

**FACTORS CONTRIBUTING TO HIGH ADOLESCENT PREGNANCY RATE IN
KINONDONI MUNICIPALITY, DAR-ES-SALAAM, TANZANIA**

by

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DECLARATION

I declare that **FACTORS CONTRIBUTING TO HIGH ADOLESCENT PREGNANCY RATE IN KINONDONI MUNICIPLITY, DAR-ES-SALAAM, TANZANIA** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.

SIGNATURE

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DATE

FACTORS CONTRIBUTING TO HIGH ADOLESCENT PREGNANCY RATE IN KINONDONI MUNICIPALITY, DAR-ES-SALAAM, TANZANIA

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ABSTRACT

This study seeks to describe the factors contributing to high adolescent pregnancy rate in Kinondoni Municipality, Dar-es-Salaam. Through the study we get to know the social economic characteristics of adolescents, the adolescents' general knowledge of reproductive health issues and the source of this knowledge.

The major discoveries made from this study are that the educational status and knowledge of reproductive health of these adolescents is low, some are already dropouts from school, and others were deprived of the chance to continue with secondary education. They have nothing tangible to do because of their low education and coupled with their low economic status, they are at risk of being involved in sexual activities at an early age, ending in pregnancies. In addition, their parents' educational and economic status was also found to be low.

It is important then, parents, teachers and the community in general to arrest the rate of adolescent pregnancies.

KEY TERMS

Adolescent pregnancy; reproductive health issues; sexuality.

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List of annexures

- Annexure A** **Letters requesting permission to the study:**
- 1 District Medical Officer
 Kinondoni Municipal Council, Dar es Salaam, Tanzania
 - 2 Chairman, College of Research and Publications Committee
 Muhimbili University College Health Sciences
- Annexure B** **Letters granting permission to conduct the study:**
- 1 Department of Health Studies, Unisa
 - 2 Chairman, College of Research and Publications Committee
 Muhimbili University College Health Sciences
 - 3 Municipal Medical Officer
 Kinondoni Municipal Council, Dar-es-Salaam, Tanzania
- Annexure C** **Consent forms:**
- 1 English form
 - 2 Kiswahili form
- Annexure D** **Questionnaires:**
- 1 English questionnaire
 - 2 Kiswahili questionnaire

Chapter 1

Orientation to the study

1.1 INTRODUCTION

Early childbearing, particularly among teenagers (those under 20 years of age) has negative demographic, socio-economic and socio-cultural consequences. Teenage mothers are likely to suffer from severe complications during delivery, which result in higher morbidity and mortality for them and their children. In addition, the socio-economic advancement of teenage mothers in the areas of education and accessibility to job opportunities may be curtailed. The National Bureau of Statistics [NBS] (2000:37) reported that in Tanzania the median age at first intercourse for women is just under 17. About 15% of women aged 15-19 have had sexual intercourse for the first time by the age of 15. By the age of 15, 18,65% of women are already sexually active and by 20, about 86% are sexually active (NBS 2000:67-68).

According to Marlow and Redding (2001:1127), puberty and adolescence are the periods during which there is a great surge of genital development. The secondary sexual characteristics appear, which increases sexual tension. The sex drive is triggered by certain androgens such as testosterone, which are at a higher level during adolescence than at any other time of life. Children entering adolescence are not fully sexually matured, yet they are capable of reproduction.

The consequences of indulging in sexual activity at an early age include adolescent pregnancies, unsafe abortion, sexually transmitted diseases (STDs), HIV/AIDS, and anaemia (Reproductive and Child Health Section [RCHS] 2004a:3-6). Ojo, Ajay, Garba and Ngoran (2004:35) emphasised that the optimal childbearing years are between 18 and 35 years. This age range is recommended because scientifically the girl's body is mature and she should be psychologically ready for childbearing and its consequences.

Given the above consequences, adolescent girls need information on biological changes, sexual issues and reproductive health services. In addition, they need guidance from parents, teachers and health providers, which is crucial in order to

achieve their full potential (Sadock & Sadock 2003:35). In Africa, adolescents are a low priority in both policies and programmes at national level (Williams & Mavundla 1999:62).

1.2 BACKGROUND TO THE STUDY

Adolescent pregnancy is a worldwide problem. In 1997, Grunseit (1997:12) found that the USA had the highest rate of adolescent pregnancies. In addition, every year more teenage girls become pregnant, many younger than 17 years old.

1.2.1 Tanzania

1.2.1.1 Country profile

The United Republic of Tanzania is the largest country in East Africa, covering a total area of 945,090 square kilometres, with a population of 35 million (NBS 2000:37).

According to the Population and Housing Census, 2002, about 65% of the population were under 25 years of age. Those aged 10-24 years constitute 31%. Women aged 15-19 account for 12% of the total fertility rate (TFR) which is 5.6 per woman (NBS 2003:23; RCHS 2004a:1).

1.2.1.2 Socio-economic condition

Tanzania is a poor country with about 51% of the population living in poverty, many of whom cannot afford their basic daily life requirements. There are very limited formal employment opportunities, particularly for youth and especially girls. Adolescents are growing up in an economy that is not able to fulfil their expectations. Inadequate health care services and economic hardship have led to the increase of adolescent high risk situations such as unwanted pregnancies and early child bearing, STIs, including HIV/AIDS, and drug abuse (RCHS 2004a:1).

1.2.1.3 Education system

According to the *Education and Training Policy* (Ministry of Education and Culture 1995:18), pre-primary and primary education is a basic right for all citizens. The Ministry of Education and Culture, the Ministry of Science Technology and Higher Education, and the Prime Minister's office are mainly responsible for formal and non-formal education. Other ministries are involved in sector-specific professional education and training. In addition, communities, non-governmental organisations (NGOs) and individuals provide formal and non-formal education with the coordination of central government ministries (Ministry of Education and Culture 1995:11).

The education system in Tanzania caters for pre-primary (2 years), primary (7 years), Ordinary level secondary education (O-level) (4 years), Advanced level secondary education (A-level) (2 years) and university (tertiary) education (3+ years). Children start pre-primary education at the age of 5 and complete primary education at the age of 13 years. With a transition rate of less than 50%, the majority of primary school graduates are not well taken care of. Being adolescents who are at the reproductive age, cases of pregnancies are common. Most of the pregnancies occur in young girls between Standards 4 and 7 (Grades 6-8), and 5% to 7% of dropouts at primary level are due to pregnancy (Ministry of Education and Culture 2005:21-25).

1.2.1.4 Health care services

The provision of health care services is divided into three levels: national, regional and district. At the national level, the Ministry of Health administers and supervises consultant referral hospitals, training institutions, the national hospitals, special hospitals, executive agencies and regulatory authorities. At the regional level, provision of health services is vested with the Regional Administrative Secretary with technical guidance of Regional Health Management Team. District management and administration of health care services has been developed into districts through their respective councils, local authorities, health service boards, facility committees and health management teams (Ministry of Health [MOH] 2002:1). More than 70% of the population lives in rural areas, so the distribution of health facilities has rural emphasis. Table 1.1 indicates the health facilities in 2000.

Table 1.1 Health facilities in Tanzania, 2000

Facility	Agency				
	Govt	Parastatal	Vol/Rel	Private	Others
Consultancy/Specialised Hospitals	4	2	2	0	-
Regional Hospitals	17	0	0	0	-
District Hospitals	55	0	13	0	-
Other Hospitals	2	6	56	20	2
Health Centres	409	6	48	16	-
Dispensaries	2450	202	612	663	28
Specialised Clinics	75	0	4	22	-

Source: NBS 2000:43

1.2.1.5 Religion

In mainland Tanzania, the main religions are Christianity (45%), Islam (Muslims) (35%) and indigenous beliefs (20%). In Zanzibar the vast majority are Muslims.

1.2.1.6 Administration

Administratively, the mainland is divided into 21 regions, and each region is subdivided into districts/municipalities. Dar-es-Salaam region comprises three municipalities, namely Kinondoni, ILala, and Temeke. Kinondoni is highly populated in comparison to the other two municipalities (see figure 1.1).



Figure 1.1

Map of Tanzania

(<http://www.tanzaniagov.org.tz>)

1.2.2 Adolescent pregnancies

The number of adolescent pregnancies continues to rise in Tanzania. For example, in 2006, among the dropouts, 3,479 in primary school and 993 in secondary school were due to pregnancy alone (Ministry of Education and Vocational Training [MOE and VT]

2006c:17). Accessibility to healthcare is influenced by health workers' attitudes, which might be intimidating to some adolescents at specific clinics and schools (Little 1997:44).

Tanzania, like many countries in Africa and elsewhere, has serious problems in relation to sexual and reproductive health issues (RCHS 2004:3; Irinoye, Oyeleye, Adeyemi & Tope-Ojo 2004:25). In their study on high-risk sexual behaviour among youth at Kisangani Ward in Tanga, Ikamba and Quedraogo (2003:121) found that adolescents were sexually active at an early age. Furthermore, 0.3% of the girls and 3.2% of the boys had their first intercourse at about 9 years old, the percentage rose to 10 by the age of 13 years. The largest group (55% of the girls and 45% of the boys) had their first sexual intercourse between 14 and 17 years old. This put the girls at risk of becoming pregnant. Adolescent pregnancies cause adverse health, social and economic implications for the parents, mothers and their children and usually for their grandmothers as well.

Worldwide, many adolescents fall pregnant; at least 1 in 5 has one or more children or is pregnant (Pathfinder International 2001:43). Each year about 1 million teenage girls under the age of 19 become pregnant; out of whom 600,000 give birth, and 400,000 (40%) opt for abortion (Sadock & Sadock 2003:39).

According to the National Center for Chronic Diseases' Prevention and Health Promotion [NCCDPHP] (1999:57-61), the possible consequences of adolescence pregnancy include:

- *Social impact* through leaving school thus resulting in lack of education or skill for a job and are unable to earn a living.
- *Sexually transmitted infections* because HIV poses a danger to women with STIs.
- *Pregnancy and delivery* pose a major health hazard for adolescents.
- *Anaemia* due to malnutrition, resulting in inadequate iron reserves as their bodies are still developing.
- *Obstructed labour* due to cephalo-pelvic disproportion, especially in very young adolescents (10-14 years old).
- *Abortion*, which poses the greatest direct threat to the young women's health.

In South Africa and Nigeria, Irinoye et al (2004:25), Williams and Mavundla (1999:62), and Karim, Magnani, Morgan and Bond (2003:18-22) found that many adolescents were sexually active and engaged in unsafe sexual practices. These activities result in STIs, unwanted pregnancy, unsafe abortions and early childbearing, which always come with additional health and social problems. The NCCDPH (1999:59) found that pregnancy-related morbidity and mortality in developing countries was higher for women under 19 and those above 35 years of age.

In Tanzania, approximately 20% of women aged 15-19 years are mothers and another 5% are pregnant for the first time (NBS 2000:38). Physical problems experienced by adolescent mothers younger than 20 years of age in Tanzania and Africa include pregnancy-induced hypertension, premature labour and anaemia (NCCDPHP 1999:59-60; RCHS 2003:6). These physical problems might remain undetected because they attend antenatal clinics very late in their pregnancy. Many adolescents will need to discontinue their education, limiting their chances of further education or training and jobs, which can sustain these mothers and their children. Financial hardship can aggravate the adolescent mother's social adjustment problems, increasing the likelihood of resorting to prostitution to augment their incomes. However, unmarried women are at greater risk for the consequences of unintended pregnancy than their married peers (NCCDPHP 1999:60).

1.2.3 Adolescent girls residing in Kinondoni Municipality

According to the 2002 Population and Housing Census, Kinondoni Municipality has a total population of 1,083,913. Of the population, 56,710 are girls aged 10-14; 3,075 from rural areas and 53,635 from urban areas; 72,376 are females between the ages of 15-19, with 3,192 from rural areas and 69,184 from urban areas (NBS 2003:127).

Kinondoni Municipality has one government hospital and eleven private hospitals; two government health centres, one parastatal and six private health centres; 24 government dispensaries, five voluntary agency dispensaries, five parastatal and 126 private dispensaries.

The Magomeni Reproductive and Child Health Clinic (MRCHC) is the largest government health centre, in Kinondoni Municipality. According to clinic records from

January 2005 to September 2005, about 25 to 40 pregnant women attended the clinic daily, with 3 to 6 among them being adolescents. Most of them made their first clinic bookings during the second and even third trimester. Their attendance was reported to be poor. In a study on obstetric outcomes among primigravida who delivered at the Muhimbili National Hospital, Lyamuya (2002:22-26) found the majority of pregnant women (adolescent and non-adolescent) came from Kinondoni Municipality and their frequency of attending antenatal check-up was poor. Most of the adolescents booked during the second trimester. Furthermore, the adolescent mothers were at risk of developing anaemia.

Table 1.3 indicates the pregnant adolescents, aged between 15 and 19, who attended the antenatal clinic at the Magomeni Health Centre, according to the clinic records for January 2005 to September 2005.

Table 1.2 Pregnant adolescents attending antenatal clinic at Magomeni Health Centre

MONTH	Gestational Age <20 wks	Gestational Age >20 wks	TOTAL	AVERAGE/DAY
January	61	57	118	6
February	38	55	93	5
March	27	60	87	4
April	31	42	73	4
May	36	35	71	4
June	29	43	72	4
July	23	47	70	4
August	45	42	87	4
September	22	45	67	3

Source: Magomeni Reproductive and Child Health Clinic 2005:19

All adolescents are referred to Muhimbili National Hospital for care and appropriate management when they are at term, because all adolescents under 19 are considered to be at risk (RCHS 2003:33).

1.3 PROBLEM STATEMENT

Burns and Grove (2005:70-71) define a research problem as “a situation in need of a solution, improvement or alteration, a discrepancy between the way things are and the way they ought to be”.

From the background to this study, it is evident that although reproductive healthcare services and contraceptives are freely available in Tanzania (Kinondoni Municipality), adolescent pregnancies nevertheless continue to increase. The research problem was to identify the factors contributing to the high adolescent pregnancy rate in Kinondoni Municipality, Dar-es-Salaam, Tanzania. Identifying the factors would facilitate making recommendations to enable more adolescents to use the reproductive services effectively and prevent unplanned pregnancies.

Through her nursing experience in the neonatal ward at Muhimbili National Hospital (MNH) in 2004, the researcher was concerned of the number of teenage mothers aged 14 to 19, who had their neonates there. According to the neonatal ward at MNH report, from July 2002 to June 2003, the total number of neonates admitted was 7,988; with 1,809 (22.6%) premature and 1,504 (18.8%) birth asphyxia, and 1380 deaths. The main causes of death were prematurity (507; 36.7%) and birth asphyxia (418; 30.72%), of which most of the neonates belonged to adolescent mothers. In addition, a total of 13,241 deliveries were conducted at MNH (<http://www.tanzaniagov.org.tz>).

This concurs with Lyamuya's (2002:33-34, 41) finding that the outcome of adolescent mothers' pregnancy was poor; most of the complications were birth asphyxia, prematurity, and meconium aspiration, which resulted in increased foetal death.

This implied that women under 18 years are at high risk of pregnancy-related problems and complications during pregnancy and delivery.

1.4 PURPOSE OF THE STUDY

The purpose of the study was to describe the factors that contribute to the high adolescent pregnancy rate in Kinondoni Municipality to prevent unplanned pregnancies.

1.5 OBJECTIVES

Burns and Grove (2005:156) describe objectives as “clear, concise, declarative statements expressed in the present tense and for clarity with only one or two variables”. The objectives of the study were to

- Determine the socio-economic characteristics of adolescents who become pregnant.
- Assess adolescent girls’ level of knowledge of reproductive health issues in general.
- Determine the source of their knowledge of reproductive health issues.
- Describe the factors contributing to the high adolescent birth rate.

1.6 RESEARCH DESIGN AND METHODOLOGY

1.6.1 Research design

A non-experimental exploratory, cross-sectional descriptive quantitative research design was used to identify and describe the factors contributing to the high adolescent pregnancy rate in Kinondoni Municipality, Dar-es-Salaam. The purpose of such a design is “to provide an explicit description of the phenomenon explored so that it can be addressed” (Burns & Grove 2005:34-35).

1.6.2 Setting

Tanzania has very good road and health services infrastructure for both urban and rural areas. The health services are offered by government, parastatal, voluntary/religious, private and non-governmental organisations. There are 6 consultancy/specialised hospitals, 17 regional hospitals, 68 district hospitals, 96 other hospitals, 499 health centres and 3,955 dispensaries. The services are spread throughout the country. The health system, particularly the Government referral system, forms a pyramidal pattern of referral from dispensary to consulting hospital (MOH 2002:51). Almost all the health facilities provide reproductive health and contraceptive services.

The study was conducted in Kinondoni Municipality, Dar-es-Salaam, Tanzania.

1.6.3 Population and sampling

In this study, the target population consisted of all the adolescents girls between 10-19 years in Kinondoni Municipality.

1.6.4 Sampling

A multistage cluster sampling method was employed. A list of all the wards in Kinondoni Municipality was obtained and one ward was randomly selected. In the second stage a list of sub-wards/streets in the selected ward was obtained, and two sub-wards randomly selected. All the adolescents aged between 10 and 19 years, in the selected sub-wards were included in the study.

1.6.5 Data collection

Data collection is a systematic way of gathering information, which is relevant to the research purpose or questions (Burns & Grove 2005:421). Data was collected using a structured questionnaire, specifically designed for this study, consisting of four sections. A structured questionnaire “enables the investigator to be consistent in asking questions and data yielded is easy to analyse” (Brink 2006:148). The questionnaires were distributed to the adolescent girls and then collected after completion.

1.6.6 Data analysis

Data was analysed using the SPSS, Version 13.0, computer program with the assistance of a statistician from Muhimbili University of Health and Allied Sciences. Descriptive statistics as well as summaries, including frequency distributions and percentages, were used.

1.6.7 Reliability and validity

According to Brink (2006:160), validity refers to “the degree to which the instrument measures what it is supposed to measure”. The researcher focused on content validity, which is the degree to which the items in an instrument adequately represent the universe of the content. The researcher gave the questionnaire to adolescents from

Temeke Municipality to review/verify and validate the questions. The questionnaire was also distributed to nurse tutors in the midwifery unit, as they are experts in the field of midwifery. These groups did not participate in the main study. The reviewers supported the assertion that the components of the questionnaire accurately reflected the phenomenon being studied and that the questions were appropriate to the factors contributing to the high pregnancy rate in Kinondoni Municipality.

1.6.8 Pre-test (pilot study)

A pre-test, which is a smaller version of the study, was carried out to obtain information to improve the questionnaire and to assess the feasibility of the study. The respondents in the pre-test were similar to those in the study and it was done under similar settings. Conducting a pre-test assisted the investigator to identify problems with the questionnaire and indicated the time needed to complete the questionnaire, which was important in obtaining consent to participate (Burns & Grove 2005:94).

1.7 ETHICAL CONSIDERATIONS

Pera and Van Tonder (2005:4) define ethics as “a code of behaviour that is considered correct”. Ethical considerations in the conduct of research were followed to prevent ethical dilemmas. To ensure ethical conduct of the study, permission to conduct this study was obtained from the Kinondoni Municipal Medical Officer and the respondents. Informed consent was obtained from each respondent. To ensure confidentiality and anonymity, neither the name of respondents nor that of the institution involved was requested on the questionnaires. No physical or psychological risks were involved as the study was non experimental. The list of respondents' names for sampling purposes was kept safe to ensure confidentiality and anonymity (Brink 2003:47).

1.8 SIGNIFICANCE OF THE STUDY

This study aimed to identify and describe the factors that contribute to the high adolescent pregnancy rate at Kinondoni Municipality. The researcher wished to identify and describe the factors in order to reduce the number of adolescent pregnancies in the area. Health education could then be modified according to the factors identified in order to promote healthy lifestyles and informed decision-making among adolescents.

The effective implementation of recommendations based on the findings of the study might also enhance the accessibility of reproductive and contraceptive health care services to adolescents. Above all, adolescents could become empowered through more appropriate health education, to make informed decisions not only about their own, but also their children's lives.

Identifying the factors, which prevent them from utilising the reproductive health services, described by adolescents themselves would equip health care providers and teachers to deal with those factors through health education at schools, social gatherings, and media and health care centres. Moreover, recommendations could be made to improve the reproductive health services, thereby enhancing their utilisation by adolescents and assisting adolescents to make informed decisions about their own and their children's futures. Strategies could be developed and implemented in collaboration with the government, NGOs, the private sector, key players and other collaborating agencies and institutions supporting health and development work in Tanzania.

The strategies should focus on programmes that provide information to adolescents, ensure access to reproductive health services, and develop life skills to empower adolescents to continue with their education and attain higher education qualifications. Such programmes might improve the health and future of young people in Tanzania to become self-sustained adults, thereby alleviating poverty in the country.

In addition the findings of the study will contribute to the body of nursing knowledge, especially in midwifery where midwives are actively involved in assisting individuals, including adolescents, families and communities, to maintain, promote and restore health during the events surrounding birth and throughout their life cycles (Nolte 1998:3).

As adolescent girls comprised the population of this study, the research results pertained only to adolescent girls, not all adolescents. It is acknowledged that adolescents who manage to avoid unplanned pregnancies might have knowledge, attitudes and/or beliefs that differ from those of the respondents.

1.9 DEFINITION OF KEY TERMS

For the purpose of this study the following terms are used as defined below:

- **Adolescent**

An adolescent is a young person who is developing from childhood into an adult: adolescent between the ages of 13 and 18 (*Oxford Advanced Learners' Dictionary* 2000:15). The WHO (1986:63) defines adolescence as an age range, the second decade of life between 10-19 years.

- **Sexuality**

Collins English Dictionary (1991:1418) defines sexuality as “the state or quality of being sexual; preoccupation with or involvement in sexual matters; people’s sexual feelings; the feeling and activities with a person’s sexual desires: male/female sexuality”.

- **Pregnancy**

Pregnancy is the condition of having a developing embryo or foetus in the body after successful conception. The average duration of pregnancy is about 280 days. Estimation of the date on which delivery should occur is based on the first day of the last menstrual period (*Taber's Cyclopedia Medical Dictionary* 2001:1730). In this study, it refers to pregnancies occurring during adolescence.

- **Reproductive health**

The WHO (1986:81) defines reproductive health as “a state of physical, mental and social well being in all matters relating to the reproductive system at all stages of life. It implies that both men and women are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide when and how often to do so. Implicit in this are the rights of men and women to be informed and have access to safe, effective, affordable, and acceptable methods of family planning of their choice, and the right to appropriate health care services that enable women to safely go through pregnancy and childbirth.” Reproductive health in this study refers to the

provision of information, education and communication about reproductive health issues to adolescents in order to reduce pregnancy.

- **Accessibility of health services**

Accessibility implies that health services are capable of being used, easily approached or easily approachable, and providing access to the people who wish to have those health services.

- **Belief**

A belief is something that represents personal confidence in the validity of some idea, person or object. The cognitive component is based on faith rather than on fact. Belief can either be true or false, correct or incorrect (Pera & Van Tonder 2005:80).

- **Conception**

Conception is the union of male sperm and female ovum; fertilisation (Lodewig, London & Olds 1998:811).

- **Contraception**

This is the prevention of conception by using an agent such as a condom, spermicidal pessary or cream, cervical diaphragm or intrauterine device, oral contraception or natural methods (Brooker 2006:58).

- **Non-utilisation**

This refers to when the reproductive health services are available but are not used, or made use of, by those who need those services.

- **Sex education**

Sex education is education on the subject of sexual activity and sexual relationships. It includes teaching about the male and female body so that the learner can understand

expressing sexuality and recognise the onset of puberty; knowledge about personal relationships, knowledge about contraception, sexually transmitted infections, pregnancy, childbirth, bonding, parenting and family living (Brooker 2006:221).

- **Teenager**

Collins English Dictionary (1991:1583) defines a teenager as “a person between the ages of 13 and 19 inclusive”.

- **Termination of pregnancy (TOP)**

This refers to the act of bringing a pregnancy to a final end, preventing the birth of a live baby (Dickson-Tetteh 1999:20).

1.10 LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Clinic
G/A	Gestational age
HIV	Human Immune-deficiency Virus
IEC	Information, education and communication
MNH	Muhimbili National Hospital
MOH	Ministry of Health
NBS	National Bureau of Statistics
NCCDPHP	National Centre for Chronic Diseases and Promotion of Health
NGO	Non-Government Organisation
NHP	National Health Policy
PMCT	Prevention of Mother-to-Child Transmission
REL	Religious
RCHS	Reproductive and Child Health Section
SRH	Sexual and Reproductive Health
STIs	Sexually Transmitted Infections
WHO	World Health Organization
VCT	Voluntary Counselling and Testing
VOL	Voluntary

1.11 OUTLINE OF THE STUDY

Chapter 1 discusses the background to the study; the research problem; the purpose, objectives and significance of the study; the research design and methodology, and ethical considerations, defines key terms used, and briefly outlines the study.

Chapter 2 discusses the literature review on factors contributing to high adolescent pregnancy rates.

Chapter 3 describes the research design and methodology, including the population and sample, data collection and the data-collection instrument.

Chapter 4 deals with the data analysis and interpretation.

Chapter 5 presents the findings and makes recommendations to improve the factors contributing to high adolescent pregnancy rate in Kinondoni Municipality and for future research.

1.12 CONCLUSION

This chapter briefly discussed the study, background to the problem, the problem statement, the purpose and significance of the study, the research design and methodology, including population and sample, data collection, reliability and validity and ethical considerations, and defined key terms.

Chapter 2 discusses the literature review undertaken for the study.

Chapter 2

Literature review

2.1 INTRODUCTION

This chapter deals with the literature review on the problem of adolescent pregnancy and factors that contribute to it.

2.2 REASON FOR A LITERATURE REVIEW

The purpose of a literature review is to familiarise the reader with practical or theoretical issues relating to the problem and helps the researcher to lay a foundation for the study. A literature review indicates what is known about an area of inquiry and suggests ways of conducting the study on the topic of interest (Polit & Beck 2004:88).

The literature review on factors contributing to adolescent pregnancy assisted the researcher to formulate appropriate research objectives and gain further insight into the problem and the factors contributing to the high adolescent pregnancy rate.

The review of literature revealed the following significant issues related to the research topic “high adolescent pregnancy rate”.

2.3 ADOLESCENCE

2.3.1 Definition

Adolescence is “the period between the onset of puberty and full maturity; youth” (Brooker 2006:5). It is characterised by profound biological, psychological, and social developmental changes (Sadock & Sadock 2003:35).

2.3.2 Adolescent identity

During adolescence, the young person's major task is to achieve a sense of self-identity. This adolescence crisis is partly a result of the move from dependency to independence: it is mainly on sex roles and gender identification. Failure to achieve this develops identity diffusion in the adolescent, which is a failure to develop a cohesive self-awareness. During this period adolescents are negative and in turmoil in the process of becoming independent. Adolescents' world is outside at school and in relationships with persons of similar ages and interests; they see themselves through the eyes of their peers. Parents/guardians need to be watchful of any changes of behaviour (Heaven 2001:29; Sadock & Sadock 2003:37).

2.3.3 Developmental stages of the adolescent

All human beings pass through the stages of adolescence.

2.3.3.1 Piaget's stages of cognitive development

Cognitive development begins when the achievements of late childhood are integrated into the person and ends when that person is eager to assume the adult role and can do it capably. Cognitive development is influenced by society and culture, including family, peers, school, church, and adolescents' heroes. Children progress from the concrete to the formal operational stage (11-15 years); they are able to solve problems that involve scientific and verbal reasoning. They are able to make use of assumptions while thinking, formulating hypotheses and constructing theories, and are future oriented (Heaven 2001:19; Marlow & Redding 2001:1129).

2.3.3.2 Erickson's psychosocial stages of development

Erickson identifies eight psychosocial stages of development, at each of which there is a developmental (potential) crisis or turning point. During adolescence the potential crisis is identity versus identity confusion. When the adolescent is successful, it facilitates positive emotional and social adjustment for the next stage (Heaven 2001:25; Marlow & Redding 2001:1124).

2.3.4 Physiological and psychosocial development of the adolescent girl

Adolescence occurs when the secondary sex characteristics appear and ends when somatic growth is completed and the individual is psychologically and physiologically mature and capable of contributing to society. The pubescent period for girls begins when growth spurts occur. During this stage, growth is rapid. Their skeletal system often grows faster than their support muscles, which tends to cause clumsiness and poor posture. At this stage, girls increase in height and weight. The increase in testosterone and androgen results in the production of secondary sex characteristics. Changes in girls appear in this order: an increase in transverse diameter of the pelvis, development of breasts, changes in the vaginal secretions, pubic and axillae hair growth. First menstruation (menarche) occurs between the appearance of pubic hair and that of axillae. After pubescence, growth is gradual and girls are capable of reproduction. Usually there are heightened sexual tensions: girls are ready for heterosexual genital expression, which they are denied, become confused and full of anxiety (Dlamini & Van der Merwe 2002:52; Marlow & Redding 2001:1120, 1128).

Psychosocial development refers to teenagers' growing ability to relate realistically to other people, to learn to become a mature partner in an intimate relationship, and to see themselves realistically. It starts during adolescence and continues to early adulthood. In order to be psychosocially developed one has to separate effectively from parents to adulthood while interacting, to choose a vocation, to mature sexually and develop a realistic and positive self-image. This is the period when they need much support, guidance, firm limits and unconditional love from the parents and community to develop to their full potential (Heaven 2001:27-33).

2.4 FACTORS CONTRIBUTING TO ADOLESCENT PREGNANCY

The incidence of adolescent pregnancy is increasing and has become a worldwide concern. Among the developed countries, the United States of America (USA) has approximately 850,000 teenagers who become pregnant each year. Although they are making much progress in lowering those rates by developing relevant strategies, they still have a long way to go (Realini 2004:33).

In 2000, the UK had the highest rate of teenage pregnancies. About 38,690 girls under the age of 18 became pregnant and 44.8% of those pregnancies resulted in legal abortions; 7,617 of those conceptions were under 16 years, and 54.5% of conceptions ended in legal abortions. This generally endangers the life of the adolescent girl and necessitates developing strategies to reduce the high incidence rate (Linda 2003:1)

In many African countries more than 20% of women aged 15 to 19 have given birth to at least one child. In Nigeria, Mauritania and Sudan, more than 15% of the girls have given birth before age 15 (NCCDPH 1999:51). According to Irinoye et al (2004:1), about 43% of pregnancies among Nigerian adolescents occurred in non-marital relationships.

Factors that contribute to a high adolescent pregnancy rate include early menarche, adolescent sexual behaviour, socio-cultural and economic factors, educational status, sexual violence, peer pressure, and urbanisation.

2.4.1 Early menarche

The earlier the occurrence of menarche, the earlier the biological possibility of conceiving. In Dar-es-Salaam, Tanzania, Nasoro (2003:25) found that the age of menarche was between 13 and 15 years, and was associated with increased sexual activity, which put teenagers at risk of unwanted pregnancies and STIs.

In the Southern Hho-Hho region of Swaziland, Dlamini, Van der Merwe and Ehlers (2003:78) found that the average age of menarche was 11 years, and their first sexual intercourse was reported to happen between the ages of 11 and 14. Due to lack of knowledge, advice and emotional support, the youngsters practised unsafe sex and were not aware that they could be pregnant or contract HIV/AIDS.

2.4.2 Adolescent sexual behaviour

There is a great surge of genital sexual development during adolescence. Due to the increased hormones, secondary sexual characteristics appear. Masturbation and sexual fantasies are common. In general, adolescents face a confusing and difficult time and need parental guidance (Heaven 2001; Marlow & Redding 2001:1127-1129).

Moore, Miller, Sugland, Morrison, Gleib and Blumenthal (2004:1-9) found that early sexual activity is affected by developmental characteristics, such as early puberty and high levels of androgen hormones (i.e. testosterone), which are associated with increased adolescent sexual behaviour.

2.4.3 Socio-cultural and economic factors

Early dating provides a context for many sexual experiences. Unconventional psychosocial attitudes and some risk behaviour, such as early use of alcohol, tobacco and drugs; school problems; delinquency, and physical aggression are associated with earlier onset of adolescent sexual intercourse. Other factors include lower family incomes, less supervision, parental modelling, and more permissive attitudes in single-parent families. Having sexually active siblings and friends is also strongly associated with earlier onset of sexual activity at a young age (Blum 2000:5; Ikamba & Quedraogo 2003:7).

Regarding socio-economic and cultural factors associated with pregnancy among adolescent girls, Muchuruza (2000:35) found that adolescents were at high risk of pregnancy at the ages of 14 to 16 years. Moreover, the risk was fifteen times higher in respondents with no formal education and no employment. Also, girls were affected by the mothers' education and the living patterns in the home; living with one parent only or with a guardian compared to living with both parents, and finally, girls from families of low socio-economic status had a higher risk of pregnancy. In Taiwan, Wang, Wang and Hsu (2003:33-44) found a lack of necessary material resources to meet the needs of adolescents, because of parents' poor socio-economic status, put adolescent girls at greater risk of pregnancy.

According to Ellis, Bates, Dodge, Ferguson, Horwood, Pettit and Woodward (2003:801-821), the fathers' absence had a greater impact on their daughters' sexual activity and teenage pregnancy than on other behavioural or mental health problems or academic achievement. This shows the importance of fathers' involvement and responsibility in raising their children. In Logan, USA, Miller (2002:22-26) revealed similar results in a study on family influences on adolescent sexual and contraceptive behaviour.

The cultural practices of socialising adolescents into adulthood range from taboos against premarital sexual encounters to encouragement of child indulgence in premarital sex. For example, in a qualitative study in Nigeria, Irinoye et al (2004:27) found that some mothers at times encouraged their sons in sexual activity, as they wanted them to be “real men”, and asked their sons if something was wrong if there were no signs of relationship with girls.

2.4.4 Educational status

Women with more education are more likely to delay child bearing. In some countries in Sub-Saharan African, more women with less than seven years’ education have a child before they are 18 than ones with seven or more years of education. In the USA, approximately 30% of young women who have less than a basic education (at least seven years) have a child before they are 18 compared to 5% of those who have at least twelve years of education (Ventura, Abma, Mosher & Henshaw 2004:1-9).

The risk of pregnancy is greater among adolescents with no formal education than with those with secondary education (Muchuruza 2000:48). Moreover, a lack of parental guidance and appropriate sex education contributes to teenage pregnancy (Wang, Wang & Hsul 2003:33-44).

2.4.5 Sexual violence

According to Gray, Wagman, Nalugoda, Lutalo, Zablotskal and Koenig (2004:156-163), among rural adolescents aged 15 to 19 in Uganda, both unwanted and mistimed pregnancies were more common among those who had been coerced than those who had not. Coerced sexual intercourse represents only one of the more extremes of sexual abuse.

In Dar-es-Salaam, many victims of rape are between 12 and 17 at the time of the rape, and pregnancy is one of the outcomes (Muganyizi 2001:42-49). This has adverse consequences for young women’s future sexual and reproductive health.

In the USA, Moore et al (2004:4-8) report a significant increase in sexual activity among females aged 14, 15 and 16 compared with young women of the same age 15 years

ago. Furthermore, the younger the age of first sexual intercourse, the more likely that the experience was coercive and forced; the greater the risk of unwanted pregnancy and STIs, and less likely the use of contraceptives and generally these youngsters have more sexual partners.

Regarding the prevalence of sexual abuse in childhood (age below 15), Garcia-Moreno, Jansen, Elsberg, Heise and Watts (2005:49-54) reveal that many victims have their first sexual experience as a product of coercion or force. This is of grave concern as the outcomes of sexual abuse include unwanted pregnancy and STIs, including HIV/AIDS. The abuse is a severe violation of girls' basic rights and bodily integrity.

Coercive sex and rape, poor contraceptive knowledge and poor contraceptive self-efficacy are major factors in teenage pregnancy (Wang et al 2003:33-44; Rwengwe 2000:118-123; Buga, Amoko & Ncyiyana 1996:95-100; Nasoro 2003:23-25; 28).

2.4.6 Peer pressure

In a study on high-risk sexual behaviour in Tanzania, Ikamba and Quedraogo (2003:1-12) found that youth are forced into having sexual intercourse by peer pressure. Peer pressure plays a role in initiating sexual activity, which frequently ends in adolescent pregnancies. Poverty for girls (especially with poor parents) is another factor. Initiation rituals for girls encourage sexual activity, as some of the girls immediately practise what they have been taught, and no appropriate information is given of how to prevent disease and unwanted pregnancy.

Having frequent sex; forced sex initiation; not owning a television set; a larger household and poor house; not living with their biological father; not talking openly about sex with a boyfriend, and also perceiving most friends to be pregnant are other risks for teenage pregnancy (Vundule, Maforah, Jewkes & Jordan 2001:73-80).

In a qualitative study on the context of adolescent pregnancies in Medellin, Colombia, Cuesta (2001:180-192) found that adolescent pregnancy occurs in the context of a "genuine love affair" in which ideas of romantic love and gender rules are powerful influences on those who unintentionally become pregnant. However, the results might be specific to that group and the opinion of boyfriends could have enriched the analysis.

2.4.7 Urbanisation

In Tanzania, factors that have influenced the adolescents' life style include modernisation accompanied by industrialisation; access to mass media; rural-urban migration; influx of refugees, and the introduction of a free market economy. All these factors have changed the traditional system of socialising the young people to adulthood.

2.5 REPRODUCTIVE HEALTH SERVICES TO ADOLESCENTS

2.5.1 Types of reproductive health services

In Tanzania, the Ministry of Health has made provision for a range of reproductive health services to be provided in public, private and NGO settings and outlets. The services include

- Information and counseling on reproductive health, sexuality and safe sex
- Testing services, VCT, STI and Pregnancy
- Management of STI, VCT+, PMTC+, HIV/AIDS
- Focused antenatal care
- Care during childbirth
- Postnatal care
- Post-abortion care
- Contraception, including emergency contraception
- Condom promotion and provision
- Other related health issues: substance abuse, violence, injuries and mental health
- Referrals to specialist health care centres

Nevertheless, sexual and reproductive services for adolescents are still surrounded by stigma, especially among parents, community leaders, religious leaders, service providers and even programmes for adolescent care. Consequently, adolescents are still denied access to reproductive health services. Existing services are not adolescent friendly in terms of type and quality of services offered, time of service, location and affordability. Expertise is lacking in schools. In short, adolescents have not benefited in

spite of favourable policies and guidelines (RCHS 2004a:12). At the same time, if these services could benefit adolescent girls, then they could complete school, get jobs and thus raise their own, their family's and the country's economic status (RCHS 2004b:113).

2.5.2 Contraception

One of the most important reproductive health services for the adolescent is contraceptive services. Contraception for adolescents is a big problem because, in order to use contraceptives, prior planning is needed. In the researcher's experience, adolescents report that their first sexual intercourse usually "just happened" and that they did not plan to have sex at the time.

It is generally believed that condom use requires the least advance planning and is used more than any other method of contraception. However, about 35% use no method on their first sexual intercourse. Usually sexual activity is sporadic rather than deliberate and rational.

Contraceptive use in Tanzania is low, especially among adolescents aged 15 to 19 (6%). The low contraceptive use among women may reflect lower levels of sexual activity or a desire to start a family. The most popular contraceptive method is a condom (NBS 2000:46, RCHS 2004a:4)

In Dar-es-Salaam, Nasoro (2003:25) found that contraceptive awareness was good among adolescents as some knew or mentioned at least one type of contraceptive. However, some admitted not using any form of contraception. Some of the girls did not use any method because they claimed to have had sexual intercourse once or twice and not become pregnant, so thought it would not happen to them. N'gwalida (2001:29), however, found lack of knowledge of methods of contraception given by teenagers aged 15 to 19 as the reason for not using contraceptives.

An investigation into factors affecting condom use among 446 junior secondary school pupils in South Africa revealed that about one year after puberty 149 pupils (70 females and 79 males) had engaged in sexual activity (Peltzer 2000:37-44). Of these, most knew about condoms prior to first sex; only 25.3% of the boys and 71% of the girls used

condoms the first time, and most of the boys and almost one third of the girls reported never using condoms. Regarding adolescents' knowledge, beliefs and experiences of sexual practices, Khoza (2004:39) reported that the girls emphasised that having sex without a condom was the worst criminal offence, because boys flitted around spreading HIV and STIs. This, then, indicated that these girls were aware of risky sex practices.

Maja, Ehlers and King (2004:30-34) found that both adult and adolescent women lacked knowledge about emergency contraception, which could prevent unwanted pregnancies in the event of unprotected sexual intercourse. The adolescents were negative about its use.

In a study of sexual behaviour among 2 740 high school students in Cape Town, South Africa, Carl, Muller, Reddy and Flisher (2003:537-540) found that 29% had participated in sexual intercourse. By the age of 14, 23.4% males and 5.5% females had participated in sexual intercourse; by 19, the proportions were 71.8% and 58.2%, respectively. It also revealed that at their last coital episode, 65.4% had used contraception and the most common methods were condoms (67.7%) and injectable steroids (43.2%).

According to Williams and Mavundla (1999:62), among 42 teenage mothers only 2.4% used condoms. Although they acknowledged the use of condoms to be the safest method, they did not use condoms. The girls supported the use of condoms, but their boyfriends refused and the girls yielded to the pressure in spite of the ill effect.

Heaven (2001:132-133) maintains that the practice of contraception among sexually active adolescents is linked to cognitive development. Adolescents' formal reasoning does not comprehend the different forms of contraception, nor do they evaluate the consequences of their actions, and males do not consider the risks of pregnancy to their female partners.

2.5.3 Life skills education

The life style of the adolescent is greatly influenced by the family, peer, teachers, and religion and traditions. At home, parents and other adults are role models. At the same time, the peer group greatly influence adolescent girls. During adolescence they are

expected to be knowledgeable in order to postpone intercourse or, if they do have sex, to use condoms. Young people need education on human development, reproductive health, anatomy and physiology; relationships with family friends as well as dating; sexual behaviour such as abstinence as well as sexuality throughout the life cycle; sexual health, including contraception, STI, HIV/AIDS, prevention of sexual abuse, and abortion; their society and culture such as gender roles and religion. In addition they need personal (life) skills such as values, decision-making, communication and negotiation. They need to understand risk behaviour and the consequences, and where they can go for reproductive health services (Blum 2000:3; Buga et al 1996:95-100; Ehlers 2003:19-21).

2.6 SUPPORTIVE ENVIRONMENT TO THE ADOLESCENT GIRL

Adolescents need support to develop into mature adults. Parents are the main support structure, as well as the community, religion, schools and cultural aspects.

2.6.1 Parents

Blum (2000:1-5) emphasises that “the strong message to parents is that you need to be in your kid’s life: know their friends, what their friends do, and who their friends’ parents are. The messages for all adults is to set clear expectations regarding school performance, skipping school or doing poorly is not just an educational threat, it’s a health threat. We need to provide resources to help capture the interest of kids who are disenfranchised.”

Nasoro (2003:30) maintains that parents should be educated on the importance of striving for the education of their female children and postpone their marriage until they are 20 years and older. It is very important to involve adolescent boys and men in the fight against adolescent pregnancy and its consequences.

According to Marlow and Redding (2001:1122), many parents do not adequately explain to their girls the various changes in the body that indicate puberty. Girls should have a clear understanding of ovulation, fertilisation, pregnancy and childbirth before the onset of menstruation. This will minimise their anxiety and empower them to face the future.

Parents should take responsibility for guiding the youth to avoid engaging in sexual activities at an early age. This is to avoid the risk of contracting STDs & HIV/AIDS and unwanted pregnancies (Ikamba & Quedraogo 2003:12).

Parents should play a significant role as sexuality educators for their children. Many parents are not ready to discuss with their children, they assume that their get information from school (Khoza 2004:39; Miller 2002:22-26).

According to Moore et al (2004:1-8), having better educated parents, supportive family relationships, parental supervision, sexually abstinent friends, good grades and attending church frequently are all related to later onset of sexual intercourse.

2.6.2 Community/religion

Information, communication and education should be provided to the existing groups in the community, in relation to changes which take place in adolescent girls' bodies and the consequences of early sexuality, namely teenage pregnancy and sexually transmitted infections including HIV/AIDS, and ill effect of abortion (Ikamba & Quedraogo 2003:1-12). If women and church/religious groups are empowered, they can play a big role in educating adolescent girls.

Marlow and Redding (2001:1129) assert that spiritually adolescents are in the stage of synthetic-conventional faith. An adolescent without religious ties is likely to be attracted to any new or different religious cult and undesired behaviour. Parents need to be aware of this and help adolescents explore their feelings and concepts.

2.6.3 School

In Tanzania, sexual and reproductive health is taught in schools, but it is inadequate in content and methods, particularly due to scarcity of information, education and communication (IEC) materials. Schools are also not equipped. Teachers receive insufficient training in reproductive health issues. In spite of developing national policy guidelines for reproductive health services, many young people have not benefited from them, due to low coverage of targeted audience, and other critical constraints such as limited resources and cultural barriers (RHCS 2004b:10).

In Mwanza, Tanzania, in most cases (94%; 96/120) became pregnant while they were out of school (completed primary school or dropouts) compared to 20% who became pregnant while in school, which means attending school could be a deterrent for becoming pregnant (Muchuruza 2000:27-53).

2.6.4 Cultural support

Maluleke (2003:64-65) found that during initiation, sexuality education was limited to personal hygiene, maintaining virginity, self-control and social morals. Abstinence was mentioned as a way of preventing HIV/AIDS, but nothing was said about HIV and its prevention, and it was done in a calm environment. However, the girls indicated that the information was inadequate and unclear.

Initiation rituals for girls that encourage sexual activity should be looked into so that they become beneficial to the girl (Ikamba & Quedraogo 2003:12).

In general, parents and communities are not adequately equipped to prepare their children for adult life. In addition, low literacy among the traditional/community leaders means that they are increasingly cut off from information on new and emerging sexual and reproductive health issues.

2.6.5 Health providers and governments

It is important for health providers to assist parents to value sexuality education for their children, display moral values, and delay sexual activity and encourage the use of condoms and contraception for those who are sexually active. These may reduce the frequency of intercourse, promote safer sexual behaviour, and reduce unwanted pregnancies as well as HIV/AIDS and STIs (Miller 2002:22-26). Williams and Mavundla (1999:62) found that health workers were not able to help adolescents during this era of primary health care orientation, as it addresses the basic local needs and problems. Health providers should be knowledgeable and involved in addressing issues related to adolescents' problems. Ikamba and Quedraogo (2003:1-12) stress that governments should continue developing strategies to assist adolescents by having clinics with services that are accessible, affordable and friendly, where they can be counselled about reproductive issues and hence meet their needs.

In support of adolescents, the MOH of Tanzania has developed a National Health and Development Stakeholders Board to guide sexual and health intervention. The main aim is for the health services to be accessible, appropriate, affordable, and adequate and of acceptable quality. In addition, adolescents who become pregnant, will be provided with appropriate reproductive healthcare for optimal health development, and those with reproductive problems would be referred to higher levels of care for appropriate management (RCHS 2003:31-33)

In the US, the government is committed to continuing efforts to prevent out-of-wedlock teen pregnancies, STIs, including HIV/AIDS, infection. Adolescents are encouraged to abstain from sexual activity until marriage (Department of Health and Human Services 2002:72).

2.6.6 Adolescent involvement and peer influence

Effective interventions require adolescents' active involvement in the definition of the problems and their solution. Among the strategies to reduce teen pregnancy is an approach that involves education, health, social services, media, parents and, most importantly, the young people themselves (Linda 2003:7).

While young people's involvement in sexual activity is fairly high, their awareness and knowledge regarding physiological, psychological and physical changes associated with adolescents is relatively low. Teenagers are optimistic and approve the inclusion of sex education in the school curriculum (Williams & Mavundla 1999:62).

Pardue (2003:1) found that "increased abstinence was the major cause of declining birth and pregnancy rates among single teenage girls".

Williams and Mavundla (1999:62) maintain that teenagers should wait for maturity before engaging in sexual intercourse to enable them to develop emotionally, intellectually and physically.

Dlamini et al (2003:80-82) found that parents, partners, peer groups, health personnel, teachers, church leaders and communities fail to empower adolescent mothers with

knowledge and skills to prevent pregnancy or to face motherhood. As a result adolescents suffered socially, culturally and spiritually.

2.7 EDUCATION AND COMMUNICATION

2.7.1 Education is power

Adolescent girls should be educated because education can reduce fertility by (Khoza 2004:39; Little 1997:45):

- Removing girls from domestic environment where early marriage and childbearing is encouraged.
- Allowing women to gain skills and education that may give them greater independence and social freedom.
- Encouraging women to achieve their educational ambitions and marry later.

2.7.2 Knowledge of adolescents' on reproductive health issues

Adolescents need to have knowledge about sexual and reproductive health issues, including preventive, promotive, rehabilitative and curative services that are appropriate to their needs.

Many adolescents do not feel that they are at risk of contracting HIV/AIDS when they practise sex without using condoms. Sometimes boys are ready to use condoms, but the girls are not because they have poor knowledge of the use of condoms or because of rumours on condom use. For example, rumours that condoms “may remain in the womb during sexual intercourse” or “carry viruses” and if girls carry condoms with them “they are thought to be prostitutes”. This shows lack of information, and education about condoms, which puts them at risk (Peltzer 2000:37-44; Ikamba & Quedraogo 2003:8).

Peltzer (2000:40) found that the majority the secondary school respondents indicated that their source of condom information (in order of importance) was radio, television, educational talks, newspaper, social/health magazine, posters and pamphlets, and health care providers. They also admitted having been given free condoms. In South Africa condoms are freely available. Correct condom knowledge was associated with

the source of information: social/religious organisation, health care providers and posters and pamphlets.

In Limpopo Province, South Africa Khoza (2004:34-41), found that the adolescent participants regarded unprotected sexual intercourse, teenage pregnancy, abortion, rape, prostitution, contraceptives, starting sex at an early age, homosexuality, and having many sexual partners as risky sex practice. In particular, rape was associated with failure in relationships and the fact that girls wore mini-skirts.

Sexuality education has been found to be successful in promoting abstinence, decreasing sexuality activity, increasing use of safer practices, increasing teenage sex responsibility, and increasing sex-related knowledge. Furthermore, sexual education aids youth towards more responsible sexual decision making, delaying the age at which first sexual intercourse occurs, and not encouraging earlier sexual activity or multiple sexual partners (Khoza 2004:40-41)

2.8 EFFECTS OF PREGNANCY ON THE ADOLESCENT GIRL

Early childbearing affects the girl socio-economically, educational opportunities and restricts skills for young people needed to succeed in work and life, reduces quality of their lives and exposes them to STIs. The community also regards them as outcasts.

2.8.1 Interruption of schooling

Out of girls who leave school because of pregnancy, very few return to school after delivery. Having lost a year of schooling, their performance at school deteriorates due to the added responsibility of caring for the baby. Some drop out of school altogether. These dropouts have less chance of being employed and suffer financially, thus continuing to be dependent on their families and becoming a burden to them (Mmari, Mchumvu, Silberschmidt & Rasch 2000:52-59; Dlamini and Van der Merwe 2002:51-55).

2.8.2 Gender education

In Tanzania, in 2005 the net enrolment ratio (NER) at primary education was 94.8%. The ratio for boys was 95.6% and for girls 93.8, but this ratio dropped drastically to 10.3% in the same year for secondary education. This is an indication that very few of the pupils who finish primary education access secondary education. It also means that only about 1 out of 10 Tanzania children of secondary school-going age (14-17) is actually in school. The remaining 9, which may include as many as 5 girls, are not attending school and therefore vulnerable to sex activity and candidates for unwanted pregnancy.

Irinoye et al (2004:29) found that adolescents' main concerns are disruption in academic work and the negative consequence thereof for future career prospects. In addition expulsion from school, ill health due to poor economic status, being treated as an outcast in the community and having an "illegitimate child" were all the concerns of adolescent mothers.

2.8.3 Sexually transmitted diseases

According to the RCHS (2004a:4) and NCCDPHP (1999:57-61), aside from pregnancy, STIs, including HIV/AIDS, are the greatest risk of sexual activity, which poses a serious health problem among adolescents. The distribution of STIs by age group and sex in Tanzania revealed that three times as many boys as girls under 15 years had contracted a curable STI; twice as many female adolescents (aged 15-19) were reported with STIs, and young women aged 15-19 are four times more likely to contract HIV/AIDS than their male counterparts.

2.8.4 Abortion

Abortion poses the greatest direct threat to a young woman's health. Abortion is illegal in many African countries and account for about one-fifth of all maternal deaths in East Africa. The abortion rate in Tanzania remains largely unknown. Available hospital-based data suggest that young women are more likely to undergo unsafe abortion than older women, possibly because of limited access to reproductive health services. More

adolescents suffer from abortion-related morbidity and mortality than those in the child-bearing age of 18-35 (NCCDPHP 1999:57-61; RCHS 2004a:3).

2.8.5 Complications during pregnancy and delivery

The risk of death in childbirth is twice as high for a mother aged between 15 and 18 than for a mother aged 20 or over. Pregnancy-related morbidity and mortality in developing countries is higher for women under 19 and above 35 years of age. The complications include anaemia, toxemia, premature delivery, prolonged/obstructed labour, vesico-vagina fistula and cervical trauma, and a higher risk of delivering low-birth weight babies. The infant mortality rate for infants born of an adolescent is higher. In general, children of teenagers are 1.2 times more likely to die during the neonatal period, 1.4 times more during the postnatal period, 1.6 times during ages 1 to 2 and 3.3 times during childhood to age 5 (NBS 2000:11; NCCDPHP 1999:59; Ojo et al 2004:37).

The implication of these effects is that women under 18 are liable to some pregnancy-related problems and complications during pregnancy and delivery.

2.8.6 Other factors

The literature review did not emphasise religion or national campaigns as factors in reducing adolescent pregnancies. The researcher found only passing reference to deliberate efforts by national leaders in the USA against adolescent pregnancy.

2.9 CONCLUSION

This chapter discussed factors that contribute to adolescent pregnancy, effects of pregnancy, sexuality and reproductive issues, community support, and information education and communication. Adolescent pregnancy is a major sexual and reproductive concern in Tanzania, Africa and elsewhere. Adolescent mothers are likely to suffer from severe complications during pregnancy and delivery that result in higher morbidity and mortality for both mother and child.

Chapter 3 describes the research design and methodology.

Chapter 3

Research design and methodology

3.1 INTRODUCTION

This chapter discusses the research design and methodology, including the population, sampling, and data collection and analysis.

3.2 PURPOSE OF THE STUDY

The purpose of the study was to describe the factors that contribute to high adolescent pregnancy rate in Kinondoni Municipality to prevent unplanned pregnancies.

The objectives of the study were to

- determine the socio-economic characteristics of adolescents who become pregnant
- assess adolescent girls' level of knowledge of reproductive health issues in general
- determine the source of their knowledge of reproductive health issues
- describe the factors contributing to the high adolescent birth rate

3.3 RESEARCH SETTING

The research setting is “the environment in which the research study takes place and can be a natural or controlled environment. Natural settings are real-life study environments without any changes made for the purpose of the study” (Burns & Grove 2005:325).

The study was conducted in the two sub-wards of Midizini and Mnazimmoja, in Manzese Ward, division of Magomeni in Kinondoni Municipality, Dar-es-Salaam, Tanzania. The study was conducted in a natural setting, as there was no manipulation

of the environment; no changes were made to the community area, and no special treatment given to the respondents, which could have affected the results.

The data was collected during normal working hours, Monday to Friday. Therefore the respondents remained in the natural surroundings common to them, which are used for community gatherings like community meetings, health meetings as well as political meetings. The doors were closed during data collection with the respondents to provide privacy. According to the Kinondoni Municipality records, between the communities, there is an estimated catchment area population of 66,866 people in Manzese ward, of whom at least 32,477 are females (<http://www.Kinondonimunicipality.go.tz/>).

3.4 RESEARCH DESIGN

Polit and Beck (2004:49) describe the research design as “a blueprint, or outline, for conducting the study in such a way that maximum control will be exercised over factors that could interfere with the validity of the research results. The research design is the researcher’s overall plan for obtaining answers to the research questions guiding the study.” Burns and Grove (2005:211) state that designing a study helps researchers “to plan and implement the study in a way that will help them obtain the intended results, thus increasing the chances of obtaining information that could be associated with the real situation”.

The researcher chose a quantitative cross-sectional descriptive and exploratory research design to describe the factors contributing to the high adolescent pregnancy rate in Kinondoni Municipality, Dar-es-Salaam.

3.4.1 Quantitative research

This study attempted to quantify factors identified as contributing to the high pregnancy rate of adolescents in Kinondoni Municipality, Dar-es-Salaam. Quantitative data can be transposed into numbers, in a formal, objective, systematic process to obtain information and describe variables and their relationships (Brink 2006:91).

Quantitative research has the following characteristics (Burns & Grove 2005:24-25; Brink 2006:10-11):

- There is a single reality that can be defined by careful measurement.
- It is usually concise.
- It describes and examines relationships, and determines causality among variables, where possible.
- Statistical analysis is conducted to reduce and organise data, determine significant relationships and identify differences and/or similarities within and between different categories of data.
- The sample should be representative of a large population.
- Reliability and validity of the instruments are crucial.
- Comprehensive data collected by employing different methods and/or instruments should result in a complete description of the variable or the population studied.
- It provides an accurate account of characteristics of particular individuals, situations, or groups.

3.4.2 Exploratory descriptive design

The study was exploratory because it explored the factors contributing to the high adolescent pregnancy rate in Kinondoni Municipality. Exploratory research studies what has previously been studied and attempts to identify new knowledge, new insights, new understandings, and new meanings and to explore factors related to the topic (Brink 2006:102) The design was exploratory because it attempted to investigate the full nature of the phenomenon (high pregnancy rate among adolescents in the Kinondoni municipal Municipality), the manner in which it becomes manifested as well as related factors that could influence the adolescent pregnancy rate (Polit & Beck 2004:19-20). Results of exploratory studies cannot necessarily be generalised to a larger population but provide a better understanding of the sample being examined (Burns & Grove 2005:356-357). Exploratory research examines the relevant factors in detail to arrive at an appropriate description of the reality of the existing situation (Brink 2006:104). The researcher deemed this approach suitable for gaining a better understanding of the high pregnancy rate in the Kinondoni Municipality.

3.4.3 Descriptive

The study was descriptive in that the researcher collected detailed descriptions of the factors that contributed to the high pregnancy rate from pregnant and non-pregnant adolescents. The factors identified were described accurately. Burns and Grove (2005:44) define the purpose of descriptive research as “to provide the opinions of respondents regarding the phenomenon being studied”. Descriptive research provides an accurate portrayal or account of the characteristics of a particular individual event, or group in real-life situations for the purpose of discovering new meaning, describing what exists, determining the frequency with which something occurs, and categorising information (Burns & Grove 2005:734). Descriptive studies provide valuable baseline information. The method is also flexible and can be used to collect information from a large group of respondents (Drummond 1998:31). In this study, the researcher attempted to identify and describe factors that contributed to the high pregnancy rate among adolescents in the Kinondoni area.

3.4.4 Exploratory descriptive research design

According to Brink (2006:102), an exploratory descriptive research design has the following characteristics:

- It is a flexible research design that provides an opportunity to examine all aspects of the problem being studied.
- It strives to develop new knowledge.
- The data may lead to suggestions or hypotheses for future studies.
- It is usually a field study in a natural setting.

3.5 RESEARCH POPULATION AND SAMPLE

Polit and Beck (2004:50) define a population as “the totality of all subjects that conform to a set of specifications, comprising the entire group of persons that is of interest to the researcher and to whom the research results can be generalized”. LoBiondo-Wood and Harber (2002:242) describe a sample as “a portion or a subset of the research population selected to participate in a study, representing the research population”.

3.5.1 Population

A population is the aggregate or totality of all subjects or members that conform to a set of specifications (Babbie 2005:190; Polit & Hungler 1999:37). The population in this study comprised all adolescent girls aged between 10 and 19 years, from Kinondoni Municipality.

Eligibility criteria specify “the characteristics that people in the population must possess in order to be included in the study” (Polit & Beck 2004:290). To be included in this study, the respondents had to:

- Be adolescent girls between 10 and 19 years old.
- Reside in the selected two sub-wards in Manzese ward, namely Midizini and Mnazimmoja.
- Be willing to participate in the study.
- Give informed consent.

3.5.2 Sampling and sample

3.5.2.1 Sampling techniques

A multistage sampling (cluster sampling) method was employed in this study. A multistage sampling is a sampling strategy that proceeds through a set of stages from larger units to smaller sampling units or clusters; it can be from states to nursing schools, to faculty members (Polit & Hungler 1999:707).

A list of all 27 wards was obtained from the Kinondoni Municipal Council and one ward randomly selected by picking a number, which happened to be Manzese ward. Then two sub-wards were randomly selected again from a list of sub-wards/streets in the selected ward, and these were Midizini and Mnazimmoja. All adolescents aged 10 to 19, in the selected sub-wards were included in the study.

3.5.2.2 Sample size

The sample size was calculated using the following formula:

$$n = \frac{Z^2 pq}{d^2}$$

Where n = Minimum sample size required

Z = Percentage point of the normal distribution corresponding to the level of significance. For 5% level of significance, Z =1.96.

P = Proportion of pregnant adolescents in the population taken to be 20%. This is from Tanzania census done by (NBS 2000:38).

$$Q = 1 - p$$

D = maximum likely error (taken to be 0.05)

$$N = \frac{(1.96)^2 (0.2) (0.8)}{(0.05)^2}$$

Sample size = 245.86 = 246

3.6 DATA COLLECTION

Polit and Beck (2004:32) define data as “information obtained during the course of an investigation or study”. In this study, a questionnaire was used to obtain data relevant to the objectives and questions. The purpose of the study was to identify the factors that might contribute to the high adolescent pregnancy rate to prevent unplanned pregnancies.

3.6.1 Data-collection instrument

Data-collection instruments refer to devices used to collect data such as questionnaires, tests, structured interview schedules and checklists (Brink 2006:296). Polit and Beck (2004:729) define a questionnaire as “a method of gathering information from respondents about attitudes, knowledge, beliefs and feelings”. The questionnaire was designed to gather information about adolescents’ knowledge, attitudes and beliefs regarding pregnancy.

After an in-depth literature review, the researcher designed the questionnaire with the supervisor, joint supervisor and a statistician. The final questionnaire was discussed with the guidance of the supervisor, statistician and midwifery experts, and accepted in

terms of face and content validity. According to Babbie (2005:244), a questionnaire is “a document containing questions designed to solicit information appropriate for analysis. Usually it is information from respondents about their attitudes, knowledge, beliefs and feelings.”

3.6.1.1 *Characteristics of a questionnaire*

Brink (2006:300-304) states that the following aspects characterise a questionnaire:

- Each participant enters his/her responses on the questionnaire, saving the researcher’s time, compared to the time required to conduct personal interviews.
- It is less expensive than conducting personal interviews.
- Respondents’ feel that they remain anonymous and can express themselves in their own words without fear of identification. This aspect was very important in this study where the adolescents might not have wished their mothers, friends or healthcare workers to know about their knowledge, attitudes and beliefs concerning pregnancy.
- Data on a broad range of topics may be collected in a limited period.
- The format is standard for all subjects and independent of the interviewer’s mood.

3.6.1.2 *Development of the questionnaire*

The researcher derived the questions from the literature review (see chapter 2), from the researcher’s personal observations, and from consultation with a nurse tutor experienced in adolescent sexual and reproductive health. The questionnaire was given to two independent experts, two experienced Midwifery tutors at the School of Nursing, to evaluate the face and content validity as well as that the conceptual components of the questionnaire accurately reflected the factors that might contribute to the high adolescent pregnancy rate. The questionnaire was corrected and discussed with the statistician, the language editor and the researcher’s supervisors from Unisa and Muhimbili University College of Health Sciences. Polit and Hungler (1999:419) emphasise that experts on the content should be called upon to analyse the adequacy of items representing the topic under study.

The reviewers supported the assertion that the components of the questionnaire accurately reflected the essence of the concepts being studied and that the questions were appropriate to the factors contributing to the high pregnancy rate in Kinondoni Municipality. The questionnaire was typed and translated into Kiswahili, the local language. An expert in English language translation edited the translation and certified that the same meanings were conveyed by specific items in the English and in the Kiswahili versions of the questionnaire (see Annexure D).

3.6.1.3 Structure of the questionnaire

The questionnaire consisted of four sections:

Section A: Biographical information

Section B: Sexuality and reproductive health issues

Section C: Source of information

Section D: Effects of pregnancy on respondents

The items contained in the questionnaire, comprising both open-ended and closed questions, attempted to identify the factors contributing to the high pregnancy rate in Kinondoni Municipality.

3.6.1.4 Administration of the questionnaire

The researcher made appointments with the Medical Officer in charge of Kinondoni municipality and the ten cell leaders of the sub-wards. Then the researcher went to the selected institution that is Kinondoni municipality in person. The administrators provided the researcher with the names and contact details of the ten cell leaders, who assisted with the whole process.

The researcher explained the nature and purpose of the study to the potential respondents, informed them that participation was voluntary, and asked them to participate in the study. Every respondent willing to participate received a consent form with information about the study to sign. After giving informed consent, the respondents were taken to a private room and given writing materials. The researcher, assisted by four volunteers from the school of nursing, handed out the questionnaires on the

specific data-collection days in January 2007. To minimise response bias, the researcher remained outside the room, but within reach to clarify problems, if the need arose. Two hundred and three girls completed and returned questionnaires. The completed questionnaires were handed to a statistician for data capturing and analysis.

3.6.1.5 Advantages of a questionnaire

The advantages of using a questionnaire in this study were as follows:

- Questionnaires were less expensive to administer than conducting interviews, as interviews might have required hiring and training interviewers/field workers.
- As the researcher was not present during the completion of the questionnaires, there was no researcher bias, as could occur during interviews.
- The respondents' anonymity was ensured during data collection by not writing their names on the questionnaires, so that the findings could not be linked to any respondent.
- The respondents felt safe, as they were not facing the researcher during completion of the questionnaire.
- Time was saved during data collection, as the completion of the questionnaire required about 30 minutes, and all the respondents could complete their questionnaires simultaneously on the specific day (LoBiondo-Wood & Harber 2002:303-304).

3.6.2 Reliability and validity

3.6.2.1 Reliability

Polit and Hungler (1999:411) describe the reliability of a tool as the consistency with which the tool measures the attribute it is supposed to measure. If a study and its results are reliable, other researchers using the same method will obtain the same results. A pre-test was conducted with respondents similar to the study sample, but excluded from the actual study, to determine the clarity of the items and consistency of the responses (LoBiondo-Wood & Haber 2002:319).

3.6.2.2 Validity

According to Babbie (2005:143), validity refers to “the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration”. Validity can be sub-categorised as external and internal validity.

Burns and Grove (2005:218) describe external validity as “the extent to which the results can be generalised beyond the sample used in the study. This usually depends on the degree to which the sample represents the population.” Low external validity in this study implies that the results can apply only to adolescent in the two sub-wards in Manzese ward (Lo-Biondo-Wood & Harber 2002:197). The external validity of this study may have been compromised as there was no guarantee that the respondents had similar knowledge, attitudes and beliefs regarding pregnancy.

Internal validity is the extent to which factors influencing adolescent pregnancy are a true reflection of reality rather than the result of the effects of extraneous or chance variables, not necessarily related to factors influencing pregnancy.

3.7 ETHICAL CONSIDERATIONS

Nurses face ethical dilemmas in their daily duties, as do researchers, when people are used as study respondents in an investigation. First, the researcher obtained written permission to conduct the study and to use the Community Centre facilities for data collection from the Medical Officer In-charge of Kinondoni Municipal Council and the Chairman: Muhimbili University College Research and Publications, and (see Annexure B). Informed consent was obtained from the respondents and, to avoid researcher bias, the administrators selected the contact persons to assist with organising the respondents at the venue.

Researchers need to exercise care that the rights of individuals and institutions are safeguarded (Brink 2006:31-35). In this study, the researcher observed the ethical principles of beneficence, respect for human dignity, fair treatment, self-respect, protection of human rights, benefit and honesty in data processing.

3.7.1 Beneficence

The principle of beneficence encompasses freedom from harm and exploitation (Lo-Biondo Wood & Harber 2002:270). No physical harm resulted from completing questionnaires, but some psychological discomfort might have resulted from the nature of some of the questions. The researcher's telephone numbers were provided should any respondent wish to discuss any aspect. The researcher would have referred respondents who experienced psychological discomfort as a result of completing the questionnaires to a counsellor, but no respondents indicated or expressed discomfort.

3.7.2 Respect for human dignity

Respect for human dignity includes the right to self-determination and to full disclosure (Pera & Van Tonder 2005:46). The respondents' right to self-determination was honoured because they

- could decide independently, without any coercion, whether or not to participate in the study
- had the right not to answer any questions that caused discomfort
- could disclose or not disclose personal information
- could ask for clarification about any aspect that caused some uncertainty

The right to full disclosure was respected because the researcher described the nature of the study as well as the respondents' rights to participate or refuse to participate in the study. This was included in the informed consent (see Annexure C).

Each respondent voluntarily signed a consent form. The signed consent form was folded and placed in a box prior to completion of the questionnaire. Each completed questionnaire was placed in a separate container. No signed consent form could be linked to any specific questionnaire. This ensured the respondents' anonymity. Confidentiality was maintained because no names were disclosed in the research project. Any respondent who wished to obtain the findings could contact the researcher (Polit & Beck 2004:151).

3.7.3 Self-respect

The respondents' right to maintain self-respect and dignity were observed through protection from physical and psychological risk during the study. Neither participation in, nor withdrawal from the study was attached to any future care to be given adolescents. No one could benefit from participation or be harmed by refusal to participate in the study (Polit & Beck 2004:142).

3.7.4 Benefit

The respondents were informed that they would receive no monetary benefit from participating in the study. The findings could benefit the health providers in formulating health education guidelines that will enhance better life styles for adolescents in Kinondoni (Burns & Grove 2005:194).

3.7.5 Protection of human rights

The researcher explained the nature and purpose of the study and the type of information required to the respondents. The respondents all clearly understood and then gave informed consent (Burns & Grove 2005:181).

3.7.6 Fair treatment

In this study all the respondents were fairly selected and treated, the researcher selected the respondents according to the research problem of adolescent pregnancies.

3.7.7 Data processing

Regarding data processing, the researcher adhered to the principle of honesty with regard to data. No data were fabricated and data were keyed into the computer as presented by respondents and then analysed, using the SPSS V13.0 computer program. The researcher involved a qualified statistician to ensure that the statistical calculations were applicable to the type of data.

3.8 PRE-TESTING THE RESEARCH INSTRUMENT

A pre-test or pilot study is a small-scale trial of the data collection instrument to determine clarity of questions and whether the instrument elicits the desired information (Polit & Beck 2004:296). In order to ensure reliability and validity, the questionnaire was pre-tested on ten teenagers with similar attributes in Temeke Municipality to check the clarity of questions and identify vague or non-acceptable questions. Adjustments were made based on the outcome of the pre-test results. The data collected during the pre-test was not part of the study. All the participants completed the questionnaire within 30 minutes and understood the questions.

3.9 DATA ANALYSIS

The data was analysed using the SPSS V13.0 software computer program by a statistician at Muhimbili University of Health and Allied Sciences. Descriptive statistics, frequency tables and percentages, were used in the data analysis and interpretation.

3.10 CONCLUSION

This chapter discussed the research design and methodology of the study. The researcher used a quantitative, descriptive, exploratory design and a questionnaire as data-collection instrument. Chapter 4 describes the data analysis and interpretation.

Chapter 4

Data analysis and interpretation

4.1 INTRODUCTION

This chapter presents the data analysis and interpretation. A statistician analysed the data, using the Statistical Package for SPSS V13.0. The statistics are presented in frequencies, tables and percentages. Relationships between variables were identified using frequencies and percentages, the researcher collected data from the respondents using structured questionnaires, which had four sections:

- *Section A:* Biographic information
- *Section B:* Sexual and reproductive health issues
- *Section C:* Source of information
- *Section D:* Effects of pregnancy on the respondents

A total of 203 respondents participated in the study voluntarily. They were informed about the aim of the study, the details in the consent forms, and why it was important for them to participate. Then they signed the consent forms, and the consent forms were collected before distribution of questionnaires and were kept separate from the completed questionnaires to ensure anonymity. This made it impossible to link the two.

The respondents were divided into small groups and each group had an assistant researcher, who went through each question and let the girls respond as they saw fit. In items where not all the respondents responded, the frequency and percentages were calculated according to the number of responses, as in item 7. Missing responses were thus not included.

The findings are discussed in numerical sequence, according to the format of the questionnaire.

4.2 SECTION A: BIOGRAPHICAL INFORMATION

The biographical information included age; religion; tribe; place of stay; who they lived with; respondents' educational level, and that of their parents/guardians; respondents' occupational and economic status, and that of their parents/guardians. Though this information was not central to the study, the personal data helped to contextualise the findings and the formulation of reproductive health programmes to meet the needs of adolescent girls.

4.2.1 Item 1: Respondents' age

The respondents' ages were within the reproductive age group of adolescents 10-19 years. Figure 4.1 depicts the respondents' ages.

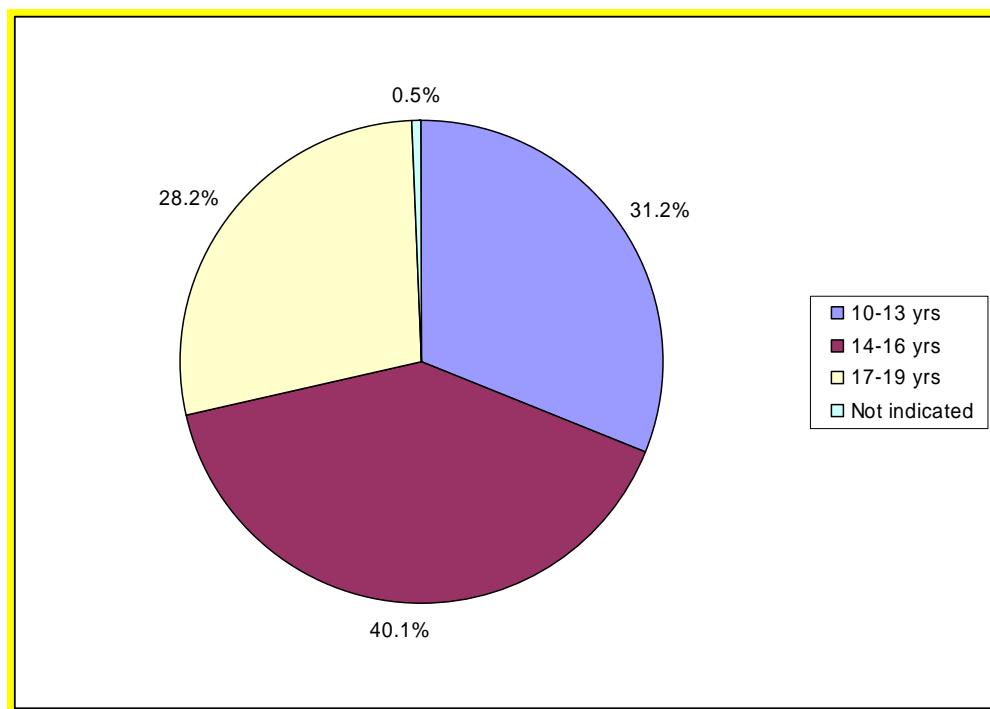


Figure 4.1
Respondents' age (n=203)

According to figure 4.1, the respondents were between 10 and 19 years old, which is within the WHO's definition of adolescence. The age range of 10 to 19 years is characterised by profound biological, psychological, and social developmental changes (Sadock & Sadock 2003:35).

Figure 4.1 indicates that of the respondents, 31.2% (n=63) were 10 to 13 years old (early adolescence); 40.1% (n=81) were 14 to 16 years old (middle adolescence), 28.2% (n=57) were 17 to 19 years old (late adolescence), and 0.5% (n=2) did not answer the question. The majority of the respondents were in middle adolescence.

4.2.2 Item 2: Respondents' religion

Of the respondents, 70.0% (n=142) were Muslims, 28.1 % (n=57) were Christians and 1.5% (n=3) indicated neither Muslim nor Christian. This means that the area where the study was done comprises mainly Moslems, which is typical of the coastal area in this country. In this study, then, the respondents represented Muslims, Christians and other/no religion. This means that the research results might be generalised to adolescents in Kinondoni.

4.2.3 Item 3: Respondents' educational level

It was important for the researcher to determine the respondents' level of education, as education influences individuals' decisions regarding reproductive issues. Table 4.1 depicts the respondents' educational level.

Table 4.1 Respondents' educational level (n=202)

LEVEL OF EDUCATION	NON-PREGNANT		PREGNANT		TOTAL
	FREQUENCY	PERCENT	FREQUENCY	PERCENT	
No formal education	3	1.7	1	4.8	4 2.0%
Primary education	135	74.5	16	76.2	151 74.7%
Secondary education	43	23.8	4	19.0	47 23.3%
TOTAL	181	100.0	21	100.0	202 100.0%

Of the respondents, 74.7% (n=151) were attending/attended primary education; 2.0% (n=4) had no formal education, and 23.3% (n=47) were attending/had secondary education. By comparison between the pregnant and non-pregnant respondents, 1.7% (n=3) non-pregnant and 4.5% (n=1) pregnant had no formal education; 74.5% (n=135) non-pregnant and 76.2 (n=16) pregnant had primary education; 23.8% (n=43)

non-pregnant and 19.0% (n=4) pregnant had secondary education. This indicated that most of the respondents had primary education, which is vital to their lives. At this age they need formal/non-formal education and health education in reproductive health issues in order to shape their future. Further/higher education for adolescents would likely delay child bearing.

In Tanzania, Muchuruza (2000:48) found that the level of education was associated with the risk of pregnancy; the risk increased among those with no formal education compared to those with secondary education.

In this study the educational level was mostly primary education. Of the respondents, 68% (n=138) between 14 and 19 years were expected to be in secondary school, but only 23.6% (n=48) were. Of the respondents, 31.2% (n=63) were between 10 and 13 years old and in primary school. This indicates that many adolescents do not have the chance to continue with secondary school education, which would enable them to be knowledgeable and protect themselves from unwanted pregnancy and STIs, including HIV/AIDS.

Educated women are more likely to delay child bearing. In some countries in Sub-Saharan Africa, many women with less than primary education have a child before they are 18, compared to those with seven or more years of education. Therefore education enables women to be self-reliant and is a protective measure against pregnancy. A low level of education is associated with teenage pregnancy (Fraser et al 2006:51).

4.2.4 Item 4: Respondents' occupational status

The respondents' occupation was very important to the researcher since the main occupation at that age should be schooling (see table 4.2).

Table 4.2 Respondents' occupation (n=203)

OCCUPATION	NON-PREGNANT		PREGNANT		TOTAL
	FREQUENCY	PERCENT	FREQUENCY	PERCENT	
Students/pupils	107	58.8	2	9.50	109 53.7%
Petty business	14	7.7	9	42.85	23 11.3%
No occupation	28	15.4	9	42.85	37 18.2%
No response	33	18.1	1	4.80	34 16.7%
TOTAL	182	100.0	21	100.0	203 100.0%

According to table 4.2, 58.8% (n=107) of the non-pregnant respondents were students/pupils, 7.7% (n=14) were doing petty business (including casual labourers, house girls and small business), and 15.4% (n=28) had no occupation. Of those who were pregnant, 9.5% (n=2) had agreed to being pregnant while still in school; 42.85% (n=9) were doing petty business, and 42.85% (n=9) had no occupation.

Table 4.2 indicates that 53.7% (n=109) of the respondents were still attending school (students/pupils), while more than 30% (n=29) were already out of school, either having completed primary education or as school dropouts. Of the respondents, 16.7% (n=38) who did not mention their occupations were most probably dropouts from school.

The economic status of the respondents who were out of school is low, in accordance with what they were doing. They had nothing tangible to manage life because they had not obtained enough education for employment and some were jobless. This put them at risk of involving themselves in undesirable behaviour. In Tanzania there are very limited formal employment opportunities, particularly for youth and especially girls, adolescents are growing up in an economy that is not able to fulfil their expectations. Inadequate services and economic hardship have led to the increase of adolescent high-risk situations such as unwanted pregnancies and early child bearing, STIs, including HIV/AIDS, and drug abuse (RCHS 2004a:1).

4.2.5 Item 5: Respondents' marital status

Here the researcher wished to establish the respondents' marital status, as it would indicate the level of early marriage in the society. Of the respondents, 2.3% (n=5) stated that they were married. In some societies in Tanzania, early marriage is accepted and allowed for the reason that a girl who has reached puberty is an adult woman and therefore ready for marriage; it will save their daughters from engaging in promiscuity, and alleviate the poverty of the family (MOE and VT 2006a:35).

The researcher is of the opinion that the respondents who were married had been deprived of their education. Marriage at this age is a risk factor to adolescents since their bodies are still developing, and they have to depend on the partner for the rest of their lives to meet the challenges of being mothers and wives unless they go to school again. Nasoro (2003:30) maintains that parents should be educated on the importance of striving for the education of their female children and postpone their marriage until they are at least 20 or older.

4.2.6 Item 6: Who respondents live with

Table 4.3 represents the respondents' replies to who they reside with.

Table 4.3 Who respondents live with (n=203)

LIVING WITH ...	NON-PREGNANT		PREGNANT		TOTAL
	FREQUENCY	PERCENT	FREQUENCY	PERCENT	
Both parents	105	57.7	6	28.6	111 54.7%
Father only	11	6.0	1	4.7	12 5.9%
Mother only	39	21.4	6	28.6	45 22.2%
Guardian	21	11.5	3	14.3	24 11.8%
Husband	2	1.1	3	14.3	5 2.5%
No permanent place	1	0.6	1	4.7	2 1.0%
No response	3	1.7	1	4.7	4 2.0%
TOTAL	182	100.0	21	100.0	

According to table 4.3, of the respondents, 54.7% (n=111) lived with both parents; 5.9% (n=12) lived with their fathers only; 22.2% (n=45) lived with their mothers only; 11.8% (n=24) lived with guardians, and living with husbands were 2.5% (n=5). About 2.0% (n=4) did not answer this question. Of those who were pregnant, 28.6% (n=6), lived with both parents; 28.6% (n=6) lived with their mothers only, and 4.7% (1) lived with her father. Most of the respondents, non-pregnant and pregnant, were living with both parents, followed by those with mothers only. This indicated that most of the families were still “intact” and the respondents had both parents with them. In addition, the majority of the pregnant respondents (57.2%) lived with their mothers (probably single parents) or with both their parents.

4.2.7 Item 7: Respondents’ parents/guardians educational and economic status

The researcher wished to establish the parents/guardians’ educational and economic status, which could influence the respondents’ lives (see tables 4.4 to 4.6).

Table 4.4 Respondents’ fathers’ level of education (n=149)

EDUCATIONAL LEVEL	NON-PREGNANT		PREGNANT		TOTAL
	FREQUENCY	PERCENT	FREQUENCY	PERCENT	
No formal education	11	8.1	3	21.4	14
Primary education	57	42.2	8	57.1	65
Secondary education	53	39.3	2	14.3	55
Higher education	14	10.4	1	7.1	15
TOTAL	135	100.0	14	100.0	149

Table 4.5 Respondents’ mothers’ level of education (n=157)

EDUCATIONAL LEVEL	NON-PREGNANT		PREGNANT		TOTAL
	FREQUENCY	PERCENT	FREQUENCY	PERCENT	
No formal education	12	8.4	4	28.6	16
Primary education	73	51.0	8	57.1	81
Secondary education	51	35.7	2	14.3	53
Higher education	7	4.9	-	-	7
TOTAL	143	100.0	14	100.0	157

Table 4.6 Respondents' guardians' level of education (n=24)

EDUCATIONAL LEVEL	NON-PREGNANT		PREGNANT		TOTAL
	FREQUENCY	PERCENT	FREQUENCY	PERCENT	
No formal education	2	10.0	2	50.0	4
Primary education	10	50.0	1	25.0	11
Secondary education	5	25.0	-	-	5
Higher education	3	15.0	1	25.04	4
TOTAL	20	100.0	4	100.0	24

According to tables 4.4, 4.5 and 4.6, of the respondents' fathers, 43.6% (n=65) had primary education; 36.9% (n=55) had secondary education; 10.0% (n=15) had higher education, and 9.4% (n=14) had no formal education. With regard to the respondents' mothers' educational status, 51.6% (n=81) had primary education; 33.7% (n=53) had secondary education; 4.5% (n=7) had higher education, and 10.2% (n=16) had no formal education.

The respondents parents'/guardians' educational level did not differ. Most of the parents and guardians were not highly educated. This might have hindered the respondents' educational progress.

Tables 4.7 and 4.8 indicate the respondents' fathers' and mothers' occupational status.

Table 4.7 Respondents' fathers' occupational status (n=183)

OCCUPATION	NON-PREGNANT		PREGNANT		TOTAL
	FREQUENCY	PERCENT	FREQUENCY	PERCENT	
Unemployed	28	17.0	3	16.7	31
Employed	59	35.0	5	27.8	64
Self-employed	78	47.3	10	55.6	88
TOTAL	165	100.0	18	100.0	183

Table 4.8 Respondents' mothers' occupational status (n=186)

OCCUPATION	NON-PREGNANT		PREGNANT		TOTAL
	FREQUENCY	PERCENT	FREQUENCY	PERCENT	
Unemployed	44	26.5	3	15.0	47
Employed	31	18.7	5	25.0	36
Self-employed	91	54.8	12	60.0	103
TOTAL	166	100.0	20	100.0	186

More respondents gave information about their parents' occupations than about their education. Table 4.7 indicates that of the respondents' fathers, 53.3% (n=88) were self-employed; 38.8% (n=64) were employed, and 18.8% (n=41) were unemployed. According to table 4.8, of the mothers, 62.0% (n=103) were self-employed; 21.7% (n=36) were employed, and 28.3% (n=47) were unemployed. In this area, self-employment meant small-scale businesses, like small (*"spaza"*) shops, selling raw/cooked food items along the road, or in marketplaces.

The study found that most of the fathers had the same occupation as their spouses. For those who were unemployed, the partner might have been employed or doing business. Most of the businesses were small scale, which did not sustain the family needs and their economic status was low. According to the MOE and VT (2006a:21), some pupils are forced to supplement their home income or buy some of their own requirements due to their parents' poor economic status.

4.3 SECTION B: SEXUALITY AND REPRODUCTIVE HEALTH ISSUES

4.3.1 Item 8: Respondents' age at first menstrual period (menarche)

Out of the 203 respondents, 71.4% (n=145) indicated that they already had their menstrual periods. Out of the 71.4%, 62.8% (n=91) started menstruating at the age of 13, while some were as young as 9 years old at menarche. Figure 4.2 illustrates the ages at which the respondents had their first menstrual period.

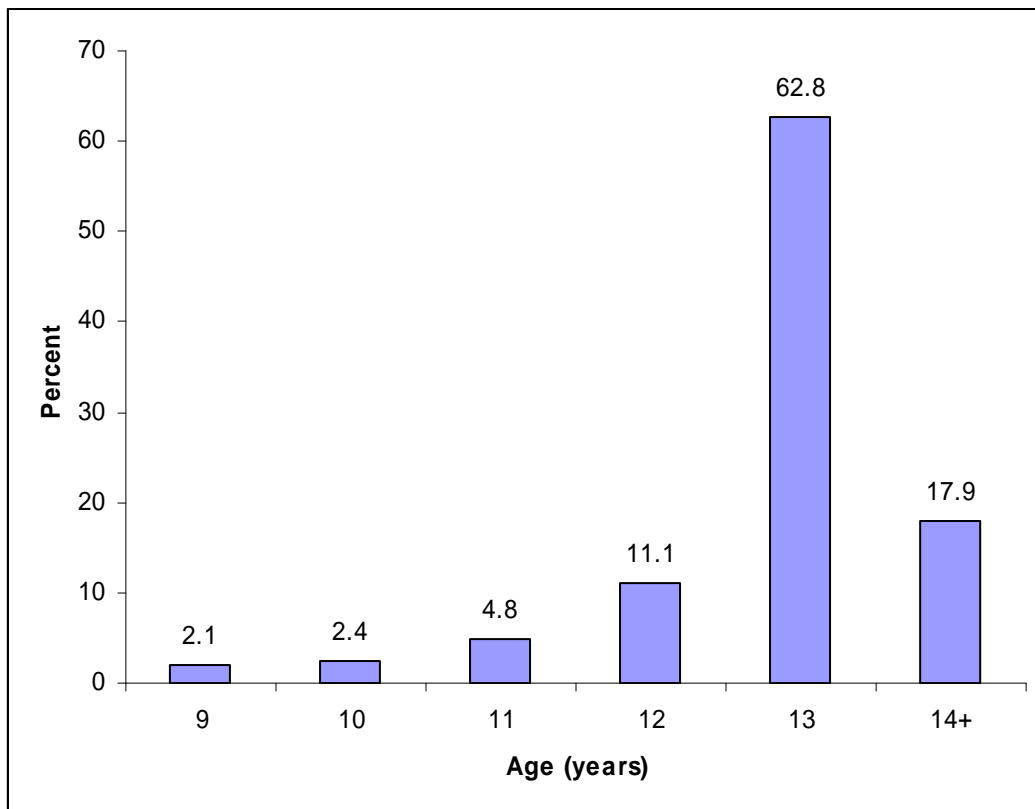


Figure 4.2
Respondents' age at menarche (n=144)

Knowing the age at which the respondents' had their first menstrual period would determine when reproductive health education should be given. Sexual and reproductive health education would empower adolescents with knowledge and life skills about the changes occurring in their bodies, and reproductive health issues. The purpose would be to postpone sexual intercourse and reduce the occurrence of STIs and pregnancy. Menarche is a factor contributing to adolescent pregnancies. Regarding contraceptive awareness and use, Dlamini et al (2003:79) and Nasoro (2003:25) found that the age of menarche was 11 to 15 and was associated with increased sexual activity, which put teenagers at risk of unwanted pregnancy and STIs.

4.3.2 Item 9: Respondents' age at first sexual encounter (debut)

Of the respondents, 28.6% (n=58) answered this question. Table 4.9 indicates that 28.6% (58) of the respondents had engaged in sexual intercourse, and 65.5% (n=38) had done so at the age of 15 to 17 years. According to the NBS (2000:37; 67-68),

about 15% of women aged between 15 and 19 had sexual intercourse for the first time by the age of 15; by 18, 65% of women were already sexually active, and by 20, about 86% were already sexually active.

Table 4.9 Respondents’ age at first sexual encounter (n=58)

YEARS	FREQUENCY	PERCENT
12	1	1.70
13	2	3.45
14	5	8.60
15	13	22.40
16	14	24.10
17	11	19.00
18	7	12.10
19	2	3.45
Not indicated	3	5.20
TOTAL	58	100.00

This study found that the respondents were sexually active around their first menstrual period, which implied that there was an association between the age at menarche and that at first sexual intercourse. This could possibly be because in late adolescence girls are better at making decisions. Furthermore, this indicated the importance of reinforcing health education at this age about changes in their bodies, sexual intercourse, pregnancy, contraception and abstaining from sexual intercourse. Adolescents have a right to information on reproductive health and services, as the information will delay pregnancy and risk factors associated with sexual intercourse and pregnancy.

4.3.3 Item 10: Respondents’ reasons for sexual debut

The researcher wished to determine the respondents’ reasons for sexual debut in order to identify the factors leading to sexuality in adolescent girls so that they can be helped. Table 4.10 presents the respondents’ reasons.

Table 4.10 Respondents' reasons for sexual debut (n=58)

REASONS	FREQUENCY	PERCENT
Self-desire	16	27.6
Peer pressure	20	34.5
Parent pressure	1	1.7
Pressure of partner	14	24.1
To get pregnant	1	1.7
Other reasons	3	5.2
Not indicated	3	5.2
TOTAL	58	100.0

According to table 4.11, several reasons led the respondents to have sexual intercourse. Of the respondents, 34.5% (n=20) indicated peer pressure; 24.1% (n=14) indicated partner pressure; 27.6% (n=16) indicated self-desire, and 1.7% (n=1) stated parental pressure; 5.2% (n=3) did not indicate any reasons and 5.2% (n=3) reported other reasons for sexual debut.

Mwaba (2000:30-34) found that the main reason (66.0%) for sexual debut was the pressure exerted by boys/men on girls to have sexual intercourse. Cuesta (2001:180-192) found that among 21 pregnant teenagers, the pregnancy occurred in the context of a genuine love affair, although they had not intended to fall pregnant.

According to Ehlers (2003:19), the reasons for sexual debut included: "did not know" or "it just happened" (8); were asked or coerced by partner (8); loved their partner (6); were curious (5), or succumbed to peer pressure (4). In Nigeria, the RCHS (2004a:5) and Irinoye et al (2004:27) found that some mothers encouraged their sons into sexual activity to be "real men", and asked the boys if something was wrong if there was no sign of relationship with girls.

Given the above findings, the researcher is of the opinion that boys and men, parents and adolescents themselves should be involved in strategies to reduce adolescent pregnancies.

4.3.4 Item 11: Respondents' pregnancy

4.3.4.1 Item 11.1: Age at first pregnancy

Of the 203 respondents, only 23.2% (n=21) stated that they had been pregnant. Of the respondents, 4.8% (n=1) stated that they had first been pregnant at the age of 15; 23.8% (n=5) at 16; 19.1% (n=4) at 17; 23.8% (n=5) at 18; 14.3% (n=3) at 19, and 14.3% (n=3) did not answer the question. (See table 4.1 for educational level of respondents who fell pregnant.)

Most adolescents' pregnancies occurred in Grades 4 to 7 of their primary schooling. These are among the 5% to 7% of dropouts at primary level due to pregnancy (Ministry of Education and Culture 2005:21-25).

Figure 4.3 depicts the respondents' age at first pregnancy.

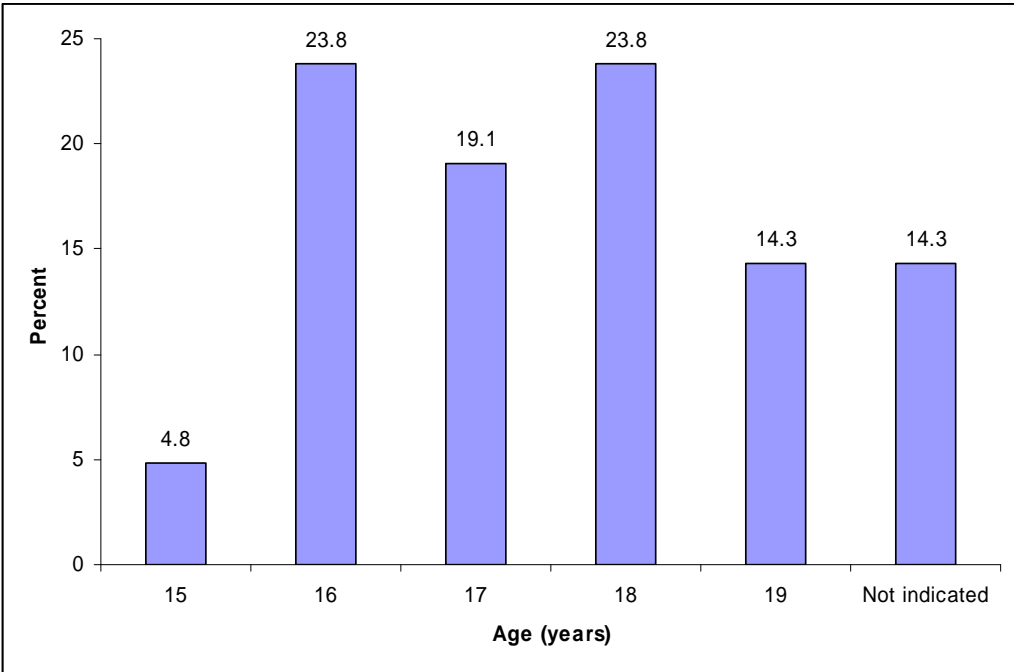


Figure 4.3
Respondents' age at first pregnancy (n=21)

According to figure 4.3, of the respondents 66.7% (n=14) fell pregnant between 16 and 18 years of age.

4.3.4.2 Item 11.2: Pregnancies planned or unplanned

Of the 21 respondents, 90.2% (n=19) stated that they had not planned the pregnancy, and 9.8% (n=2) had planned to fall pregnant. In a study on risk factors for teenage pregnancy among sexually active black adolescents in Cape Town, Vundule et al (2001:73-80) found that 97.4% (n=191) of pregnancies were not planned.

Despite the guidelines on sexual and reproductive services developed for adolescents, the phenomenon is still surrounded by stigma, especially among parents, community and religious leaders, service providers and programmes. Consequently, adolescents are still denied access to reproductive health services. Existing services are not adolescent friendly in terms of type and quality of services offered, time of service, location and affordability. Expertise is lacking in schools. In short, adolescents have not benefited in spite of favourable policies and guidelines being formulated (RCHS 2004a:12).

4.3.5 Item 12: Respondents' information about abortion

4.3.5.1 Item 12.1: Respondents who had an abortion (n=203)

The respondents were asked if they had had an abortion and 2.9% (n=6) stated that they had had an abortion.

4.3.5.2 Item 12.2: Where abortion was conducted

Of the respondents, 83.3% (n=5) stated that the abortions were conducted at a clinic, and 16.7% (n=1) stated at home. The low results may have been due to sensitivity of the question, because available hospital-based data suggest that young women in Tanzania are more likely to undergo unsafe abortions than older women, possibly because of limited access to reproductive health services. More adolescents suffer from abortion-related morbidity and mortality than those in the child-bearing age of 18 to 35 (NCCDPHP 1999:57-61; RCHS 2004a:3).

4.3.5.3 Item 12.3: Should girls aged 10-19 have a legal abortion or not

The respondents were asked to indicate whether young girls aged 10 to 19 should have a legal abortion. Of the respondents, 70.9% (n=144) stated that they should not; 16.3% (n=33) stated that they should be allowed to abort; and 12.8% (n=26) did not answer the question.

This study found only a small percentage of the respondents had had an abortion. They and all adolescents, therefore, need reproductive health services to rescue them from the ill-effects of abortion.

4.3.6 Item 13: Respondents' knowledge on reproductive health issues

Several questions were asked to measure respondents' level of knowledge on pregnancy and reproductive health issues. It was important to identify the knowledge on reproductive health issues at that particular age in order to give them life skills that will enable them to continue with further education eventually to get a career and earn a living.

4.3.6.1 Item 13.1: When is a woman likely to fall pregnant

Respondents were asked when is a woman likely to get pregnant, Of the respondents 21.1% (n=41) indicated 14 days before menstruation; 19.2% (n=39) indicated 14 days after menstruation; 6.9% (n=14) indicated during menstruation; 27.6% (n=56) indicated any time; and majority 26.1% (n=53) did not respond to this question. This means that the knowledge of when a woman is likely to get pregnant is low. Dlamini et al (2003:78) found that adolescents practise unsafe sex and were not aware that they could become pregnant and/or contract HIV/AIDS.

4.3.6.2 Item 13.2: Risk age for an adolescent to fall pregnant

Of the respondents, 92.1% (n=187) stated that they were not aware of the risk age; 5.4% (n=11) stated that they were aware, and 2.5% (n=5) did not answer the question.

4.3.6.3 Item 13.3: Appropriate age for an adolescent to fall pregnant

Of the respondents, 80.3% (n=163) showed 20 years and above, 17.2% (n=35) indicated age below 20, and 2.5% (n=5) did not answer the question.

4.3.6.4 Item 13.4: Right time for a girl to receive information about reproductive health issues

Of the respondents, 78.3% (n=159) that information about reproductive health issues should be given during primary education; 11.3% (n=2) stated that during secondary school while 4.4% (n=9) mentioned that at higher education level. In Tanzania sexual and reproductive health is taught in schools, but it is inadequate in content and methods, particularly due to scarcity of IEC materials. Schools also are not equipped. Teachers receive insufficient training in reproductive health issues. In spite of developing National policy guidelines for reproductive health services, many young people have not benefited from them, due to low coverage of targeted audience, and other critical constraints such as limited resources and cultural barriers (RHCS 2005:10).

Table 4.11 Respondents' recommendations on when to receive reproductive health information (n=203)

TIME	FREQUENCY	PERCENT
Primary school	159	78.3
Secondary school	23	11.3
Higher education	9	4.4
Not indicated	12	6.0
TOTAL	203	100.0

Most of the respondents, 78,3% (n=159) stated that reproductive health information should be given during primary school; this shows their readiness to get the information and that they find it appropriate. The MOE and VT in Tanzania have

included Reproductive health in their curriculum of primary education as indicated previously. In addition, the MOE and VT (2006a:17) has developed a guide for schools and Teachers' College to widen their knowledge on guidance and counselling, which includes various problems faced by students in and outside the school, such as reproductive health issues, sexuality, pregnancies, drug abuse and truancy.

It is expected that adolescents should have high knowledge and parents should be knowledgeable as they are the first teachers to their adolescent girls. Parents should also talk openly at home about these issues in order to prevent adolescent pregnancies, sexually transmitted disease including HIV/AIDS. In addition in a study done by Mwaba (2000:16-34) and Vundule et al (2001:73-80) found that most teenagers had negative attitudes towards pregnancy as 77% girls and 85% boys regarded it as wrong, and 92.7% of the girls said they wanted to complete school.

4.3.6.5 Item 13.5: Respondents' knowledge of contraception

Several questions were asked to measure the respondents' knowledge and awareness on contraceptives. The respondents were asked about the use of contraceptives in order to identify their awareness and use. Of the respondents, 10.8% (n=22) stated that they used contraceptives; 57.6% (n=117) indicated non-use, and 31.5% (n=64) did not answer the question. The methods used by those who stated to be using contraceptives were pills 45.5% (n=10) mentioned pills, 27.3% (n=6) mentioned injectables, while 13.6% (n=3) mentioned condoms. Of the respondents who indicated using contraceptives, 13.6% (n=3) did not answer this question (see table 4.12). Ehlers (2003:19) found that among the respondents who used contraceptives, (16) stated to be using injectables, condoms (16) and pills (5).

Table 4.12 Respondents' use of contraceptives (n=22)

METHOD	FREQUENCY	PERCENT
Pills	10	45.5
Injectables	6	27.3
Condoms	3	13.6
Not indicated	3	13.6
TOTAL	22	100.0

4.3.6.6 Item 13.6: Suitable contraceptive methods for adolescents

Of the 203 respondents, 62.6% (n=127) mentioned condoms, pills and injectables; 8.9% (n=18) indicated the voluntary surgical contraception. Thus 71.4% (n=145) responded to this question and 28.6% (n=58) did not answer the question.

4.3.6.7 Item 13.7: Methods that prevent pregnancy and STDs

Of the respondents, 52.7% (n=107) stated condoms; 23.2% (n=47) indicated intrauterine devices, pills, and natural methods, and 24.1% (n=49) did not answer the question.

Based on the above statistics the adolescents seem to know about condoms, but do not use them. Williams and Mavundla (1999:62) found a high rate of unprotected sex. Among 42 teenage mothers only 2.4% used condoms. Although they acknowledged the use of condoms to be the safest method, they did not use them.

This could be due either to lack of knowledge of general reproduction issues or negative attitudes towards contraceptives. Young adolescents are less likely to use contraceptives because of their immaturity. Lack of knowledge on methods of contraception was revealed among teenagers aged 15 – 19 as the reason of not using contraceptive method (N'gwalida 2001:29; Mbambo, Ehlers & Monerang 2006:26-29).

4.3.6.8 Item 13.8: How to prevent pregnancy, STDs and HIV

Of the respondents, 67.5% (n=137) stated that by abstaining from sexual activities; 21.7% (n=44) mentioned other contraceptive methods such as using contraceptives, having regular medical check-up, having only one sexual partner; and 10.8% (n=22) did not answer the question.

Pardue (2003:1) found that "increased abstinence was the major cause of declining birth and pregnancy rate among single teenage girls". Most striking among these findings is that among unmarried teenage girls aged 15 to 19 increased abstinence accounted for 67 percent of the decrease in pregnancy rate. Similarly, a 51 percent of the drop in the birth rate for single teenage girls 15 to 19 is attributed to abstinence (<http://www.heritage.org./Research/Family>).

This indicates that adolescents can be encouraged to postpone sexuality and pregnancy by abstaining, and those who cannot abstain should be encouraged to use contraceptives.

4.4 SECTION C: SOURCE OF INFORMATION

Different sources of knowledge regarding sexuality and reproduction were presented to the respondents on the questionnaire. They were asked on the source of knowledge that contributed more towards the knowledge they have.

4.4.1 Item 14: Respondents' source of information regarding menstruation

The information from the girls regarding menstrual period was important to the researcher in order to identify the role of parental care in avoiding adolescent pregnancies.

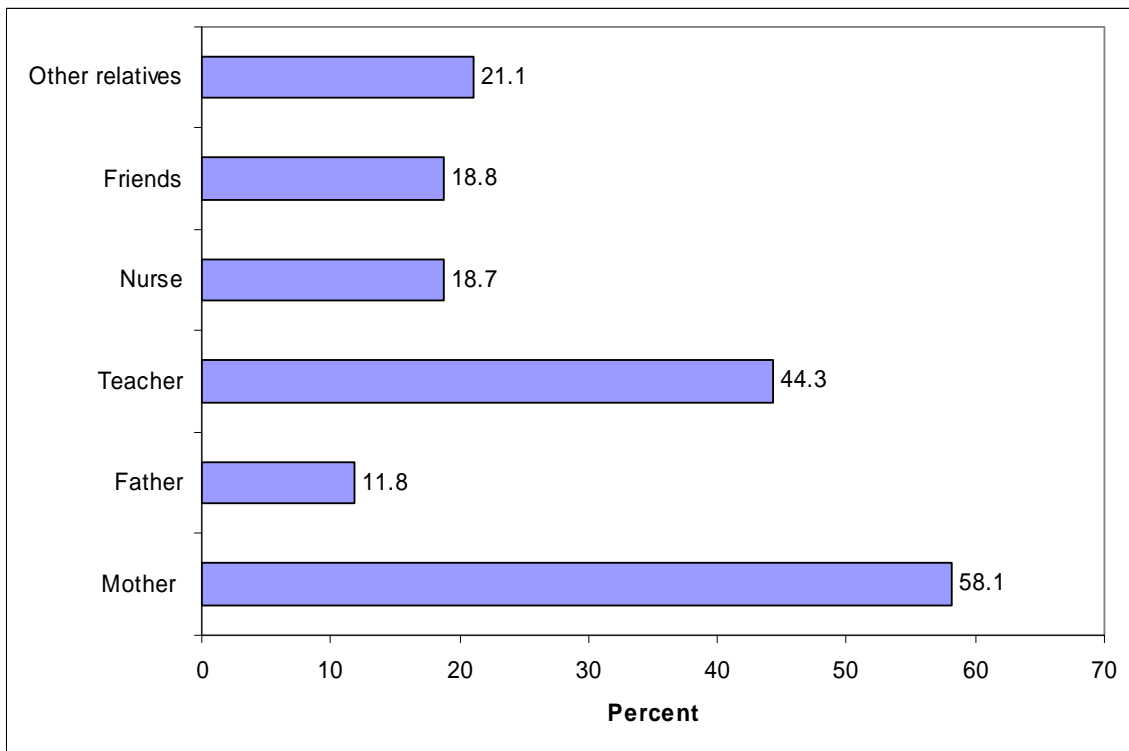


Figure 4.4
Respondents' source of knowledge regarding menstruation

According to figure 4.4, of the respondents 58.1% (n=118) indicated their mothers as the source of information concerning menstruation; 11.8% (n=24) mentioned their fathers; 44.3% (n=90) mentioned teachers; 18.7% (n=38) indicated the nurses as the source of information; 18.8% (n=37) mentioned their friends, and 21.1% (n=43) indicated relatives.

According to the findings the researcher is of the opinion that; parents, school teachers, nurses and relatives and the community should be involved in providing information about changes during puberty so that adolescents are prepared well to face the challenges at that time.

4.4.2 Item 15: Respondents' source of information about sexuality and reproduction

Different sources of knowledge regarding sexuality and reproduction were presented to the respondents on the questionnaire. They were asked about the source of knowledge that contributed more towards the knowledge they have. The information

regarding knowledge on sexuality was important to identify those who contributed more and the deficit in relation to equipping the adolescents with knowledge necessary for their development.

Table 4.13 Respondents' source of information on sexuality and reproduction (n=203)

WHO PROVIDED INFORMATION	MOST	LEAST	NONE	MISSING	TOTAL
School	99 (48.7%)	34 (16.8%)	30 (14.8%)	40 (19.7%)	203 (100.0%)
Parents	75 (36.9%)	31 (15.3%)	44 (21.7%)	53 (26.1%)	203 (100.0%)
Friends	35 (17.2%)	40 (19.7%)	47 (23.1%)	81 (39.9%)	203 (100.0%)
Television/video	44 (21.7%)	54 (26.6%)	34 (16.7%)	71 (35.0%)	203 (100.0%)
Newspapers	41 (20.2%)	39 (19.2%)	40 (19.7%)	81 (39.9%)	203 (100.0%)
Internet	21 (10.3%)	20 (9.8%)	65 (32.0%)	97 (47.8%)	203 (100.0%)
Church/Mosque	19 (9.3%)	17 (8.4%)	54 (26.6%)	113 (55.7%)	203 (100.0%)

In relation to source of information about sexuality and reproduction, 48.7% (n=99) of the respondents stated that they have received information about sexuality and reproduction from school; 36.9% (n=75) mentioned receiving information from parents; 17.2% (n=35) indicated that their friends provided the information; 21.7% (n=44) indicated from television/video; 20.2% (n=41) mentioned newspapers; 10.3% (n=21) stated Internet; while 9.3% (n=19) mentioned church/mosque.

4.4.3 Item 16: Respondents' source of knowledge about pregnancy

Respondents were asked about different sources who contributed more to the knowledge they have on pregnancy. The aim is the same as the one mentioned above.

Table 4.14 Respondents' source of information about pregnancy (n=203)

WHO PROVIDED INFORMATION	MOST	LEAST	NONE	NO RESPONSE	TOTAL
School	130 (64.0%)	20 (9.8%)	15 (7.4%)	38 (18.7%)	203 (100.0%)
Parents	76 (37.4%)	30 (14.8)	25 (12.3%)	72 (35.5%)	203 (100.0%)
Friends	41 (20.2%)	40 (19.7%)	31 (15.3%)	91 (44.8)	203 (100.0%)
Television/video	46 (22.7%)	46 (22.7%)	27 (13.3%)	84 (41.3%)	203 (100.0%)
Newspapers	40 (19.7%)	36 (17.7%)	33 (16.3%)	94 (46.3%)	203 (100.0%)
Internet	17 (8.4%)	22 (10.8%)	60 (29.6%)	104 (51.3%)	203 (100.0%)
Church/Mosque	17 (8.4%)	12 (6.0%)	63 (31.0%)	111 (54.5%)	203 (100.0%)

Of the respondents, 64.0% (n=130) indicated school as the source of information; 37.4% (n=76) stated parents; 20.2% (n=41) indicated friends; 22.7% (n=46) indicated television/video; 19.7% (n=40) stated newspapers; 8.4% (n=17) indicated the Internet, and 8.4% (n=17) indicated others.

In general, from the above tables: 4.16; 4.17 and 4.18, parents and the community are not participating in educating their children about reproductive and sexuality issues, it might be because they feel not well educated, that youths are more educated in the end their parents feel not empowered to do so. Parents should play a significant role as sexuality educators for their children. Many parents are not ready to discuss with their children, they assume that their youths will get information from school (Khoza 2004:39; Miller 2002:22 -26). According to a report by Linda (2003:7), it was indicated that among the strategies to reduce teen pregnancy is an approach that involves education, health, social services, the media, parents and most importantly the young people themselves, (<http://www.info.doh.gov.uk>)

4.5 SECTION D: EFFECTS OF PREGNANCY ON ADOLESCENT

4.5.1 Item 17: Respondents' knowledge of the effects of pregnancy on the adolescent

They were also asked about the health problems that could be expected when an adolescent falls pregnant (see figure 4.5).

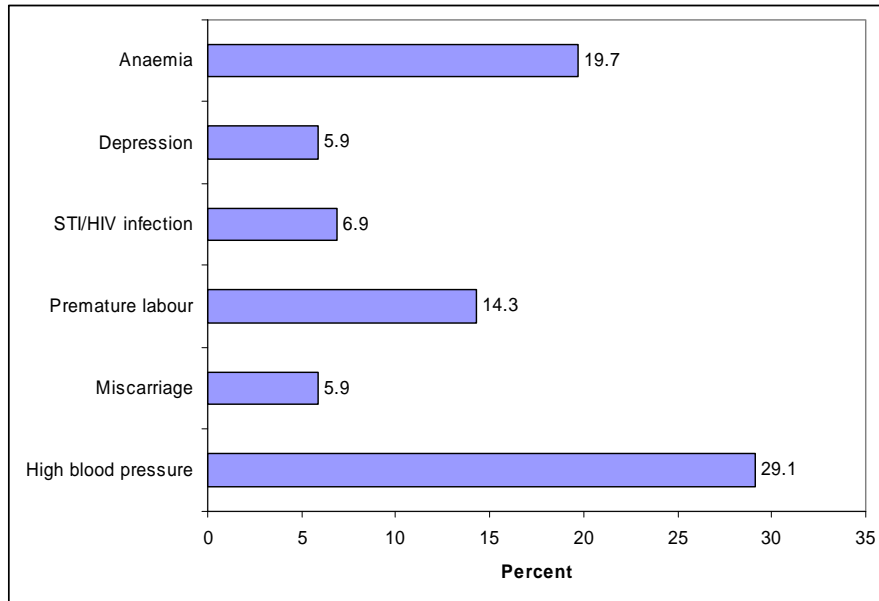


Figure 4.5

Respondents' knowledge of effects of pregnancy on adolescents (n=203)

Respondents were asked about problems/effects of pregnancy on the adolescents. Of the respondents 29.1% (n=59) mentioned blood pressure; 5.9% (n=12) stated miscarriage; 14.3% (n=29) stated premature labour; 6.9% (n=14) mentioned STI/HIV/AIDS infection; 5.9% (n=12) mentioned depression, and 19.7% (n=40) stated anaemia.

From the figure 4.5 above it shows that adolescents are not knowledgeable about the effects of pregnancy on their health, as only few responded on this question. Therefore it is important to educate the adolescents at this age about effects of pregnancies on adolescents and their consequences.

In addition they were asked about social problems that are prevalent with an adolescent pregnancy almost all adolescents were aware of the social impact on teenage pregnancies, that one will suffer from lack of money and parents will abandon them. Furthermore, they stated that being abandoned by friends and shame were not their big issue.

4.5.2 Item 18: What the respondents would like to learn more about

The respondents were asked to indicate what they would like to learn more about. The responses were coded and categorised into four groups in order of importance:

- Reproductive health issues
- STDs
- Early sexuality and abortion and their consequences
- Abstinence and how to overcome temptation

This study found the source of knowledge limited. Most of the respondents indicated school as the source of knowledge, and other sources were poorly ranked. In the researcher's view, much effort is still needed to empower adolescents with the necessary information. The findings indicated that the respondents had little knowledge, obtained mainly in primary school, and from their parents and other sources. They need to continue with secondary education as a means of becoming knowledgeable and self-reliant, and contributing to the country's development.

4.6 CONCLUSION

This chapter discussed the data analysis and interpretation, with the use of frequencies, tables and diagrams.

Chapter 5 concludes the study and presents recommendations for reducing the factors contributing to the high adolescent pregnancy rate in Kinondoni Municipality.

Chapter 5

Findings, limitations and recommendations

5.1 INTRODUCTION

The purpose of the study was to describe the factors that contribute to the high adolescent pregnancy rate in Kinondoni Municipality to prevent unplanned pregnancies. This chapter discusses the conclusions and limitations of the study and makes recommendations for strategies to improve the services to adolescent girls and further research.

5.2 FINDINGS

5.2.1 Age

Of the respondents, 31.2% were 10 to 13 years old; 40.1% were 14 to 16, and 28.2% were 17 to 19, hence the majority were in middle adolescence.

5.2.2 Religion

In regard to religious affiliation, 70.0% of the respondents were Muslims, 28.1% were Christians, and 1.5% were neither Muslims nor Christians.

5.2.3 Educational level

Most of the respondents (74.7%) were literate (see chapter 4, table 4.1). The respondents' educational level was mostly primary education, which meant that many of them did not have the chance to continue with secondary school education, as only 23.3% were in secondary schools. Secondary or high school education is important because it can equip adolescents to be knowledgeable; protect themselves from unwanted pregnancies and STDs, including HIV/AIDS; enable them to be self-reliant and self-supporting, and contribute to the national economy and alleviating poverty.

The study found that most of the respondents had a low level of education. A low level of education is associated with teenage pregnancy.

5.2.4 Occupational status

Of the respondents, 53.7% were attending either primary school or secondary school, 30% were not going to school, and 16.7% did not answer this question (see chapter 4, table 4.2). Of the respondents who had been pregnant (85.0%), 42.85% were doing petty business and 42.85% had no occupation. These were dropouts, and more than 30% of the respondents were at risk because their educational level was not high enough to get a useful career and earn a living.

In Tanzania, there are very limited formal employment opportunities, particularly for youth and especially girls. Inadequate services and economic hardship have led to increased adolescent risk situations, such as unwanted pregnancies and early child bearing, STIs, including HIV/AIDS, and drug abuse (RCHS 2004a:1).

Based on the above, school attendance and becoming educated are very important at this age. Adolescents who are not at school are at risk of being dependants or involving themselves in sexual activity to meet their needs (see table 4.9). Adolescents therefore need reproductive health services, education and guidance.

5.2.5 Marital status

Of the respondents, only 2.3% stated that they were married. Marriage during adolescence is a high-risk situation because their bodies are still developing and the consequences and outcome of pregnancy are frequently unfavourable. In addition, they have been deprived of an education that could have equipped them to earn a reasonable living.

5.2.6 Who living with

This study found that of the respondents, 54.7% lived with both parents; 5.9% lived with their fathers only; 22.2% lived with their mothers only; 2.5% lived with their husbands,

and 1.0% did not have a permanent place to stay (see table 4.3). Of the pregnant respondents, 57.3% lived with their mothers or with both parents.

5.2.7 Parents'/guardians' educational and economic status

The study found the respondents' parents'/guardians' educational level generally low. According to the respondents' fathers, 43.6% had primary education; 36.9% had secondary education; 10.0% had higher education, and 9.4% had no formal education. With regard to the respondents' mothers' educational status, 51.6% had primary education; 33.7% had secondary education; 4.5% had higher education, and 10.2% had no formal education.

The respondents' parents had a low economic status (see tables 4.7, 4.8). Of the fathers, 18.8% were unemployed; 38.8% were employed, and 53.3% were self-employed. Of the mothers, 28.3% were unemployed; 21.7% were employed, and 62.0% were self-employed. Self-employment in this area meant small-scale business, like small ("*spaza*") shops, and selling raw/cooked items along the road or in small markets. The population are generally poor because their incomes are small.

5.2.8 Age at first menstrual period

Of the respondents, 71.4% were already menstruating. Of these, 62.8% started menstruating at age 13, and some started at as young as 9.

5.2.9 Age at first sexual encounter

With regard to the first sexual encounter, 28.6% of the respondents had engaged in sexual intercourse. Of these, 65.5% had engaged in sexual intercourse at 15 to 17 years of age.

5.2.10 Reason for sexual debut

The respondents gave the following reasons for their sexual debut: self-desire (27.6%); peer pressure (34.5%); pressure from partner (24.1%); parent pressure (1.7%); to fall

pregnant (1.7%), and “other” reasons which led to sexual intercourse, although no reason was given (5.2%).

5.2.11 Pregnancy

Of the respondents, 23.2% had been pregnant, and most (66.7%) of them fell pregnant between 16 and 18 years of age.

Of the respondents who fell pregnant, 90.2% stated that they did not plan to fall pregnant, and 9.8% had planned to fall pregnant.

5.2.12 Abortion

Of the respondents, 2.9% had had an abortion. Most of them (83.3%) had had the abortion at a clinic, and 16.7% had had it at home.

In relation to whether girls aged 10 to 19 should have a legal abortion or not, 70.9% of the respondents stated that girls should not be allowed to have an abortion, while 16.3% were in favour of girls being allowed to have an abortion. In this study, the respondents did not plan to have an abortion.

5.2.13 Knowledge of reproductive issues

With regard to when a woman is likely to fall pregnant, 21.1% of the respondents indicated 14 days before menstruation; 19.2% stated 14 days after menstruation; 6.9% indicated during menstruation; 27.6% indicated any time, and 26.1% did not answer the question. This indicated that the respondents were not knowledgeable about time of conception.

When asked about the risk age for an adolescent to fall pregnant, 92.1% were not aware and 5.4% were aware.

In relation to the appropriate time for a woman to fall pregnant, 80.3% indicated 20 years and older, and 17.2% stated younger than 20. These two items indicated that the respondents had little or poor knowledge of the consequences of adolescent pregnancy.

In relation to right time for adolescents to receive information about reproductive health issues, 78.3% of the respondents indicated at primary school; 11.3% stated at secondary or high school, and 4.4% stated at higher (tertiary) education level. The majority of the respondents, therefore, were ready to receive information at the appropriate time during primary education. Accordingly, the researcher feels strongly that it is the responsibility of all key players to take their role as educators, counsellors, and care givers of adolescents seriously.

In this study the respondents were aware that condoms as contraceptive method prevents STDs, HIV/AIDS infection and pregnancy. Nevertheless, condoms were not regularly used (see table 4.12). Of the respondents, 57.6% indicated non-use; 10.8% were using contraceptives, and 31.5% did not answer the question. The methods used were pills (45.5%); injectables (27.3%); condoms (13.6%), and 13.6% did not answer the question. In relation to the most suitable contraceptive method for adolescents: 62.6% stated condoms and 8.9% indicated pills and injectables. Regarding methods that prevent pregnancy and STIs, 52.7% stated condoms, and 23.2% indicated intrauterine devices, pills and natural methods.

In order to prevent pregnancy, STIs and HIV/AIDS, 67.5% indicated abstaining from sexual activity; and 21.7% indicated using contraceptive methods, regular medical check ups, having one sexual partner; and having only one partner.

The respondents knew that abstaining from sexual intercourse is a way of preventing adolescent pregnancies and STIs, but many factors contribute to these pregnancies.

5.2.14 Source of knowledge of reproductive issues

In this study, their mothers were the main source of information on menstruation, and school was the main source about pregnancy, sexuality and reproductive health issues (see figure 4.4; tables 4.13 and 4.14).

Of the respondents, 58.1% indicated their mothers as the source of information about menstruation; 11.8% indicated their fathers; 44.3% indicated teachers; 18.7% indicated nurses; 18.8% stated friends, and 21.1% stated relatives.

With regard to the source of information about sexuality and reproduction, 48.0% stated indicated the school; 36.9% said their parents; 17.2% said friends; 21.7% said television/radio; 20.2% said newspapers; 10.3% said the Internet, and 9.3% said church/mosque.

With regard to the respondents' source of information about pregnancy, 64.0% indicated school; 37.4% indicated parents; 20.2% indicated friends; 22.7% said television/radio; 19.7% indicated newspapers; 8.4% said the Internet, and 8.4% indicated others

5.2.15 Knowledge of effects of pregnancies on adolescents

The respondents were asked about the effects of pregnancies on adolescents (see figure 4.5). Of the respondents, 29.1% indicated blood pressure; 5.9% stated miscarriage; 14.3% indicated premature labour; 6.9% stated STI/HIV/AIDS infection; 5.9% stated depression, and 19.7% indicated anaemia. The findings indicated little knowledge of the effects and consequences of pregnancy on adolescents. The respondents were unaware of the consequences of adolescent pregnancy, but were aware of the social problems that are prevalent with adolescent pregnancy.

Adolescents have a right to information, including the effects and consequences of adolescent pregnancies that might make them postpone sexual activity.

5.2.16 What the respondents wanted to know more about

The respondents generally indicated that they wished to know more about:

- Reproductive health issues
- STIs
- Early sexuality, abortion and their consequences
- Abstinence and how to overcome temptation

From the findings, it is clear that adolescents are not getting adequate information and sexuality education hence their needs are not met. The low response to nurses as source of information indicated that the respondents were not in regular contact with the medical personnel (nurses), possibly because they did not have access to the

reproductive health services or the services were not user friendly. This would appear to indicate that more deliberate strategies are needed.

The parents and the community did not appear to be playing their roles in educating the children about reproductive and sexuality issues. Again, it seemed that they were not knowledgeable and empowered to do so.

5.3 LIMITATIONS OF THE STUDY

The researcher identified the following limitations in the study. The study was limited to the factors contributing to the high adolescent pregnancy rate in Kinondoni Municipality therefore the findings cannot be generalised to the entire country. This imposed a further limitation on the generalisability of the research results, as it cannot be assumed that the respondents who participated in the study had the same knowledge, attitudes and perceptions regarding reproductive health services as those who did not participate.

5.4 RECOMMENDATIONS

Based on the findings of this study, the researcher makes the following recommendations for practice and for further research.

5.4.1 Ministry of Education and vocational training

- Deliberate efforts should be made to ensure that as many girls as possible continue with secondary education, especially because of being at risk.
- Vocational training should be provided for adolescents with no formal education and those with primary/secondary education only (dropouts) to occupy them and develop a future.
- Teachers should be equipped to counsel students, in primary and secondary schools, using counselling skills they learned at teachers' college.

- Girls should receive education about menstruation, sexual intercourse, pregnancy and contraceptives before they reach the age of 13 when a number of them have already had their menarche and some even their sexual debut.

5.4.2 Community support system

- The parents/guardians need to be equipped with knowledge and skills regarding reproductive health issues, so that they can communicate with their children adequately. Parents are the first educators of their children, and should use religion to teach moral and ethical issues to abstain from or postpone sexual activity. It is therefore important for the community and individual families to improve the quality of life of their families and their economic status.
- Community centres should be used to provide information for the youth on reproductive health issues, including dramas, seminars and workshops.

5.4.3 Health services management

- Reproductive health services should be accessible to, friendly and affordable for adolescents.
- Develop sustainable reproductive health programmes and implement the programmes at all clinics. The programmes should be audited at regular intervals.
- Health care workers should be sensitive to the needs of adolescents by creating supportive environments and programmes to prevent and address the causes of adolescent pregnancies.

5.4.4 The country

- The government, NGOs and private sector should continue to endeavour to improve and encourage the economy.

- The media should be actively involved in providing information to the community on the prevention of adolescent pregnancy, and STI/HIV/AIDS infection.
- Develop country partners in Africa to generate new knowledge and develop systematic guidelines at programme and policy level.

5.4.5 Further research

Further research should be conducted on the following topics:

- Parents' occupational and economic status as factors contributing to adolescent pregnancies
- An investigation into parents' knowledge with regard to sexual education of their children
- Contraception awareness and use among adolescents who are sexually active
- What male partners can contribute to the prevention of adolescent pregnancy
- A survey on school dropouts.
- Sexuality education, gender and reproductive issues related to changes during puberty for girls.

5.5 CONCLUSION

Adolescent pregnancies are still a major health concern in Tanzania, Africa and elsewhere. Teenage mothers' socio-economic advancement, education and job opportunities are limited and stunted by premature pregnancy. The study found that poor economic status of parents, low educational level, lack of knowledge/information on reproductive health issues and pressure from men, were the main factors contributing to the high adolescent high pregnancy rate in Kinondoni Municipality, Tanzania.

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Mrs. Margaret N. Philemon
School of Nursing Diploma
P.O.Box 65003
DAR ES SALAAM.

19th December, 2006

The District Medical Officer
Kinondoni Municipal Council
P.O. Box 61615
DAR ES SALAAM.

U.f.s. Director,
Institute of Allied Health Sciences
MUCHS.

FORWARDED FOR ASSISTANCE

M. N. Philemon
19.12.2006

DIRECTOR
INSTITUTE ALLIED HEALTH SCIENCES
Muhimbili University College of Health Sciences

Dear Sir,

**RE: REQUEST TO CONDUCT RESEARCH IN MANZESE WARD
ON "FACTORS CONTRIBUTING TO HIGH ADOLESCENT
PREGNANCY RATE IN KINONDONI MUNICIPALITY"**

I am a Nurse Tutor at the above school, at the moment I am pursuing a Masters degree in Advanced Midwifery with the University of South Africa as a Distance Learner. The research is done to fulfill the requirements of the degree.

My research study is "Factors contributing to the adolescent high pregnancy rate in Kinondoni Municipality Dar es Salaam".

The study aims to identify and describe the factors that contribute to high rate of adolescent pregnancies. The proposed problem will benefit the community of kinondoni municipal in the following;

In terms of the findings strategies that provide information to adolescents and accessibility and user friendly of Reproductive health care clinics for adolescents in Kinondoni Municipality.

In order to achieve the objectives of the study, relevant information is needed through distributing questionnaires to adolescents;

Pregnant and non pregnant have been selected to participate in this study. Manzese ward has been randomly selected.

The distribution of Questionnaires will be done during morning hours. Ethical consideration will be adhered to at all times. The proposed date for data collection shall be in December/January 2006.

I hope my request shall be favourably considered.

Please find enclosed my proposal and Ethical clearance letter from MUCHS.

Thanking you in advance for your co-operation

Sincerely,

M. Philemon

Mrs. M. Philemon

KINONDONI MUNICIPAL COUNCIL

ALL CORRESPONDENCES SHOULD BE DIRECTED TO THE MUNICIPAL DIRECTOR

Tel: 2171022



MUNICIPAL MEDICAL OFFICER
OF HEALTH,
KINONDONI MUNICIPAL COUNCIL
P.O. BOX 61665,
DAR ES SALAAM

In reply please quote:

Ref. No. FD/K/133 VI 145

Date: 4TH January 2007

**TO WHOM IT MAY CONCERN:
KINONDONI MUNICIPALITY.**

RE: RESEARCH PERMIT

MARGRETH PHILEMON

The above mentioned is a research student from MUCHS school of nursing school has been given permit to conduct a research in your ward on **factors contributing to high adolescent pregnancy rate in Kinondoni Municipality**, from 8th January to 23rd January 2007.

Kindly provide her with the necessary assistance in order to enable her to perform her activities comfortably.

Best wishes,

.....
Aleswa Zebedayo
(Research Coordinator.)
Kinondoni Municipal Council

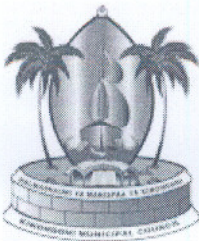
Copy: To above mentioned Candidate.

NB: please give a feedback to MMOH office after completing your research.

KINONDONI MUNICIPAL COUNCIL

ALL CORRESPONDENCES SHOULD BE DIRECTED TO THE MUNICIPAL DIRECTOR

Tel: 2171022



MUNICIPAL MEDICAL OFFICER
OF HEALTH,
KINONDONI MUNICIPAL COUNCIL
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Best wishes,

.....
Aleswa Zebedayo
(Research Coordinator.)
Kinondoni Municipal Council

Copy: To above mentioned Candidate.

NB: please give a feedback to MMOH office after completing your research.



MUHIMBILI UNIVERSITY COLLEGE
OF HEALTH SCIENCES

OFFICE OF THE DIRECTOR OF RESEARCH AND PUBLICATIONS

P. O. BOX 65001 ● DAR ES SALAAM ● TANZANIA

TELEPHONE: Direct: 255 22 2152489

Telegrams: UNIVMED

Telex: 41505 MUHMED TZ

Telefax: 255 22-150465

E-mail: drp@muchs.ac.tz

Ref.No.MU/RP/AEC/Vol.IX/26

3rd January, 2006

Mrs. Margaret Philemon,
Diploma School of Nursing,
Institute of Allied Health Sciences,
MUCHS.

RE: APPROVAL OF ETHICAL CLEARANCE FOR THE STUDY TITLED "FACTORS CONTRIBUTING TO HIGH ADOLESCENT PREGNANCY RATE IN KINONDONI MUNICIPALITY, DAR ES SALAAM"

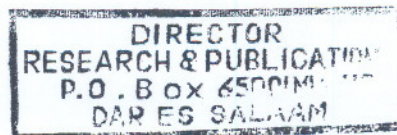
Reference is made to your submission requesting for ethical clearance for the above-mentioned study.

I am pleased to inform you that the Chairman has on behalf of the Academic Board approved Ethical Clearance of your study. The ethical clearance is in effect for one year, from 29th December, 2006 – 28th December, 2007.

By way of this letter, ethical clearance is granted to proceed with planned activities.

Prof. E. F. Lyamuya

CHAIRMAN, COLLEGE RESEARCH & PUBLICATIONS COMMITTEE



c.c. Principal, MUCHS.

c.c. Registrar, MUCHS.

c.c. Director, Institute of Allied Health Sciences, MUCHS.

Annexure C (KIAMBATANISHO NAMBA C)**KISWAHILI “VERSION OF CONSENT FORM”****FOMU YA IDHINI****NAMBA YA UTAMBULISHO**

--	--	--	--	--

Maombi ya kupata idhini kushiriki katika zoezi hili, kwa kujibu maswali katika dodoso unayopewa.

Habari! Mimi ninaitwa Bibi Margareth Philemon, ni mwalimu muuguzi na ninachukuwa shahada ya uzamili ya ukunga.

Sababu za utafifi:

Tunaendesha ufafiti huu ili kugundua ni mambo yapi yanayosababisha kupata mimba kwa wingi katika umri mdogo.

Iwapo utashiriki:

Utapewa karatasi yenye maswali na maelezo nawe utatakiwa kuyajibu, utachangia mawazo yako katika suala hili.

Usiri:

Majibu yote utakayotoa yatakuwa siri, jina lako halitatumika, bali nambari yako tu ndiyo itaingizwa kwenye kompyuta

Iwapo itatokea hatari:

Hatutegemei hatari/yeyote kutokea/kukupata kwa sababu ya kushiriki katika utafiti huu.

Uhuru wa kushiriki au kutoshiriki:

Kushiriki au kujiondoa katika utafiti huu ni hiari yako kabisa, ukiamua kutoshiriki, wahudumu wa afya wataendelea kukuhudumia kama kawaida. Una uhuru wa kuacha wakati wowote, hata kama ulikubali mwanzoni, kukataa kwako au kujiondoa katika utafiti hakutaathiri haki yako ya kupata huduma unayostahili.

Faida ya kushiriki :

Ukikubali kushiriki katika utafiti huu, itakuwa ni faida kwako kutoa elimu/maarifa mawazo yako katika mchakato wa kutafuta njia mbadala za kuyashughulikia masuala ya vijana wa kike ili wapate huduma itakayowasaidia wasipate ujauzito katika umri mdogo.

Iwapo yatatokea madhara :

Hatutegemei madhara yeyote kutokea kufuatana na wewe kushiriki. Iwapo madhara yatatokea kufuatana na wewe kushiriki katika utafiti huu, utahudumiwa kufuatana na mwongozo uliopo wa matibabu hapa nchini Tanzania. Hutapata matibabu ya ziada.

Nani wa kumwona/kuwasiliana naye:

Iwapo utakuwa na maswali kuhusiana na utafiti huu wasiliana na mtafiti Mkuu – Bibi Margareth Philemon wa Taasisi ya Vyuho Vya Vyeti na Stashahada ya juu, Muhimbili S.L.P 65003, DAR ES SALAAM. Iwapo utakuwa na wasiwasi juu ya haki zako kuhusu utafiti huu wasiliana na Prof. E. Lyamuya, Mwenyekiti wa Kamati ya Utafiti na Uchapishaji Chuo Kikuu Kishiriki cha Muhimbili, S.L.P 65001 DAR ES SALAAM Simu Nambari 2152489.

Sahihi:.....
Je unakubali?

Mshiriki amekubali.....Mshiriki amekataa.....

Mimi,.....Nimesoma maelezo katika dodoso hili. Maswali yangu yamejibiwa.Ninakubali kushiriki katika utafiti huu.

Sahihi-----

Sahihi ya shahidi(kama hajui kusoma)-----

Sahihi ya Mtafiti msaidizi.-----

Tarehe ya kupata idhini-----

Annexure C**CONSENT FORM:****INFORMED CONSENT**

ID-NO

--	--	--	--	--

--	--	--	--	--

Consent: To participate in sharing of your experience on the factors, contributing to high adolescent pregnancy rate, through filling in the prepared questionnaire.

Hello! My name is Mrs. Margareth Philemon, I am a nurse tutor. I am pursuing Masters in advanced studies in midwifery.

Purpose of Study

I am conducting a study in Kinondoni municipal Council in order to learn about factors contributing to high adolescence pregnancy rate. By knowing these factors we can enhance the accessibility and user friendly of health care clinics for adolescents in Kinondoni municipal.

What participation Involves

If you agree to join in the study, you will be required be given a questionnaire whereby you will answer questions thereon and so share your knowledge on the issue.

Confidentiality

All information we collect on forms will be entered into computers with only the study identification number.

Risks

I do not expect that any harm will happen to you because of joining this study. It is only the information you are giving and you will not be associated with that information after you have given it.

Rights to withdraw and Alternative.

Taking part in this study is completely you choice. If you choose not to participate in this study you will continue to receive all services that you would normally get from the clinic. You can stop participating in this study at any time, even if you have already given your consent. Refusal to participate or withdrawal from the study will not involve penalty or lose of any benefits to which you are otherwise entitled.

Benefits

If you agree to take part in this study, the study gives you a chance to participate in reflecting on adolescent problems. You and other adolescent girls will benefit in receiving appropriate health care after the results are out.

In case of Injury

We do not anticipate that any harm will occur to you as a result of participation in this study. However if any physical injury resulting from participation in this research should occur, we will provide you with medical treatment according to the current standard of care in Tanzania. No additional compensations.

Who to Contact

If you ever have questions about this study, you should contact the Principal Investigator, Mrs. M. Philemon. Institute of Allied Health Sciences, P.O. Box 65003, Dar es Salaam. If you ever have questions about your rights as a participant, you may call Prof. E.F. Lyamuya, Chairman of the College Research and Publications Committee, P.O. BOX 65001, Dar es Salaam. Tel. 2152489

Signature:

Do you agree?

Participant agrees Participant does NOT agree.....

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

Signature _____

Signature of witness (if Adolescent Cannot read) _____

Signature of research assistant _____

Date of Signed consent _____

Annexure D

DODOSO YA UTAFITI

UTAFITI KUHUSU MAMBO YANAYOSABABISHA
MIMBA KATIKA UMRI WA MIAKA 10-19 KATIKA
HALMASHAURI YA KINONDONI, DAR ES SALAAM

Jibu maswali yote kwa kuweka alama ya 'v' katika kisanduku au andika jibu katika sehemu iliyowazi, maswali mengine yana majibu zaidi ya moja

NAMBA YA DODOSO

1	2	3

SEHEMU A: TAARIFA BINAFSI:

			MATUMIZI YA OFISI
1. Je una miaka mingapi kamili sasa? <div style="display: flex; justify-content: center; gap: 10px;"> <input type="text"/> <input type="text"/> </div> Miaka			4
2. Unaishi wapi?			5
3. Je dhehebu/dini lako/yako ni lipi/ipi katika haya?			6
3.1 Muislamu	1		
3.2 Mkristo (Mprotestant)	2		
3.3 Mkatoliki	3		
3.4 Mengineyo(taja)	4		
4. Je wewe ni kabila gani?			7
5. je umewahi kwenda shule?			8
	NDIYO 1	HAPANA 2	
6. Kama ni ndiyo kiwango chako cha elimu ni kipi?			9
6.1 Elimu ya Msingi (darasa la.....)	1		
6.2 Elimu ya Sekondari (darasa.....)	2		
7. Unaishi na nani?			

7.1 Wazazi wote wawili	1		10		
7.2 Baba pekee	2				
7.3 Mama pekee	3				
7.4 Mume	4				
7.5 Mlezi	5				
7.6 Sina makazi ya kudumu (taja wapi?).....	6				
8. Kiwango cha juu cha elimu cha Wazazi/Walezi					
	Baba	Mama	Mlezi		11
8.1 Hajasoma				1	
8.2 Elimu ya msingi (darasa la.....)				2	
8.3 Elimu ya sekondari (darasa la...)				3	
8.4 Elimu ya juu				4	
9. Hali yako ya ndoa ni ipi?					12
9.1 Sijaolewa	1				
9.2 Nimeachika	2				
9.3 Nimeolewa	3				
9.4 Nimefiwa na mume	4				
9.5 Sijaolewa naishi na bwana	5				
10. Kama umeolewa ni sababu zipi zilikupelekea kuolewa?					13
10.1 Nililazimishwa na wazazi	1				
10.2 Nilipenda mwenyewe	2				
10.3 Sikuwa na wa kumtegemea	3				
10.4 Nilipata mimba	4				
10.5 Sababu nyinginezo (taja)	5				
11. Baba/Mlezi anafanya shughuli gani?					14
11.1 Hajaajiriwa	1				
11.2 Amejiriwa	2				
11.3 Amejajiri (Mfanyabiashara)	3				
12 Je Mama/Mlezi anafanya shughuli gani?					15
12.1 Hajaajiriwa	1				
12.2 Amejiriwa	2				
12.3 Amejajiri (Mfanyabiashara)	3				
13. Je wewe unajishughulisha na nini?					16
14. Je shughuli unayoifanya inatosheleza mahitaji yako?					17
	NDIYO 1	HAPANA 2			

SEHEMU B: MASUALA KUHUSU AFYA YA UZAZI NA UJINSIA

15. Ni mabadiliko gani yanayotokea wakati wa kubarehe wasichana?(ibu ni zaidi ya moja)			18
15.1 Kuota mavuzi	1		
15.2 Kuongezeka matiti	2		
15.3 Kuvunja ungo	3		
15.4 Mengineyo (taja)	4		
16. Je umevunja ungo?			19
	NDIYO 1	HAPANA 2	
17. Kama ni ndiyo ulivunja ungo ukiwa na miaka mingapi?			20
17.1 Miaka 8	1		
17.2 Miaka 9	2		
17.3 Miaka 10	3		
17.4 Miaka 11	4		
17.5 Miaka 12	5		
17.6 Miaka 13	6		
17.7 Mengineyo (taja)	7		
18. Ulipewa taarifa gani ulipovunja ungo?			21
18.1 Kwamba hiyo ni laana	1		
18.2 Utapata maumivu	2		
18.3 Uko tayari kupata mtoto	3		
18.4 Uko tayari kuolewa	4		
18.5 Ujitahidi kuwa msafi	5		
18.6 Ujiepuche na ngono	6		
18.7 Mengineyo (taja)	7		
19. Katika hawa/hivi nani wa/kilikupa taarifa kuhusu elimu ya uzazi?			22
	NDIYO 1	HAPANA 2	
19.1 Mama			
19.2 Baba			
19.3 Mwalimu			
19.4 Muuguzi			
19.5 Rafiki			
19.6 Ndugu wengine			
19.7 Majarida			
19.8 Vitabu			
19.9 Mengineyo (taja)			
20. Je ni kipindi gani mwanamke anaweza kupata mimba?			
20.1 Siku 14 kabla ya kuingia mwezini	1		
20.2 Siku 14 baada ya kuingia mwezini	2		

20.3 Siku za kuwa mwezini	3		23
20.4 Wakati wowote	4		
21. Je ulishawahi kufanya tendo la ngono? Kama ni hapana nenda swali nambari 25	NDIYO 1	HAPANA 2	24
22. Je ulikuwa na umri gani ulipofanya tendo la ngono?	<input type="text"/> <input type="text"/> Miaka		25
23. Je unakumbuka ni nini kilikusababisha wewe kufanya ngono?			26
23.1 Hamu ya kufanya ngono	1		
23.2 Ushawishi wa wenzangu	2		
23.3 Ushawishi wa wazazi	3		
23.4 Nililazimishwa na mhusika	4		
23.5 Kutafuta mimba	5		
23.7 Sababu nyinginezo	6		
24. Je mtu uliyefanya naye ngono kwa mara ya kwanza alikuwa na umri gani?	<input type="text"/> <input type="text"/> Miaka		27
25. Je una wapenzi wangapi wa ngono sasa?	<input type="text"/> <input type="text"/>		28
26. Je ulishawahi kuwa na Wapenzi wa ngono wangapi?	<input type="text"/> <input type="text"/>		29
27 Ni athari zipi unazozijua zinazotokana na kujiingiza kwenye mapenzi/ngono katika umri mdogo? (jibu ni zaidi ya moja)			30
27.1 Kushindwa mtihani	1		
27.2 Kupata mimba	2		
27.3 Kupata magonjwa ya zinaa	3		
27.4 Jamii itakudharau	4		
28. Je unatumia dawa/mpango wa wowote wa kuzuia mimba?			31
Kama hutumii nenda nambari 29	NDIYO 1	HAPANA 2	
29. Unatumia dawa/njia ipi/zipi katika kati ya hizo kuzuia mimba?			32
29.1 Vidonge	1		
29.2 Sindano	2		
29.3 Njia za asili	3		

29.4 Nyinginezo (taja).....	4				
30. Kama hutumii toa sababu			33		
31. Ni njia ipi/zipi zinafaa kwa vijana?					
31.1 Kufunga kizazi	1				
31.2 Vidonge	2				
31.3 Sindano	3		34		
31.4 Mpira wa kiume/kike	4				
32. Je ni wapi utazipata/zinapatikana hizo njia za kuzuia mimba?					
32.1 Duka la dawa	1				
32.2 Sokoni	2		35		
32.3 Kliniki za uzazi wa mpango	3				
32.4 Shuleni	4				
32.5 Kwingineko (taja)	5				
33. Ni njia ipi inayozuia kupata mimba na magonjwa ya zinaa?					
33.1 Kitanzi	1				
33.2 Vidonge	2				
33.3 Mpira wa kiume/kike	3				
33.4 Njia za asili	4		36		
34. Je ulishawahi kupata mimba? Kama hapana nenda nambari 36	NDIYO 1	HAPANA 2	37		
35. Kama ndiyo ulikuwa na umri gani? <table border="1" style="margin-left: auto; margin-right: auto;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> miaka					38
36. Je ulipanga kupata mimba hiyo?	NDIYO 1	HAPANA 2	39		
37. Je unawezaje kuzuia mimba na magonjwa ya kuambukiza?					
37.1 Kuachana na tendo la ngono	1				
37.2 Kutumia dawa za kuzuia mimba	2				
37.3 Kupima afya mara kwa mara	3		40		
37.4 Kuwa na mpenzi mmoja wa ngono	4				
37.5 Mengineyo (eleza).....	5				
38. Kwa mawazo yako, ni umri upi ni hatari kwa msichana kupata mimba?			41		
38.1 Miaka 20	1				
38.2 Miaka 18	2				
38.3 Miaka 17	3				

38.4 Miaka 16	4		
38.5 Miaka15	5		
38.6 Miaka 14	6		
38.7 Miaka13	7		
39. Ni umri upi unafaa kwa msichana kupata mimba?			
39.1 Miaka 20 au zaidi	1		42
39.2 Miaka 18	2		
39.3 Miaka 17	3		
39.4 Miaka 16	4		
39.5 Miaka 15	5		
39.6 Miaka 14	6		
39.7 Miaka 13 au chini zaidi	7		
40. Ni matatizo gani ambayo msichana anaweza kupata akiwa na mimba katika umri mdogo? Jibu yote			
	NDIYO 1	HAPANA 2	43
40.1 Mapigo ya damu kupanda			
40.2 Kuharibika mimba changa			
40.3 Kuanza uchungu kabla ya wakati			
40.4 Magonjwa ya zinaa na ukimwi			
40.5 Kuchanganyikiwa			
40.6 Upungufu wa damu			
40.7 Mengineyo			
41. Ni matatizo yapi ya kijamii yanayoweza kumpata msichana mwenye mimba?			
	NDIYO 1	HAPANA 2	44
41.1 Kukosa matumizi			
41.2 Kutelekezwa na wazazi			
41.3 Kukimbiwa na marafiki			
41.4 Kupata aibu			
41.5 Mengineyo			

SEHEMU C: UPATIKANAJI WA HABARI

42. Ni nani aliyekuelimisha kuhusu masuala ya kimapenzi (ujinsia)?(jibu yote)			
	ZAIDI 1	KIASI 2	HAPANA 3
42.1 Shule			45
42.2 Wazazi			
42.3 Marafiki			
42.4 Runinga/video			
42.5 Magazeti/Vijarida			

42.6 Mtandao				
42.7 Kanisani/Msikitini				
42.8 Njia nyinginezo (taja).....				
43. Ni wapi ulipata habari kuhusu masuala ya mimba?				
	ZAIDI	KIASI	HAPANA	
	1	2	3	
43.1 Shuleni				46
43.2 Wazazi				
43.3 Marafiki				
43.4 Runinga/video				
43.5 Magazeti/Vijarida				
43.6 Mtandao				
43.7 Kanisani/Msikitini				
43.8 Kwingineko (taja)...				
44. Je unapendekeza elimu ya ujinsia/uzazi zifundishwe wakati gani?				
44.1 Elimu ya msingi (darasa.....)			1	47
44.2 Elimu ya sekondari (.....)			2	
44.3 Elimu ya juu			3	
45. Je unataarifa juu ya sheria ya utoaji mimba nchini kwetu?				
45.1 Ndiyo			1	48
45.2 Hapana			2	
46. Kama ni ndiyo nani alikujulisha?				
46.1 Shuleni			1	49
46.2 Kanisai/Msikitini			2	
46.3 Marafiki			3	
46.4 Radio			4	
46.5 Magazeti			5	
46.6 Runinga			6	
46.7 Wengineo (taja)....			7	
47. Je wewe unadhani msichana wa miaka 10-19 aruhusiwe kutoa mamba?				
		NDIYO	HAPANA	50
		1	2	
48. Je wewe binafsi umeshawahi kutoa mimba? (Kama ni hapana nenda nambari 50)				
		NDIYO	HAPANA	51
		1	2	
49. Kama ndiyo taja mahali ilipotolewa				
49.1 Nyumbani			1	52
49.2 Hospitali/kliniki			2	
49.3 Mtaani			3	
49.4 Kwingineko (taja)			4	

50. Je ulijisikiaje/ulijionaje wakati ulipotoa mimba?	53
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SEHEMU D: ATHARI ZA MIMBA KATIKA UMRI MDOGO

51. Kwa maneno yako mwenyewe, elezea athari/madhara ya kubeba mimba isiyotarajiwa katika umri mdogo.	54			
52. Wewe utazuiaje kubeba mimba isiyotarajiwa?	55			
52.1 Kuacha kufanya tendo la ngono			1	
52.2 Kutumia mpira wa kiume/kike			2	
52.3 Kufuata mila/desturi (taja)			3	
52.4 Mengineyo (taja)			4	
53. Andika mambo ambayo ungependa kufahamu/kujifunza zaidi:	56			
53.1			1	
53.2			2	
53.3			3	
53.4			4	
53.5			5	

AHSANTE KWA USHIRIKIANO WAKO WA KUJAZA DODOSO HII

Annexure D

QUESTIONNAIRE

Factors contributing to the high adolescent pregnancy rate at Kinondoni municipal council, Dar-es-Salaam, Tanzania

Answer each question by placing an "v" in the appropriate box or write down your response in the space provided.

Number of questionnaire

1.	2	3

SECTION A: BIOGRAPHIC INFORMATION

			OFFICE USE
1. Your age at your last birthday. <div style="text-align: center;"> <input type="text"/> <input type="text"/> YEARS </div>			4
2. Where do you live?			5
3. Indicate your religion/faith.			6
3.1 Moslem	1		
3.2 Protestant	2		
3.3 Catholic	3		
3.4 Other (specify)	4		
..... 4. What is your tribe? 			7
5. Have you attended formal education?			8
	YES 1	NO 2	
6. If Yes what is your level of education?			9
6.1 Primary education (standard.....)	1		
6.2 Secondary education (Form.....)	2		
7 Whom do you live with?			
7.1 Both parents	1		
7.2 Father only	2		

				OFFICE USE		
7.3	Mother only			3	10	
7.4	Husband			4		
7.5	Guardian/adoptive parents			5		
7.6	No permanent place (state where)			6		
8	Highest level of education of parents/guardian.				11	
		Father	Mother	Guardian		
8.1	No formal education					1
8.2	Primary school					2
	• Standard.....					
8.3	Secondary school				3	
	• Form.....					
8.4	Higher education				4	
9	Indicate your marital status.				12	
9.1	Single					1
9.2	Divorced					2
9.3	Married					3
9.4	Widowed					4
9.5	Co-habiting				5	
10	If married, state the circumstances.				13	
10.1	Forced by parents					1
10.2	Voluntary					2
10.3	Dependency					3
10.4	Pregnancy					4
10.5	Other (specify)				5	
					
11	What is your Father's/Guardian's occupational status?				14	
11.1	Unemployed					1
11.2	Employed					2
11.3	Self employed (Doing Business)				3	
12	What is your Mother's/Guardian's occupational status?				15	
12.1	Unemployed					1
12.2	Employed					2
12.3	Self-employed (Doing Business)				3	
13	What is your occupation?				16	
	Please state					
					
14	Does your occupation sustain your needs/life?				17	
		YES	NO			
		1	2			

SECTION B: SEXUALITY AND REPRODUCTIVE HEALTH ISSUES

			OFFICE USE	
15 What physical changes do girls notice during puberty? (Please specify).			18	
15.1	Growth of pubic	1		
15.2	Breasts develop	2		
15.3	Starting of menstruation	3		
15.4	Other (please state)	4		
16 Have you had your menstrual period?			19	
	YES 1	NO 2		
17. If yes how old were you when you had the first menstrual period?			20	
17.1	8 years	1		
17.2	9 years	2		
17.3	10 years	3		
17.4	11 years	4		
17.5	12 years	5		
17.6	13 years	6		
17.7	Other (please specify)	7		
18. What information did you receive regarding the menstrual period? (please list)			21	
18.1	It is a curse	1		
18.2	It is painful	2		
18.3	You are ready to have a baby	3		
18.4	You are ready to get married	4		
18.5	About hygiene	5		
18.6	Avoiding sexual intercourse	6		
18.7	Other (please state)	7		
19. Who supplied the information?			22	
	Source	YES		NO
19.1	Mother	1		2
19.2	Father	1		2
19.3	Teacher	1		2
19.4	Nurse	1		2
19.5	Friends	1		2
19.6	Other relatives	1		2
19.7	Magazines	1		2
19.8	Books	1		2
19.9	Other (please specify).....	1	2	
20. When is a woman likely to get pregnant?			23	
20.1	14 days before menstruation	1		
20.2	14 days after menstruation	2		
20.3	During menstruation	3		
20.4	Anytime	4		

		OFFICE USE
21. Have you ever had sexual intercourse? <div style="display: flex; justify-content: center; gap: 20px;"> <input type="checkbox"/> YES <input type="checkbox"/> NO </div> <p style="text-align: center;">If "NO" skip to question no. 27</p>		24
22. At what age was your first sexual intercourse? <div style="display: flex; align-items: center; margin-top: 10px;"> <input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/> Years </div>		25
23. What led you to have sexual intercourse?		26
23.1 Self desire	1	
23.2 Peer pressure	2	
23.3 Parent pressure	3	
23.4 Pressure of partner	4	
23.5 To get pregnant	5	
23.6 Other (reasons)	6	
24. What was the age of your sexual partner at the first sexual encounter? <div style="display: flex; align-items: center; margin-top: 10px;"> <input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/> years </div>		27
25. How many sexual partners do you currently have? <div style="display: flex; align-items: center; margin-top: 10px;"> <input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/> </div>		28
26. How many sexual partners have you had? <div style="display: flex; align-items: center; margin-top: 10px;"> <input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/> </div>		29
27. What are the risks/dangers of indulging in sexual intercourse at an early age?		30
27.1 Fail at school	1	
27.2 Become pregnant	2	
27.3 Contract STI/HIV/AIDS	3	
27.4 Pushed out of the community	4	
28. Do you use any contraceptives?		31
	<div style="border: 1px solid black; padding: 2px;">YES</div> <div style="border: 1px solid black; padding: 2px;">NO</div>	
	<div style="border: 1px solid black; padding: 2px; text-align: center;">1</div> <div style="border: 1px solid black; padding: 2px; text-align: center;">2</div>	
29. If yes, indicate the method :		32
29.1 Pills	1	
29.2 Injectables	2	
29.3 Traditional contraceptives	3	
29.4 Other (please state)	4	

			OFFICE USE
30. If no, state the reasons (please list):			33
31. Which type of contraceptive is suitable for teenagers?			34
31.1 Voluntary Surgical Contraception	1		
31.2 Pills	2		
31.3 Injectables	3		
31.4 Condoms	4		
32. Where are contraceptives available?			35
32.1 In shops (pharmacy)	1		
32.2 Market place	2		
32.3 Reproductive and child health clinic	3		
32.4 At schools	4		
32.5 Others (specify)	5		
33. Which contraceptive method prevents pregnancy and sexually transmitted diseases?			36
33.1 Intra Uterine Device	1		
33.2 Pills	2		
33.3 Condom	3		
33.4 Natural method/rhythm	4		
34. Have you been pregnant before?			37
If No skip to question no.37	YES	NO	
	1	2	
35. If yes, how old were you at your first pregnancy? <div style="display: flex; align-items: center; margin-left: 40px;"> <input style="width: 40px; height: 20px; border: 1px solid black; margin-right: 5px;" type="text"/> <input style="width: 40px; height: 20px; border: 1px solid black; margin-right: 5px;" type="text"/> Years </div>			38
36. Was this a planned pregnancy?			39
	YES	NO	
	1	2	
37. How would you prevent pregnancy, sexually transmitted diseases and HIV/AIDS?			40
37.1 By abstaining from sexual activities	1		
37.2 Using contraceptives	2		
37.3 Having regular medical check-ups	3		
37.4 Have only one sexual partner	4		
37.5 Other (please specify)	5		

			OFFICE USE	
38. In your opinion, what is the youngest age at which you consider it a risk to fall pregnant?			41	
38.1	20 years	1		
38.2	18 years	2		
38.3	17 years	3		
38.4	16 years	4		
38.5	15 years	5		
38.6	14 years	6		
38.7	13 years and younger	7		
39. What is the most appropriate age to fall pregnant?			42	
39.1	20 years and older	1		
39.2	18 years	2		
39.3	17 years	3		
39.4	16 years	4		
39.5	15 years	5		
39.6	14 years	6		
39.7	13 years and younger	7		
40. What health problems could be expected when an adolescent falls pregnant?			43	
Problems		YES		NO
40.1	High blood pressure	1		2
40.2	Miscarriage	1		2
40.3	Premature labour	1		2
40.4	STI/HIV infection	1		2
40.5	Depression	1		2
40.6	Anaemia	1		2
40.7	Other:	1	2	
41. What social problems are prevalent with an adolescent pregnancy?			44	
Problems		YES		NO
41.1	Lack of money	1		2
41.2	Parents will abandon me	1		2
41.3	My friends will abandon me	1		2
41.4	Shame	1		2
41.5	Other (please specify)	1		2
.....				

SECTION C: SOURCE OF INFORMATION

				OFFICE USE
42. Who provided you with the most information about sexuality and reproduction?				45
	Most	Least	None	
	1	2	3	
42.1	School			
42.2	Parents			
42.3	Friends			
42.4	Television/video			
42.5	Newspapers/magazines			
42.6	Internet			
42.7	Church/mosque			
42.8	Other (specify)			
.....				
43. Who/what was the source of information about pregnancy?				46
	Most	Least	None	
	1	2	3	
43.1	School			
43.2	Parents			
43.3	Friends			
43.4	Television/video			
43.5	Newspapers/magazines			
43.6	Internet			
43.7	Church/mosque			
43.8	Other (specify)			
.....				
44. When do you recommend should a girl be given information about reproductive health?				47
44.1	Primary school		1	
	• Standard			
44.2	Secondary school		2	
	• Form			
44.3	Higher education		3	
45. Are you aware of abortion laws?				48
44.1	Yes		1	
44.2	No		2	
46. If yes, who informed you?				
46.1	School		1	
46.2	Church		2	
46.3	Friends		3	
46.4	Radio		4	
46.5	Magazines		5	
46.6	Television		6	

46.7 Other (please state)	7	49			
47. Do you think girls 10-19 years should have legal abortion?		50			
	<table border="1"> <tr> <td>YES 1</td> <td>NO 2</td> </tr> <tr> <td></td> <td></td> </tr> </table>		YES 1	NO 2	
YES 1	NO 2				
48. Have you undergone an abortion? (If No go to no.50)		51			
	<table border="1"> <tr> <td>YES 1</td> <td>NO 2</td> </tr> </table>		YES 1	NO 2	
YES 1	NO 2				
49. If yes, where (please indicate)?		52			
49.1 At home	1				
49.2 At a clinic	2				
49.3 Backstreet	3				
49.4 Other (please specify)	4				
50. How did you feel about the abortion?		53			

SECTION D: EFFECTS OF PREGNANCY ON THE ADOLESCENT

		OFFICE USE
51. In your own words, describe the consequences of an unwanted pregnancy. 		54
52. How would you prevent an unwanted pregnancy?		55
52.1 Abstinence	1	
52.2 Condom	2	
52.3 Cultural practices (please state)	3	
52.4 Other (please state)	4	
53. I would like to have more knowledge about:		56
53.1	1	
53.2	2	
53.3	3	
53.4	4	
53.5	5	

THANK YOU FOR YOUR ASSISTANCE IN COMPLETING THIS QUESTIONNAIRE