special target group for health education through the School Health Programme, and that water sources will be provided to all primary schools as part of basic sanitation efforts. It also states that health care services and health education will be provided to schools.

### **Educational Policy**

The goal of the Educational Policy (1995) is to ensure quality, access and equity at all levels of education. Specifically these policies are aiming in improvement of quality education and training, expansion of the provision of education and training, promotion of science and technology and broadening the base for the financing of education and training. So, efforts geared towards at ensuring that the female adolescents do not become pregnant and drop out of school so that they complete schooling are in line with the national educational policy.

Further to that the educational policy also emphasizes on girls education. It stipulates that Primary education shall be universal and compulsory to all children at the age of 7 years until they complete this cycle of education; co-education and girls secondary schools shall be promoted and encouraged; the existing girls boarding schools shall continue and more places for girls shall be established where secondary education for



girls has been deficient. The government also envisages establishing special education financial support schemes for girls and women in education and training institutions.

The Education Policies are in line with the larger national or macro policy which emphasizes on increased role of private sector in education, introduction of cost sharing measures, and decentralization of education and training management. The Government has recently developed a key development strategy called the National Strategy for Growth and Reduction of Poverty (2005); best known by its Kiswahili acronym of MKUKUTA (Mkakati wa Kukuza Uchumi na Kuondoa Umaskini Taifa). The focus is outcome orientated and organized around three clusters - Growth and reduction of income poverty, improved quality of life and social well-being, and governance and accountability. It is has deliberately been set out to mainstream all cross-cutting issues.

**MKUKUTA** targets all the poor in their struggle to improve their welfare. It requires that its key stakeholders are actively involved in education, public mobilizing, sensitizing and dissemination of implementation information throughout Tanzania. General mass education is crucial to enable the ordinary citizens to participate in the national development strategies. Indeed, educating beneficiaries on any programme under implementation is of paramount importance. Once they understand that they will be in a position of contributing magnificently materially and morally because they would take it as theirs. Failure to that they would take it as a government entity. The poor young female adolescents who become pregnant and drop out of school will be left

out. Deliberate efforts must be taken to ensure that at least all citizens complete the compulsory basic primary education. The aim of assisting the young female adolescents to complete the basic education scheme is to empower them so that they become active participants in development activities. If the youth lack education, they will definitely be left out. This phenomenon in a way has led to failures of a number of projects especially those executed in the rural areas where the majority of people have no formal education or are less educated in comparison with the urban dwellers. After all there is no point of initiating projects which sideline the target groups.

Although the policies and guidelines have been stipulated still the situation is not that good. There is lack of commitment, seriousness and lack of resources to create the enabling environment for implementation of the activities geared towards youth development and social welfare. We are witnessing cases of child abuse, adolescence pregnancy, children not attending schools etc. The gender equality is also taken care of by the Gender and Development policy whose overall objective is to promote gender equality and equal participation of men and women in economic, cultural and political matters. Also focuses on - fairer opportunities for women and men and access to education, child care, employment and decision making. Unfortunately some parents support marriage of their daughters at very tender ages of under 18 years. The 1971 Marriage Act on the other hand ought to be reviewed as a matter of urgency because it allows marriage at 14 to 15 years of age for the girls which is not acceptable as the

female adolescent is not fully biologically (anatomical and physiological) and psychologically mature. In addition to that the victims are supposed to be in school.

In conclusion, the various literatures have looked into various program approaches for improving adolescent health, including health education programs, family planning services, multi-service centers, information, education and communication programs, and training. Recommendations for policy and program changes include increasing educational opportunities (especially for females), expanding health services, increasing legal access to family planning services, raising the legal age of marriage, collecting data on younger adolescents (under 15). The authors state that adolescents especially in developing countries face limited access to information and services that they clearly need. However, what it takes to get a solution in any of these wide range problems is extremely demanding and hard to attain. The papers highlight the critical needs of female adolescents, recommending that efforts be made to increase women's education, eliminate discriminatory practices, and increase sexuality education and family planning services. The literature has also provided a wide range of options to solve the adolescent reproductive health problems. Despite all that, there are little achievements in solving the problems. The abundant literature on this subject does not seem to offer very easy solutions to the adolescent reproductive health problems.

## **CHAPTER 4. IMPLEMENTATION**

The project will be implemented in 3 conveniently selected primary schools in Temeke District. The schools will be selected from different wards, one school per ward. It will be a two-year project targeting adolescents in standards five and six, for easy and prolonged follow-up because they will still be in school during the whole project period. A total of sixty pupils will be trained in each school per year.

### **4.1 Products and Outputs**

Implementation of the project will require a set of tools which include project proposal including an implementation plan, training guidelines (trainers guide and pupils' handout), and monitoring and evaluation tools. These will be the key outputs by the end of the project, in addition to the overall project implementation report, which will be produced upon successful completion of the project.

By the end of the 2<sup>nd</sup> year of implementation of the project, it is also expected that a total of 360 pupils (120 per school) and 6 primary school teachers will have been trained in adolescent sexual reproductive health. The three project schools will have been capacitated to train pupils in adolescence issues.

## 4.2 Project Planning

The implementation process will involve the following **activities**:

- Community needs assessment and a survey to establish the reproductive knowledge and family life education needs of female adolescents in the project area.
- Feedback to primary and key stakeholders.
- Proposal development
- Consultation with policy-makers at the national level and implementers at the district
- Development of the implementation tools
- Sensitization of key stakeholders at the implementation level
- Selection of implementation sites
- Recruitment and training of trainers (teachers) and a supervisor
- Training of trainers
- Recruitment of the target beneficiary (female adolescents in schools)
- Delivery of the training programme in schools
- Supportive supervision
- Medium-term review of the project
- Final evaluation of the project

### 4.2.1 Brief Description of Activities

- Community needs assessment and a survey, have been conducted to establish the reproductive knowledge and family life education needs of female adolescents in the project area. The survey was a cross-sectional study which involved adolescent girls

in 3 three located near the UMATI teenage mothers centre. The study has shown the need for a special training programme aimed at increase the level of reproductive knowledge of the female adolescents by increasing their access to information regarding bodily growth and associated physiological changes in order to make them responsible member of the society.

- Further to the community needs assessment and the survey, feedback to primary and key stakeholders (the administration and teachers in the primary schools where the study was conducted, district authorities and UMATI leaders) has been conducted to share the findings from the survey and to enlighten them about the need for the a special training programme targeting the female adolescents, given the significant gap noted in the reproductive knowledge and family life education needs of the female adolescents in school and out of school.
- Proposal development involved detailing out the project goal, objectives and rationale; its implementation plan including a set of activities to be implemented, resource needs (financial, materials and human); as well as the monitoring and evaluation mechanism.
- Consultation with policy-makers at the national level and implementers at the district level will involve senior officials in the Ministry of Education and Vocational Training as well as the Ministry of Health and Social Welfare; and district leaders

including District Education Officer, District Medical Officer, District School Programme Co-ordinator and District RCH Co-ordinator. The objective will be to enlighten them and about the project and to solicit their support and cooperation towards its implementation. The consultative process is also envisaged to create some sense of ownership and acceptance of the project by the leaders, which a basis for sustainability.

- Development of the implementation tools has focused mainly on the top priority of having a trainers guide on adolescence. This tool has been developed in consultation with the relevant authorities to ensure its relevance and technical appropriateness. The tool primarily outlines what the female adolescents need to know about bodily growth changes and reproductive functions during adolescence. This tool will be complement by the pupils' handbook which shall be prepared just before actual implementation of the envisaged project begins in the selected schools. Likewise, a supervision checklist and evaluation tools will be development upon commencement of the project based on the based on the implementation need of the project.
  
- Sensitization of key stakeholders at the implementation level will be conducted prior to commencement to of the project to enlighten them about the project goal, objectives and expected results; and to gain their acceptance and support in its implementation as basis for ownership and sustainability of the project.

The sensitization process will involve local government leaders, religious leaders, other influential members of the community, as well as community members.

- In selecting implementation sites, the three schools where the survey was conducted will be given the first priority, considering that they have already gained some level of understanding regarding the need for the project, based on the survey findings.
- Recruitment and training of trainers (teachers) and a supervisor will be limited to the three project schools and the collaborating institution, UMATI. This will enable the project to take advantage of the ground work done during the survey.
- Training of trainers will be conducted by the project co-ordinator using the trainers guide. This will be a five-day training involving 6 primary school teachers (2 teachers per school) and a training supervisor from UMATI. The supervisor will be trained for additional two days on supervisory skills to enable him/her to effectively conduct supportive supervision to the teachers once implementation of the project begins.
- In recruiting the pupils to be covered by the project, priority will be given to pupils in standards five and six. These pupils should be in the age range of 12 to 14 years, and are therefore in the puberty stage when they experience a number of bodily and physiological changes leading to adulthood. Considering that the project will be implemented over a two-year period, recruiting pupils in standard five and six will make it possible to follow-up the pupils while they are still in school.
- Delivery of the training programme in schools will be done alongside the schools curriculum so as not to interfere with the normal learning schedules in schools. The



project management will discuss and agree with the schools' administration on the most appropriate time to offer the training. The teachers involved in the project will be given a special incentive, preferably an extra-duty allowance as a form of motivation in order to ensure their active participation in implementation of the project.

- Supportive supervision will be conducted to the teachers routinely by the trained supervisor and the project co-ordinator using a standard supervision checklist to ensure the quality of the training and to give the needed technical assistance.
- Medium-term review of the project will be conducted at the end of the first year of implementation to ensure to that it is on the right course. The review will make it possible to identify and address whatever weaknesses and gaps noted in the implementation process and to document certain lessons and best practices to be promoted in the 2<sup>nd</sup> year of implementation of the project.
- Final evaluation of the project will be done at the end of the 2<sup>nd</sup> year of implementation with the primary objective of measuring the outcomes and impact of the project on the target community. A comprehensive report will be prepared upon successful evaluation, detailing out the achievements made, constraints experienced, challenges met, solutions applied and lessons learnt from the whole process.

The report will be used as advocacy tool for scaling up implementation of the project based on the results from the evaluation.

### 4.2.2 Implementation Plan

S/N	Activity	Responsible Person	Timeframe
1	Feedback to primary and key stakeholders*	Project co-ordinator/ researcher	October 2006
2	Proposal development*	Project co-ordinator/ researcher	Dec 2006 – Jan 2007
3	Consultation with policy-makers*	Project co-ordinator/ researcher	February 2007
4	Development of implementation tools (training guide)*	Project co-ordinator/ researcher	March – April 2007
5	Sensitization of key stakeholders	Project co-ordinator/ researcher	May – June 2007
6	Selection of implementation sites	Project co-ordinator/ researcher	July 2007
7	Recruitment of trainers and a supervisor	Project co-ordinator/ researcher	July 2007
8	Training of trainers and a supervisor	Project co-ordinator/ researcher	August 2007
9	Recruitment of the target beneficiary (female adolescents in schools)	Project co-ordinator/ researcher, supervisor and the trainers	Sep 2007
10	Delivery of the training programme in schools	Trainers/teachers	October 2007 – October 2009
11	Supportive supervision	Project co-ordinator/ researcher, Supervisor	October 2007 – October 2009

12	Medium-term review of the project	Project co-ordinator/ researcher, supervisor and the teachers	October 2008
13	Final evaluation of the project	Project co-ordinator and an external evaluator	November 2009
14	Preparation of the final project report	Project co-ordinator	December 2009
15	Dissemination of results	Project co-ordinator	December 2009

\* Accomplished activities.

#### **4.2.3 Inputs for Implementation**

The key inputs required for successful implementation of the project include human resource, equipment and financial resources.

##### **(a) Staffing Pattern**

Eight personnel will be involved in the implementation of the project. They include project co-ordinator, project supervisor, and six trainers (teachers drawn from the primary schools implementing the project).

The project co-ordinator will be responsible for the overall co-ordination of the project while the supervisor will provide technical support to the trainers through routine supportive supervision. The trainers on their part will be responsible for conducting the actual training to the pupils.

While both the supervisor and the trainers will be trained on the project using as standard training guide, the supervisor will be provided with an additional training to equip him/her with supervision skills.

### **(b) Budget for Implementation of the Project**

The budget for implementation of the project takes into account the financial needs of the planned activities, human resource needs and equipment. The table below highlights the main items in the budget categorized as project preparation costs, start-up costs, running costs and winding up costs.

#### **The Budget**

<b>Preparation Costs</b>		
<b>S/N</b>	<b>Item</b>	<b>Amount in USD</b>
1	Community needs assessment/survey	500
2	Feedback to stakeholders (half-day dissemination workshop)	200
3	Sensitization of key stakeholders on the need for the project	200
4	Training workshop for the teachers and the supervisor	1000
	<b>Sub-total 1</b>	<b>1,900</b>
<b>Start-up Costs (Purchase of Equipment)</b>		
1	Laptop (1)	1,800
2	Printer (1)	400
3	Blackboard (3)	150
4	Overhead Projector	900
5	Motorbike for the supervisor	2,000

	<b>Sub-total 2</b>	<b>5,250</b>
<b>Monthly Running Costs</b>		
1	Supervision allowance to the supervisor	50
2	Extra duty allowance to 6 teachers (USD50 x 6)	300
3	Fuel allowance to the supervisor	100
4	Fuel allowance to the project co-ordinator	200
5	Project communication costs	100
6	Teaching materials (chalk, stationary and exercise books)	50
	<b>Sub-total 3</b>	<b>800</b>
<b>Running costs for entire project period (USD800 x 24 months)</b>		<b>19,200</b>
<b>Project Winding up Costs</b>		
1	Project evaluation	1,000
2	Dissemination of results	200
	<b>Sub-total 4</b>	<b>1,200</b>
<b>Overall Project Cost</b>		
1	Preparatory costs	1,900
2	Set-up costs	5,250
3	Running costs	19,200
4	Winding-up costs	1,200
<b>Total</b>		<b>27,550</b>

#### 4.2.4 Project Implementation Chart

S/ N	Activity	Year 2006		Year 2007				Year 2008				Year 2009			
		Q3	Q4	Q1	Q2	Q3	Q 4	Q1	Q 2	Q3	Q4	Q1	Q2	Q3	Q4
1	Initial consultations and familiarization	X													
2	Feedback to stakeholders		X												
3	Proposal development		X	X											
4	Consultation with policy-makers			X											
5	Implementation tools development			X	X										
6	Sensitization of stakeholders				X										
7	Selection of implementation sites					X									
8	Recruitment of trainers, supervisor					X									
9	Training of trainers, supervisor					X									
10	Recruitment of pupils						X								
11	Delivery of the programme						X	X	X	X	X	X	X	X	
12	Supportive supervision						X	X	X	X	X	X	X	X	
13	Medium-term review									X					
14	Final evaluation														X
15	Preparation of final project report*														X
16	Dissemination of results*														X

\* Activities likely to continue into the fourth year

## **CHAPTER 5: MONITORING AND EVALUATION**

Monitoring and evaluation will be conducted to ensure that the project stays on track and achieves its objectives. Monitoring will be done routinely using to gather information needed to keep the project on track, identify constraints and formulate solutions, document best practices and measure progress. Evaluation will be done in order to assess the impact of the project on the target community.

### **5.1 Monitoring Activities**

The monitoring activities will be undertaken to ensure that project stay on track and achieves its objectives:

- (i) Weekly reporting by teachers on the learning progress of the pupils. The reporting will particularly focus on the pupils' learning needs, challenges, most frequently asked questions and general feeling about certain aspects of the training programme.
- (ii) Monthly reporting by the supervisor on the progress of the project in all the implementing schools, with a focus on the pupils' learning progress, teachers' performance as well as their capacity needs and gaps in delivery of the training programme. This information will be collected during the routine supportive supervision.
- (iii) Quarterly reporting by the project co-ordinator, focusing on the pupil's learning progress and overall delivery of the training programme. This information will be collected through the weekly reports by teachers, monthly reports by the supervisor and routine visits by the project co-ordinator to the project sites.

The following set of tools will be developed and used in the monitoring process:

- (i) **Weekly Reporting Form** that will be regularly filled by the trainers to monitoring learning progress of the pupils.
- (ii) **Supervision Checklist** which captures a range of indicators which touch on the pupils learning progress and needs, performance as well as capacity needs of the teachers in delivery of the training programme.
- (iii) **Quarterly Reporting** forms to monitor planned outputs delivery.
- (iv) **Documentation Framework** for collecting both quantitative and qualitative information on implementation of the programme routinely.

## 5.2 Evaluation

The evaluation process will involve the following major activities:

- (i) Medium-term review of the project at the end of the first year of implementation to assess progress, identify weaknesses and gaps, formulate solutions, and to document lessons learnt and best practices to be scaled up.
- (ii) Final evaluation of the project to be conducted at the end of the 2<sup>nd</sup> year of implementation. The main objective of the evaluation will be to measure outcomes and impact of the project in the target community.

The following tools will be developed and used in the evaluation process:

- (i) **Pupils' Feedback Form** to gather information from the female adolescents regarding what they feel about various aspects of the course for example most exciting units, most difficult areas to understand, most informative units; expectations, as well as most burning questions



- (ii) **Medium-term Review Guideline** to be used in assessing progress, identifying weaknesses and gaps, and documenting lessons learnt and best practices to be scaled up.
- (iii) **Evaluation Guidelines (Terms of Reference)** to be use in measuring the outcomes and impact of the project in the target community.

### **5.3 Monitoring and Evaluation Indicators**

Two sets of indicators, namely Output and Outcome indicators will be used to monitor and evaluate implementation of the project. The output indicators will focus more the process of implementation of the project while outcome indicators will focus on the end result of the process at different levels of implementation.

#### **5.3.1 Output Indicators**

- Number of female adolescents trained in the entire programme area.
- Number of female adolescents attending classes regularly.
- Number of homework given to the pupils.
- Number of student completing their homework.
- Number of test conducted to gauge the understanding of the pupils in the course of the training.
- Number of pupils having difficulties understanding the subject.
- Number of teachers trained and followed after training.
- Number of supervision visits conducted.
- Number of pupils' feedback forms properly filled and submitted at the end of each unit
- Number of weekly reports submitted in time.

- Number of monthly supervision reports submitted in time.

### **5.3.2 Outcome Indicators**

The outcome indicators will focus mainly on the reproductive knowledge of the female adolescents, and the primary target group. The indicators are as follows:

- Proportion of the female adolescents who understand what adolescence is and can clearly explain it.
- Proportion of the female adolescents who can identify, using a diagram, the body parts directly related to reproduction.
- Proportion of female adolescents who can identify, using proper terminology, the body parts directly related to reproduction.
- Proportion of female adolescents who can describe the physical, psychological and emotional changes that occur during adolescence.
- Proportion of female adolescents who can describe the steps involved in adolescent sexual maturation in a sequential order.
- Proportion of female adolescents who can describe the functions of reproductive organs in males and females
- Proportion of female adolescents who understand menstrual cycle, conception and pregnancy.

## CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

### 6.1 CONCLUSIONS

Many people and the authorities in Tanzania express their concerns with regard to the large numbers of pupils, mostly girls, who drop out of school because of pregnancy, teenage marriage, child labour or truancy. Studies have repeatedly shown that as a girl's education increases, so does her quality of life. Educated girls are less likely to marry early or to get pregnant at a young age. The failure of girls to complete primary education is a critical issue because education is a key to the desired socio-economic development.

Education aims at the formation of the human person in the pursuit of his ultimate end and of the good of the communities of which he or she is a member. Therefore, children and young people must be helped, with the aid of the latest advances in knowledge to develop harmoniously their physical, moral and intellectual endowments so that they may gradually acquire a mature sense of responsibility in striving endlessly to form their own lives properly and in pursuing their way in future. The family which has the primary duty of imparting education needs help of the whole community and the government at large. Failure of a country to educate its young population could limit the country's capability to acquire a competitive work force necessary for its economy.

It is thus necessary to safe guide the young people by giving them, as they advance in years, reproductive knowledge and family life skills as well so that they are not obstructed in pursuing education that will enable them to take their part in social life as economically useful members of the community. Lack of reproductive knowledge and skills often times leads to problems because teenagers become sexually mature and

active much earlier. The adolescents are put in a situation that is vulnerable to reproductive health problems like STIs, HIV/AIDS and teenage pregnancies which may force them out of school.

Adolescent reproductive health problems are indeed very common and lead to very serious socio-economic and public health problems in Tanzania and other third world countries. A lot of the problems emanate from the poor socio-economic situations of the affected families and the respective adolescents. Furthermore, lack of reproductive knowledge, family life education, awareness of bodily changes and functions exacerbate the situation. The affected young adolescents get teenage pregnancies and drop out from schools. So, the challenge is how to combat this growing problem.

The researcher has attempted to address the important question which is how can the female adolescents dropping out of primary schools due to pregnancy could be helped to get appropriate education, knowledge and skills in order to prevent them from the vice so that they become socio-economically useful community members. Presumably, if the female adolescents get the appropriate family life education, reproductive health knowledge and skills they will not become pregnant and hence will not drop out of school.

## **6.2 RECOMMENDATIONS**

The key recommendation is that there is a great need to establish appropriate comprehensive family life education programme to deal with these key pertinent issues. The programme would aim at helping the girls who have been forced out of primary schools due to pregnancy to complete their studies and, where possible enable them pursue further studies: and also, to equip them with skills in order to make them

economically independent. The study suggests that there is need to equip the adolescents with appropriate FLE, RH knowledge and inculcate in them the right attitudes for their living and future so that they become socio-economically useful members of the community.

Education is a key for breaking the transmission of poverty from one generation to the next. Yet studies show that the poor adolescents are more likely to not complete schooling (Population and Development Review 25(1): 85-120). Consequently, they are deprived of the education on reproductive health and sexuality that is provided at higher grade levels and do not know how to find health information. The preferred timing is when they are at school and be given by teachers who should be well trained in these areas.

This undertaking will eventually alleviate the problem of the ever increasing school drop out, increasing number of young parents out of marriage, increasing number of single parents, increasing number of children that are not being cared by both parents, failure to complete primary education, failure to secure formal or gainful employment, the young girls may not be able to be self reliant and hence consequently perpetuate poverty. The study findings imply that action has to be taken now to save the youths. FLE, Reproductive knowledge, healthy attitude and behaviour change is urgently needed. The literature suggests that where efforts have been taken to educate the youth, the results were encouraging. Health educators have long argued that sex education (about contraception and safer sexual behaviours) would effectively reduce the number of teenage pregnancies.

Countries that do use progressive sex education at a young age, such as the Netherlands, do have a much lower rate of teenage pregnancy than the United States and the United Kingdom. However, there are many confounding factors such as ethnicity, available social support systems and contraception, and so forth that make comparisons difficult. Proponents of progressive sex education hold that providing young people with sexual information allows them to make their own choices about whether or not to have sex, not to be rushed into having sex without realizing the consequences, and to be able to use contraception when they eventually do choose to have sex.

**In summary,**

The study has demonstrated that there is a need to equip the adolescent girls with appropriate reproductive health information and family life knowledge so that they can grow up as responsible and socio-economically useful members of the society. The preferred timing of this intervention is when they are in school and should be implemented by their teachers. Apart from undertaking other measures like reviewing the inadequate legislation governing this area, the researcher strongly recommends implementation of a well structured training programme for the female adolescents in school, with a focus on increasing their reproductive and family life knowledge, as way of averting the problem of adolescent pregnancy and other associated problems and consequences.

In response to that, the researcher has thus developed a trainers' guide in adolescence in the endeavor to fill the gap. Appropriate FLE, RH knowledge and inculcation in them the right attitudes for their living and future is largely needed so that they become socio-

economically useful members of the community. The trainers' guide/manual on adolescence overleaf covers the following areas;

- Introduction
- The Physiological Development Of The Adolescent
- The Psychological Development Of The Adolescent
- The Male Reproductive System
- The Female Reproductive System
- The Sexual Maturation Of The Male Adolescent
- The Sexual Maturation Of The Female Adolescent
- Menstrual Cycle

**FAMILY LIFE EDUCATION**  
**FOR**  
**FEMALE ADOLESCENTS**

**TRAINER'S GUIDE**

**By:**  
**PASIENS STEPHEN MAPUNDA**

**(March 2007)**



## **TRAINER'S GUIDE ON ADOLESCENCE**

### **Introduction**

Adolescence is the period during which a child matures into an adult. The World Health Organization (WHO) defines adolescence as the period of life between 10 and 19 years of age. During this period of life, most children go through the physical stages of puberty which often begins between the ages of 9 to 13 years. Different cultures regard people as becoming adults at various ages of the teenage years. This occurs most likely at the age of fourteen to sixteen for girls and at the age of 18 to 20 years. This transitional change involves the biology (pubertal), social, and psychological changes. The biological changes are most obvious and as such can be ascertained easily.

Puberty occurs when the child develops secondary sex characteristics. The secondary sex characteristics are for example deeper voice in boys, and development of breasts in girls. This is triggered by the pituitary hormones which are secreted during this time. The hormones lead to maturation of the girl's ovaries and the boy's testicles. In sociology, adolescence time is identified with dramatic changes in the body, along with developments in a person's psychology. In African countries like Tanzania, the beginning of adolescence occurs when the child is about completing seven to eight primary school years. This is the most difficult time for the children as some of them are not able to enter the secondary schools due to truancy, pregnancy etc. which may occur during the delicate period.

There is a great need for information on issues pertaining to adolescents' anatomical, physiological and especially the reproductive system changes during the vital period. Adolescents in the third world countries face limited access to services that they clearly need. Recommendations for policy and program changes include increasing educational opportunities (especially for females), expanding adolescent reproductive health services and establishment of youth centres to deal with the consequences of lack of the needed knowledge, skills and attitudes during the adolescent period. In response to that a number of program approaches for improving adolescent health, including health education programs, family planning services, multi-service centers, information, education and communication programs; and training have been initiated. The question is whether what is being offered is what is needed and whether it is being offered at the right time and place. In this study it has been found out that a lot of the information given is familiar to the adolescents. They do not get the information they need most at the right time, in the right place and by the right people.

The research study revealed that the young adolescents need the information to be taught in primary schools by their teachers. Among the information needed is on what happens during the adolescence period. So, this is an attempt to give the adolescent trainers and primary school teachers' information on adolescence which would enable them to teach the young adolescents in school. This trainers' guide addresses one of the critical needs of female adolescents, established in the survey on information needs for young adolescents in Temeke district, Dar-es-Salaam. These are some of the efforts that are being made to increase women's education, decrease female adolescent school drop out

resulting from teenage pregnancies and increase sexuality education to enable the young female adolescents live a descent socio-economic life.

This package of information therefore, provides adolescents and youth trainers with relevant and accurate information on adolescence and will empower them with the knowledge skills and attitudes to intervene in their communities to bring about positive changes. While on one hand, this will develop the capacity and expertise of the primary school teachers and enhance their understanding of adolescent issues.

### **The Physiological and Psychological Development of the Adolescent**

The overall goal is to impart the basic and necessary reproductive knowledge, skills and the appropriate attitudes to adolescents. This concise training guide describes what the trainer has be acquainted with to enable him or her teach adolescent teachers and the adolescents. It is all about the physical, social and emotional changes that take place during adolescence. The aim of the trainer's guide course is to equip the trainers with the necessary knowledge and skills as trainers for the adolescents.

### **The Study Topics are;**

1. Introduction
2. The Physiological Development Of The Adolescent
3. The Psychological Development Of The Adolescent
4. The Male Reproduction System
5. The Female Reproduction System
6. Sexual Maturation Of The Male Adolescent
7. Sexual Maturation Of The Female Adolescent
8. Menstruation
9. Pregnancy

#### **1. Introduction**

There are numerous activities in which adolescents engage, namely family, education, work and recreation; these occur in school, home, youth groupings and other settings throughout the community. The adolescents are faced with a lot of challenges. They are in the community where a lot of activities are taking place as well. They are still young and look forward to grow into adulthood. The elder adolescents, parents and teachers are expected to guide them through this critical path to adulthood. There are many distractions for the youth that include time wasting leisure activities, alcohol abuse, illicit drugs, prostitution etc. The youths face a lot more problems. This opportune time is for the youths to be in schools and or vocational centres.

However, what it takes to get a solution in any of these wide range problems is extremely demanding and hard to attain. A lot of the problems emanate from the poor socio-economic situations of the affected families and the respective adolescents. Three major vices namely; poverty, low social economic status and ignorance are deeply rooted. This is an attempt to address the ignorance on the human reproductive system and the bodily changes that occur during adolescence.

“The Physiological and Psychological Development of the Adolescent” trainers’ guide has been designed to enable the trainer understand the reasoning behind the child’s sudden changes in behavior and be able to offer help to youth during this critical period of their life when they are struggling to identify and formulate their self-image, values, and ideals along with gaining independence from their parents, teachers, caretakers, or guardians.

This information is targeting the trainers of standard 5-7 pupils aged between 11- 16 years, where most children enter adolescence. For the teachers to take full advantage of the information included in here, three to four weeks should be set aside to teach the related topics in their entirety.

The trainer is advised to familiarize her/himself with the theory and practical aspects by reviewing the diagrams and charts. The trainers being adults are expected to draw a lot from their own experience and elaborate the information further by giving practical and live examples in a free and a very relaxed mood to clarify the issues. It is believed that by doing so, the pupils will find the subject more interesting and motivate them to learn.

Even though the vocabulary may appear to be difficult, children will tend to learn the words rapidly because of the direct involvement and interest in the subject. At the end of the lessons the students should be able to;

- i. Explain what is adolescence
- ii. Identify, using a diagram, the body parts directly related to reproduction.
- iii. Identify, using proper terminology, the body parts directly related to reproduction.
- iv. Describe the physical, physiological and emotional changes that occur during adolescence
- v. Place the steps involved in adolescent sexual maturation in sequential order.
- vi. Describe the function of reproductive organs in males and females.
- vii. Understand the menstrual cycle, conception and pregnancy

## **THE PHYSIOLOGICAL DEVELOPMENT OF THE ADOLESCENT**

### **Introduction**

In trying to discuss adolescence, most adults tend to confuse the terms adolescence and puberty, and use them synonymously. However, puberty refers to the physiological changes involved in the sexual maturation of a child, as well as other body changes that may occur during this period of time. Adolescence refers to the stage from puberty to adulthood, and includes the psychological experiences of the child during this period. Adolescence is described as being the teenage years from thirteen to eighteen years of age; however, puberty decides the onset of adolescence. Therefore, adolescence occurs in some children as early as nine years of age. During this period of time the child has a great deal of concern over his/her body image and any discrepancies in the child's eye such as obesity, early or late maturation, etc., may be manifested through a variety of disorders.

During adolescence there is a large degree of psychological growth as children make adjustments in their personality due to the rapid physical and sexual development which is characteristic of this period of life. Adolescents face ongoing conflict and difficulty adapting to the sudden upsurge of sexual and aggressive drives. These changes cause unrest and confusion in the adolescents' inner selves and in the way they perceive the world.

## **What is Puberty?**

Puberty refers to the physiological changes that the adolescent undergoes in order to reach sexual maturity. The child develops secondary sex characteristics which include deeper voice in boys and development of breasts in girls. This phenomenon is influenced by hormones. The pituitary and the girls' ovaries/boys testicular hormones hasten the rapid maturation. During this period the growth spurt begins to accelerate, males experience their first emission of semen usually in the form of "wet dreams," and menarche occurs in the females. This state signals that fertility is possible. The boy's sperm can fertilize the girl's ovum.

## **The Bodily Development of the Adolescent**

The body changes that are noticed during puberty are triggered by hormones that are released from certain endocrine glands. The important gland is the pituitary gland, located at the base of the brain. This gland stimulates hormone production in other glands. Adolescent growth is in the beginning depicted by the growth of the arms and legs. The faces also change. The male face becomes leaner while the female adolescent face somehow becomes round-ish due to extra fat deposition. Both sexes become very attractive to either sex. The male become more muscular and increase in height while the girls develop the hips and usually assume a figure of eight.

Changes also occur on the body skin in both sexes. These changes include the growth on body hair, both pubic and armpit. This process begins about the same time as the rapid growth begins. The growth of pubic hair continues throughout adolescence, it spreads



horizontally in girls and also vertically in boys as it spreads over the genital areas. In males, the growth of facial, chin (beards) and chest hair usually become very vivid. Females may also occasionally find small amounts of facial and chest hair.

The Physical Changes during Puberty are;

- In boys, the testicles start to produce the hormone testosterone, the male sex hormone.
- In girls, the ovaries produce oestrogen and progesterone, the female sex hormone.
- The pituitary gland also manufactures a hormone that makes the bones and muscles grow rapidly.
- The adrenal glands, situated above the kidneys, produce additional sex hormones, including androgens. Boys produce more androgens than girls. The hormones from these glands cause a variety of physical changes that happen gradually.

The trainer should concentrate on what the adolescent needs to know. The following points should be emphasized.

- i. Right now you are changing.
- ii. You notice changes in your body and also in your feelings.
- iii. You are moving away from childhood, on your way to becoming an adult.
- iv. All the changes are normal.
- v. This stage called puberty.
- vi. It is a process that takes time, a different amount of time for every person.
- vii. Sometimes it makes you feel awkward, confused, and uncomfortable.
- viii. At other times, you feel excited and independent.

- ix. Puberty starts between the ages of 9 and 16. You may be growing and developing faster than your friends, or more slowly. That happens because each of you has his/her own internal clock. It is part of what makes you an individual.
- x. These differences are normal.
- xi. Your rate of growth is influenced by heredity, by your environment and by your sex. Your growth won't be completed until you are 18 to 22 years of age.
- xii. You may or may not engage in self-pleasuring.
- xiii. Puberty has an impact on you on various levels: You will notice physical, emotional and sexual changes.

### **The Changes for Boys**

- As they get older increased testosterone made by testicles (pituitary gland)
- Testosterone starts to work (growth spurts)
- Shoulders and chest begin to broaden and voice gets deeper
- Pubic, underarm, chest and facial hair growth
- Sex organs develop – the penis and testicles will get bigger (different sizes), testicles produce sperm (each ml of semen contains 120 million spermatozoa)
- Wet dreams
- Erections
- Acne and increased perspiration
- Changes start around age 10, but it depends on the individual
- Gradual changes and not at the same time

In summary, although the timing of these changes is different for every guy, the stages of puberty usually happens in the following order;

- During the first stage of male puberty, the scrotum and testes grow larger.
- Next, the penis becomes longer, and the seminal vesicles and prostate gland grow.
- Hair begins to appear in the pubic area and later it grows on the face and underarms.

During this time, a male's voice also deepens.

- Boys also undergo a growth spurt during puberty as they reach their adult height and weight.

### **The Changes for Girls**

- Pituitary gland causes ovaries to produce hormones (oestrogen)
- Estrogen starts to work (growth spurts)
- Hips will broaden
- Pubic and underarm hair growth
- Breasts are developing (shapes and sizes differ)
- Menstruation begins (ovaries contain thousands of cells - born with these)
- Acne and increased perspiration

**There are five physical occurrences from puberty** (Marshall, 1978 in Steinberg, 1996).

- i. Growth occurs
- ii. Body composition begins to change.
- iii. The circulatory and respiratory systems begin to change.
- iv. The primary sex characteristics develop.

- v. The secondary sex characteristics develop.

The **growth spurt** usually occurs in girls about two years before boys. The growth spurt triggers the legs to grow, followed by the body's trunk, and ending in the shoulders and chest (Cole & Cole, 1993). Bones become harder and denser, while muscle and fat contribute to an adolescent increase in weight (Steinberg, 1996).

**Body composition and circulatory and respiratory change:**

- i. Girls develop breasts, acquire hips, and have a higher ratio of fat to muscle (Cole & Cole, 1993). Females are healthier, live longer, and are able to tolerate more long term stress than males (Cole & Cole).
- ii. Boys develop wider shoulders, a more muscular neck, and lose fat during adolescence (Cole & Cole, 1993). Males develop larger hearts and lungs, have higher blood pressure, and lower resting heart rates than females (Cole & Cole). Overall, males can exercise longer and with greater force than females (Cole & Cole).

**Sexual development** involves enlargement, maturity, and the reproduction of the primary sex organs. The male testes produce sperm cells and the prostate gland produces semen. Males are able to ejaculate the semen, which contains the sperm. The female ovaries release the mature ova into the fallopian tubes. Menstruation occurs if conception does not (Cole & Cole, 1993).

As the primary sex organs mature, the secondary sex characteristics distinguish males from females (Cole & Cole, 1993). The following chart shows the variations of physical changes at puberty (Goldstein, 1976 in Steinberg 1996).

<b>GIRLS</b>		<b>BOYS</b>	
<b>Characteristics</b>	<b>Age of Occurrence</b>	<b>Characteristics</b>	<b>Age of Occurrence</b>
Breasts grow	8-13 years	Testes and scrotal sac grow	10-13 years
Pubic hair develops	8-14 years	Pubic hair develops	10-15 years
The body grows	9 ½-14 ½ years	The body grows	10 ½-16 years
Menarche occurs	10-16 ½ years	Penis growth	11-14 ½
Underarm hair grows	Around 2 years after pubic hair	Voice changes (Larynx grows)	Around the same time as the penis
Oil/Sweat glands	Around time of underarm hair	Underarm and facial hair	Around 2 years after pubic hair
		Oil/Sweat glands	Around time of underarm hair

### **Emotional Changes during Puberty**

**Sense of Identity** - The pubertal boy or girl is trying to identify him or her self. Friends become more important than family members. They want to become more independent from parents and family. They begin to feel they exist or regard themselves as being also important.

**Future** – Majority have no regard for future. They need to be guided.

**Pressure** – He or she is compelled to do what the peers do. They seem to be setting the standards for him or her with regard to dressing, language and behavior. This situation can create conflict with the parents.

**Confusion** – They are on transit. Many of them get lost during this period. They do not realize where they are going. Some loose track and get trapped into funny hobbies, alcoholism, sports, illicit drugs, truancy, may become pregnant and drop out of school etc.

**Poor decision making** – They may be moved by unusual events. They may be overwhelmed by the body physiological needs and not using the common sense. Thinking is limited. They prefer enjoyment rather than working

**Mood Swings** – They become moody. It can be explained by the hormonal changes that occur during this period.

**Self-consciousness** – They become more conscious of themselves especially for the girls. This goes beyond the self identity.

**Sexual Desires** – They develop sexual interest with the opposite sex. They have fantasy. They develop interest in sexual movies, magazines, stories etc.

## The Male Reproductive System

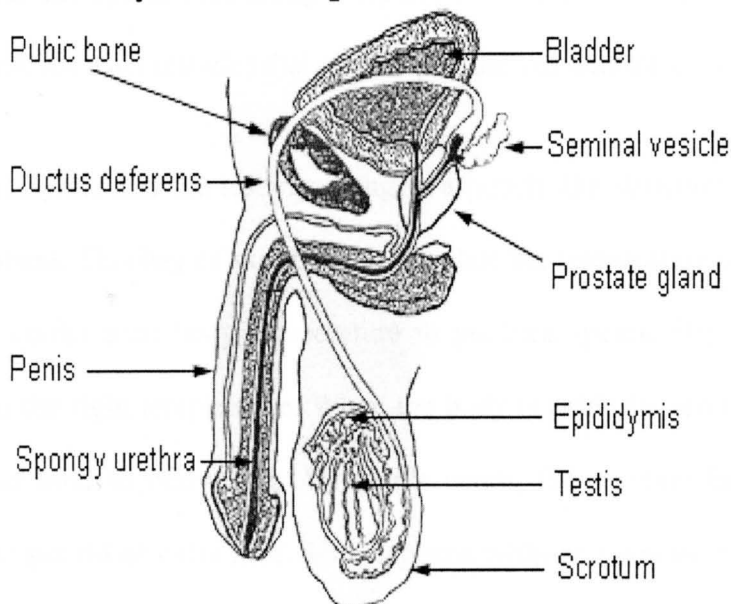
At the end of the topic the student should be able to;

- i. Identify and list the functions of the male's external reproductive system.
- ii. Identify and list the functions of the male's internal reproductive system.
- iii. Label a diagram of the internal organs of the male.
- iv. Label a diagram of the male's external organs

The male reproductive system has reproductive organs, or **genitals**, that are both inside and outside the pelvis. The male genitals include:

- i. the penis
- ii. the testicles
- iii. the duct system, which is made up of the epididymis and the vas deferens
- iv. the accessory glands, which include the seminal vesicles and prostate gland

### Male Reproductive System



The **penis** is made up of the **shaft** and the head which is technically called the glans. The shaft is the main part of the penis and the glans is the tip. There is a small opening at the end of the glans called the urethra. This is the opening where the semen and urine exit. The inside of the penis is made of a spongy tissue that can expand when there is an increased blood flow and contract when the blood flow decreases.

The 2 **testicles** produce and store millions sperms. The testicles are oval-shaped and grow to be about 4 centimeters in length and 1 2.5 centimeters in diameter. The testicles are part of the endocrine system because they produce a sex hormone called **testosterone**. Testosterone hormone hastens maturity of the boys during adolescence. Testosterone is the hormone that causes boys to develop deeper voices, bigger muscles, and body and facial hair, and it also stimulates the production of sperms.

The **epididymis** and the **vas deferens** make up the duct system of the male reproductive organs. The vas deferens is a muscular tube that passes upward alongside the testicles and transports the sperm-containing fluid called **semen**. The epididymis is a set of coiled tubes (one for each testicle) that connects to the vas deferens.

The epididymis and the testicles hang in a pouch-like structure outside the pelvis called the **scrotum**. This bag of skin helps to regulate the temperature of testicles, which need to be kept cooler than body temperature to produce sperm. The scrotum changes size to maintain the right temperature. When the body is cold, the scrotum shrinks and becomes tighter to hold in body heat. When it's warm, the scrotum becomes larger and more floppy to get rid of extra heat. This happens without a guy ever having to think about it. The brain and the nervous system give the scrotum the cue to change size.



The **accessory glands**, including the seminal vesicles and the prostate gland, provide fluids that lubricate the duct system and nourish the sperm. The **seminal vesicles** are sac-like structures attached to the vas deferens to the side of the bladder. The **prostate gland**, which produces some of the parts of semen, surrounds the ejaculatory ducts at the base of the **urethra**, just below the bladder. The urethra is the channel that carries the semen to the outside of the body through the penis. The urethra is also part of the urinary system because it is also the channel through which urine passes as it leaves the bladder and exits the body.

All boys are born with a **foreskin**, a fold of skin at the end of the penis covering the glans. Some boys have a **circumcision**, which means that a doctor cuts away the foreskin.

Circumcision is usually performed during a baby boy's first few days of life. Although circumcision is not medically necessary, parents who choose to have their children circumcised often do so based on religious beliefs, concerns about hygiene, or cultural or social reasons. Boys who have circumcised penises and those who don't are no different: All penises work and feel the same, regardless of whether the foreskin has been removed.

### Role of the male in reproduction

During sexual intercourse the male releases semen which contains sperms. The sperms are usually introduced in the vagina. They travel through the mouth of the womb, into the cavity of the womb technically called the uterus. They proceed on either side to the fallopian tubes where the sperm meets the ovum from the female ovaries.

The fertilization usually takes place in the middle third of the fallopian tubes. The fertilized ovum called the zygote will be implanted in the womb and develop into a baby in nine months.

#### Further development

When a baby boy is born, he has all the parts of his reproductive system in place, but it isn't until puberty that he is able to reproduce. When puberty begins, usually between the ages of 10 and 14, the pituitary gland - which is located in the brain - secretes hormones that stimulate the testicles to produce testosterone. The production of testosterone brings about many physical changes during the puberty.

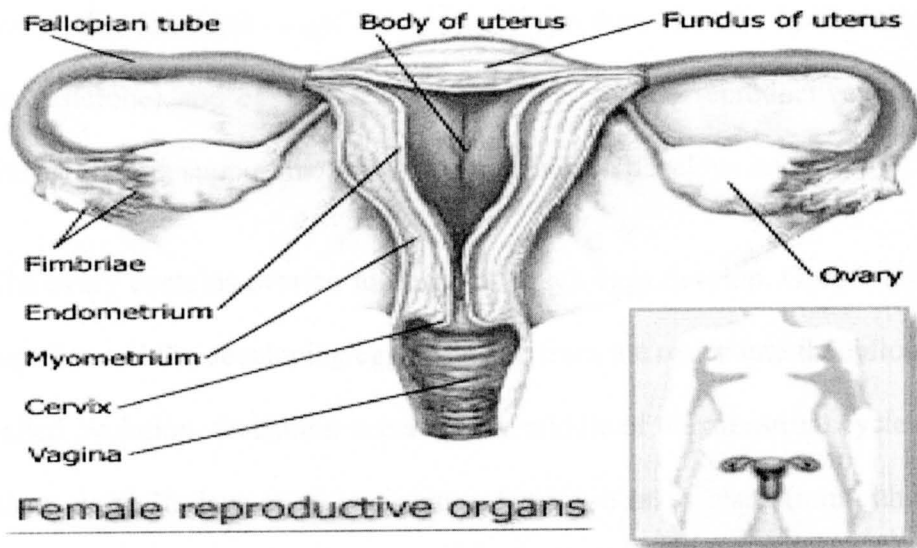
### **THE FEMALE REPRODUCTION SYSTEM**

**At the end of the topic the student should be able to;**

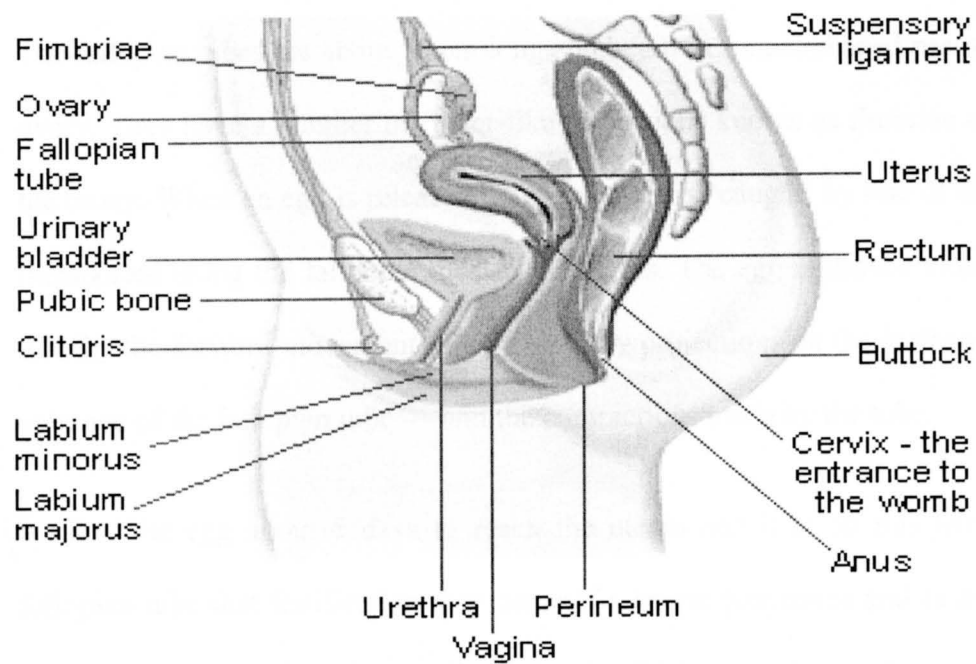
- v. Identify and list the functions of the female's external reproductive system.
- vi. Identify and list the functions of the female's internal reproductive system.
- vii. Label a diagram of the internal organs of the female.
- viii. Label a diagram of the female's external organs

## The Female reproductive organs

### Front view



### Side view



## **Ovaries**

The ovaries are the main reproductive organs of a woman. The two ovaries, which are about the size and shape of almonds, produce female hormones (oestrogens and progesterone) and eggs (ova). All the other female reproductive organs facilitate the transportation; support the growing zygote which develops into a baby.

The ovary contains ovarian follicles, in which eggs develop. Once a follicle is mature, it ruptures and the developing egg is ejected from the ovary into the fallopian tubes. This is called ovulation. Ovulation occurs in the middle of the menstrual cycle and usually takes place every 28 days or so in a mature female. It takes place from either the right or left ovary at random.

## **Fallopian tubes**

The fallopian tubes are about 10 cm long and begin as funnel-shaped passages next to the ovary. They have a number of finger-like projections known as fimbriae on the end near the ovary. When an egg is released by the ovary it is 'caught' by one of the fimbriae and transported along the fallopian tube to the uterus. The egg is moved along the fallopian tube by the forward movement of cilia — hairy projections on the surfaces of cells at the entrance of the fallopian tube — and the contractions made by the tube.

It takes the egg about 5 days to reach the uterus and it is on this journey down the fallopian tube that fertilization may occur if a sperm penetrates and fuses with the egg. The egg, however, is only usually viable for 24 hours after ovulation, so fertilization usually occurs in the mid or internal one-third of the fallopian tube.

**Uterus**

The uterus is a hollow cavity about the size of a pear (in women who have never been pregnant) that exists to house a developing fertilized egg. The main part of the uterus (which sits in the pelvic cavity) is called the body of the uterus, while the rounded region above the entrance of the fallopian tubes is the fundus and its narrow outlet, which protrudes into the vagina, is the cervix.

The thick wall of the uterus is composed of 3 layers. The inner layer is known as the endometrium. If an egg has been fertilized it will burrow into the endometrium, where it will stay for the rest of its growth. The uterus will expand during a pregnancy to make room for the growing fetus. A part of the wall of the fertilized egg, which has burrowed into the endometrium, develops into the placenta. If an egg has not been fertilized, the endometrial lining is shed at the end of each menstrual cycle.

The myometrium is the large middle layer of the uterus, which is made up of interlocking groups of muscle. It plays an important role during the birth of a baby, contracting rhythmically to move the baby out of the body via the birth canal (vagina).

**Cervix**

The mouth or opening into the uterus; protrudes into the uppermost part of the vagina. Protects delicate tissues in the uterus.

## **Vagina**

The vagina is a fibro muscular tube that extends from the cervix to the vestibule of the vulva. The Vaginal opening is located between the urethral opening and the anus; may be covered by a thin membrane called the “hymen” prior to first experience of intercourse. So, the vagina receives the penis and semen during sexual intercourse and also provides a passageway for menstrual blood flow to leave the body and delivery of the baby. The vagina is capable to expand during intercourse and childbirth. It Lubricates during sexual arousal; girls often experience vaginal lubrication and possibly orgasm during sleep.

## **Clitoris**

A structure located in front of the urethral opening at the point where the inner labia meet; focal point of stimulation for the female. No reproductive function.

## **Labia Majora**

Two sets of folds on either side of the vagina; provide protection to the clitoris and the urethral and vaginal openings.

## **Urethral opening**

A small opening in front of the vagina for the passage of urine (not a part of the reproductive system).

## **Labia Minora**

These are the inner folds of the vagina.

**Menarche**

Menarche occurs at different times for individual adolescent girls. There are both early and late maturing girls. Early developing girls seem to fare worse at puberty (Golub, 1992). They suffer because they look older and are involved in more sexual relationships than their non-maturing peers (Golub, 1992). This often results in teasing which in turn leads to self-consciousness.

**Physical changes**

Menarche is preceded by characteristic body changes. Breast development usually occurs first, though not in all cases. There is a slight enlargement of the areola (the area around the nipple), and elevation of the breast as a small mound, called breast buds. This occurs, on average, at 10.5 years. The completion of mature breasts is approximately 4.5 years after the onset of growth (Brooks-Gunn & Elliott, 1992).

There is also an increase in body hair. At about the age of eleven, pubic hair begins to develop. Over time, pubic hair becomes longer, darker, coarser, and curlier (Brooks Gunn et al, 1992). Underarm hair usually begins to grow about two years after the onset of pubic hair. Other noticeable physical changes include a growth spurt and weight gain.

A female's growth spurt begins around 9.6 years of age (Brooks-Gunn et al, 1992). Body proportions also change with the hips becoming fuller. Sweat glands become more active resulting in body odor and an increase in the secretion of skin oil. Finally, paralleling these external changes are those occurring internally, including growth of the uterus and vagina (Golub, 1992).

## **Sexual Maturation of the Female Adolescent**

The process of physical growth and maturation is dynamic, encompassing a wide array of physiologic changes. Physical maturation begins and ends earlier than cognitive or psychosocial maturation. The physiological changes that mark the onset of puberty in females include increases in height, weight and body fat percentage; breast formation; growth of pubic and armpit hair; and menarche. While the timing of these events varies considerably among adolescent females, the sequence remains consistent.

Even though the female adolescent's growth rate varies from child to child, a sequential pattern has been identified. The typical sequence of events occurs as follows:

- i. The adolescent growth spurt begins
- ii. Non-pigmented pubic hair (downy) appears.
- iii. The budding stage of development (breast elevation) and the rounding of the hip begin, accompanied by the beginning of downy maxillary hair.
- iv. The uterus, vagina, labia and clitoris increase in size.
- v. Pubic hair growth becomes rapid and is slightly pigmented.
- vi. Breast development advances, nipple pigmentation begins, and the areola increases in size. Armpit hair becomes slightly pigmented.
- vii. Growth spurt reaches its peak, and then declines.
- viii. Menarche occurs.
- ix. Pubic hair development is completed, followed by mature breast development and completion of armpit hair development.
- x. "Adolescent sterility" ends, and the girl becomes capable of conception.



## **Menstruation and The Menstrual Cycle**

**At the end of this lesson the student should able;**

To explain what menstruation is

To explain what a menstrual cycle is

To determine the varying length of the menstrual cycles and her own cycle

To determine the ovulation time

To explain the concept of safe and unsafe days

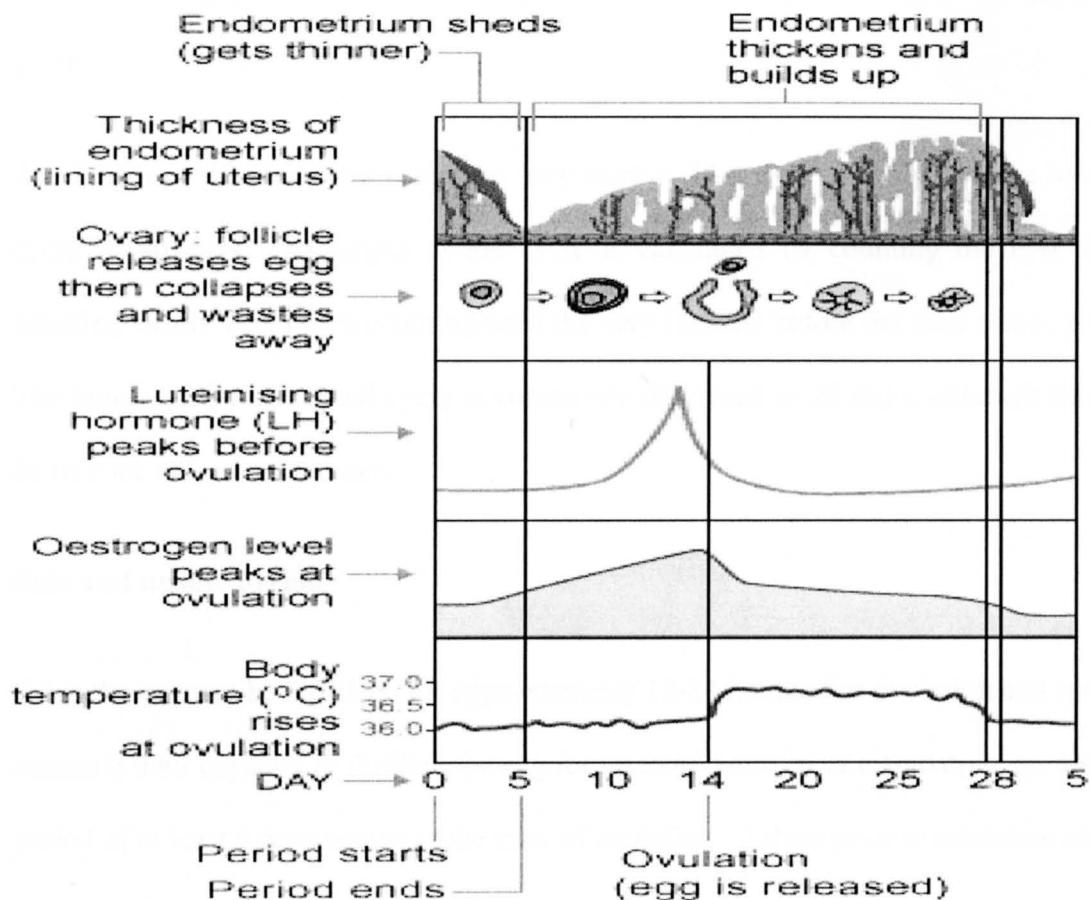
To explain when conception is possible to occur

How to avoid unwanted pregnancy

## **Menstruation and The menstrual cycle**

### **Menstruation**

Menstruation occurs approximately every three to four weeks. If the ovum is not fertilized, most of the lining of the uterus mixed with blood is expelled through the cervix into the vagina. This bloody discharge is referred to as menstruation (menses) or a menstrual period. The entire cycle repeats itself throughout the reproductive life of the female. However, at its onset after puberty, menstruation may be irregular for up to a year or two. Some women have irregular cycles. The length of the cycles varies from three weeks to five weeks. Some women have a four week (28 days) regular cycles.

**Diagram: The Monthly Physiological changes in a woman**

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### The menstrual cycle

The menstrual cycle is the correct term for the cycle (usually monthly) in which a woman's body releases an egg, prepares itself for fertilization of the egg by sperm and creates an environment in the uterus or womb in which the fertilized egg could implant and form a developing embryo (baby). If the egg is not fertilized, the lining of the uterus is shed from the body in what are commonly known as menstruation described above. The commonly used description is a woman's period. Girls start to have their periods

around the age of 13, usually about 2 years after the breasts first start to develop, and will continue having periods until the menopause, which occurs, on average, at about the age of 51.

The length of the menstrual cycle can vary from a short cycle of only 21 days to a long cycle of 40 days. The length of the cycle is calculated by counting the first day of bleeding as day 1 and then counting until the very last day before the next bleed (period). The length of the menstrual cycle is commonly described as 28 days, although this may be true for only some women.

### **Safe and unsafe period**

Since the egg can be fertilized for approximately 12-24 hours after ovulation and sperm maintain their capacity to fertilize the egg for up to 48 hours after ejaculation, an **unsafe** period of at least 3 days occurs at the time of ovulation - 2 days prior to ovulation and 1 day after.

### **Timing of ovulation.**

It is possible to do this with a reasonable degree of accuracy, given sufficient motivation and intelligence. It requires the daily recording and interpretation of body temperature, by noting the appearance of certain physical signs (which don't appear in some women), and by a prediction of the time of ovulation based on the length of previous menstrual cycles. Fertilization can occur only around the time of ovulation. Ovulation occurs in response to changes in the hormonal balance regulating the menstrual cycle.

Estimating when ovulation will occur in the present menstrual cycle solely by basing the calculations on the length of past menstrual cycles is unsatisfactory. Each cycle is subject to variations caused by a number of external factors not related to the length of previous cycles. The changes associated with ovulation occur in the cervical, not vaginal, mucus. For most of the menstrual cycle, the cervical mucus is thick, scant and impenetrable to sperm. During the four to five days around the time of ovulation, the mucus changes to become copious, watery, thin and readily penetrable to sperm. A method of detecting changes in cervical mucus signifying ovulation is presently being studied.

**The basic facts:**

- An egg (ovum) can live inside a woman's body for 12-24 hours. However, in calculating the fertile time we use 48 hours in case more than one egg is released.
- Sperm can live in a woman's body up to 5 days after intercourse, though more often 2 days. Pregnancy is most likely if intercourse occurs anywhere from 3 days before ovulation until 2-3 days *after* ovulation.
- Since the exact time of ovulation cannot be predicted, we add 2 to 3 days to the beginning and end.

A woman's fertile time ("unsafe days" if she wants to prevent pregnancy) is thus about one-third of her cycle.

Pregnancy is prevented by not having sexual intercourse during the unsafe fertile time, or by using a barrier method such as male condom or female condom, cervical cap, or diaphragm. A woman should therefore, abstain from intercourse, or use a barrier method

of birth control during her fertile days: 5 days before ovulation through 3 days after ovulation, about one-third of her cycle. Alternatively, if a woman wants to get pregnant, she can know when the most likely time is.

As a woman becomes more familiar with the signs of ovulation and the pattern of her menstrual cycle, she becomes more aware of her fertility. This is easier for women who get regular menstrual cycles. There are several ways of monitoring fertility changes. The methods include calendar Charting, Basal Body Temperature (BBT) charting and cervical mucus monitoring. For more information on these is contained in the appendix.