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FACTORS CONTRIBUTING TO TEENAGE FERTILITY IN COASTAL KENYA

A CASE OF MOMBASA COUNTY

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DECLARATION

DECLARATION BY CANDIDATE

I hereby declare that this research project is my original work and has not been presented for any other academic award at the University of Nairobi or any other institution.

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DECLARATION BY SUPERVISOR

This research project has been submitted with my approval as the University Supervisor

Signature: ……

Name: PROF. MBURUGU EDWARD K

Date: ……

DEDICATION

To my mother, the late Christabel Ayuko.

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LIST OF ACRONYMS AND ABBREVIATIONS

ABR	Adolescent Birth Rate
AIDS	Acquired Immuno Deficiency Syndrome
ARHD	Adolescent Reproductive Health and Development
ASRH	Adolescent Sexual and Reproductive Health
DHS	Demographic Health Survey
FP	Family Planning
GDP	Gross Domestic Product
HIV	Human Immuno deficiency Virus
ICPD	International Conference for Population and Development
KNBS	Kenya National Bureau of Statistics
LBW	Low Birth Weight
MCI	Multi Cluster Indices
MDGs	Millennium Development Goals
NCPD	National Council for Population and Development
TFR	Total Fertility Rate
UNFPA	United Fund for Population Agency
WHO	World Health Organization

ABSTRACT

The coastal region is among the top three areas with the highest early childbearing prevalence in Kenya (KNBS, 2014). Studies on adolescent fertility within this region have mainly been based on secondary data derived from demographic health surveys. Critical factors to bring out individual social and cultural factors affecting adolescents' reproductive clinical outcomes are not known. This research endeavoured to give an understanding of the factors that contribute to teenage fertility within the coastal region. The move was by trying to: identify individual risk factors contributing to adolescent fertility among young people, establish how adolescents perceive sexuality about consequences of sexuality and examine types of parental attachment that promote protection against teenage pregnancy. Additionally, it also entailed identifying forms of barriers that hinder teens from accessing contraceptives. The study was conducted within Bangladesh slums of Mombasa County. A cross-sectional household survey based on both quantitative and qualitative approaches was adopted. A proportionate sampling methodology was used in reaching the study population. The unit of analysis was adolescent girls aged between 15-19 years. One hundred and sixty-five (165) adolescents participated in the study. The mean interval at intimate introduction was 15 years, and 43% of respondents had started childbearing. Most teenagers indicated that they would want to have a baby to make them become women and feel important. The study identified early sexual debut, peer pressure, education and drug abuse as individual characteristics that contribute to teenage pregnancy. The hope of getting money and strengthening a relationship with the child's father was a major factor among girls living

with a caregiver as a determinant to pregnancy. Although most respondents indicated stronger attachment towards their mothers, those living with both parents showed lower risks and tendency to teenage pregnancy compared to those living with single mothers only. The primary barrier to contraceptive was service providers' attitude and stigma towards teenagers.

Intervention programs should focus on creating awareness among adolescents that dissuade early pregnancy and the importance of women as valued member of society regardless of ever having a child or not. Single mothers need to be trained on parenthood. Economic empowerment programs targeting single mothers and caregivers need to be initiated and scaled up. There is a necessity for further research into the extent to which sexual and gender-based violence play a role in contributing to teenage fertility.

CHAPTER ONE: INTRODUCTION

1.1Background of the study

The world is facing an unprecedented population of young people. According to the United Nations, young people numbers slightly less than 1.8 billion in a global population of 7.3 billion. This is up from 721 million inhabitants aged 10 to 24 in 1950 when the world's population totalled 2.5 billion (United Nations, 2014). Eighty-nine percent of the world's 10 to 24-year-olds live in less developed countries (UNFPA, 2014). The organisation additionally cautions that while the figures of both teenagers and youth are projected to drop over the near-term decades in numerous areas, the condition will be austere in Africa. The factor is because it is where her portion of the globe's youngsters and youth will not merely increase from 18 percent in 2012 to 28 percent in 2040 but could hit 41 percent by 2100.

Kenya has a youthful population where 78 percent of the population is under 34 years of age. Young people aged 15-24 account approximately a quarter of all the people (KNBS, 2009). A major factor contributing to this situation is teenage fertility. The 2009 Kenya national population census report shows high levels of adolescent fertility in the country which currently stands at 94 births per 1,000 women aged 15–19 years compared to the global adolescent fertility rate of 45 births per 1,000 women (World Bank, 2014).

Pregnancies among girls less than 19 years of age have irreparable consequences. According to world health organisation, teenage girls who deliver every year have a far greater danger of dying from maternal reasons likened to females in their 20s and 30s

(WHO, 2008). Socially, early childbearing interferes with adolescent's access to education and their puts to an end her economic ambitions, ability to engage in gainful employment, livelihood and health. (Gyan, 2013). This creates high development costs for communities. For instance, the World Bank shows that the potential threat posed by adolescent pregnancy for national economies is between one tenth of gross domestic product (GDP) in China to a third in Uganda (Chaaban and Cunningham, 2011). Worse still is the fact that teenage pregnancies fuel the poverty cycle. It has been established that there is a cycle of adolescent pregnancy across generations; girls born to adolescents girls have higher chances than girls born to adult women to initiate giving birth to children. (Almeida and Aquino, 2009; Buvinic, 1998; Kearney and Levine, 2009).

These challenges have made adolescent pregnancy a major policy concern. The International Conference on Population and Development (ICPD) brought to the fore the significance of addressing adolescent pregnancy and underlining contributing factors to be targeted. Among key things identified as a way forward were governments bring down adolescent pregnancies and tackle their reproductive health needs. The Millennium Development Goals (MDGs), has been a hallmark in enhancing access to sexual health as part of its universal goals to be achieved.

Kenya has initiated various interventions to address the surging youth population needs and related challenges. Among these is the formulation of the Kenya adolescent reproductive health and development policy. The policy seeks to contribute to the improvement of the well-being and quality of life of Kenya's adolescents and youth by

integrating the health and development concerns of adolescents and young people into the national development process. Since its formulation in 2003, the policy has, as a result, guided the development of various instruments and interventions to ensure achievement of key indicators such as: doubling the contraceptive use rate among adolescents and reducing the proportion of women below age 20 with a first birth. Despite the policy, there is still a high need for improved adolescent and sexual reproductive health services.

1.2 Statement of the research problem

The level of teenage fertility remains unacceptably high in Kenya. This is in spite of various interventions instituted by the government to reduce the trend. For example, Kenya teenage procreative health and growth strategy attempts to add to the development of the well-being of Kenya's youngsters and youth through the incorporation of their sanitation and growth concerns. However, the age-specific fertility rate (ASFR) for females in Kenya aged 15-19 is 96 deliveries per 1,000 women (KDHS 2014) - a number greater than the universal ratio of 45 deliveries per 1,000 women (World Bank, 2014).

The distribution of teenage pregnancy in Kenya varies according to geographical location, education levels, age brackets and income levels. Forty-seven percent of women give birth before 20 years while 8% before age 16 (Neal, 2015). The proportion of those who have already been pregnant is higher among those with primary education (Donatien, 2013). Individuals dwelling in shantytowns are at bigger threat for early pregnancy, compared with their non-slums counterparts (Zulu, Dodoo, & Ezeh, 2002).

A common denominator within this distribution is that most of the teenage pregnancies are unintended. Three-quarters (76%) of those who had ever been pregnant reporting the unwanted pregnancy. These is severe among young adolescents where young women aged 15–19 were significantly more likely than older women to experience unintended pregnancy (Ikamari, 2013). This is similar to the marital status where adolescents who have never been married exhibit higher levels of unintended pregnancy (61% vs. 20% for those who are currently or formerly married) (Donatien, 2013).

The Coastal region is among the areas with the highest rate of teenage pregnancy in Kenya. According to KDHS 2008-09, 25.7% of teenagers aged 15-19 had begun childbearing in the region compared to only 10% in Central Province. Mombasa has rapid urbanisation which has seen a rise in informal settlements bringing in a mix of ethnic communities. Studies that have attempted to understand factors contributing to this have been limited to secondary literature and youth in institutions and organised groups alone. For instance, Jumbe (2014) used secondary evidence from the 2008/9 Kenya Demographic and Health Survey (KDHS) to study determinants of adolescent fertility in Coast Province. In seeking to understand sexual behaviour amongst youths in Mombasa, Jin, (2012) focuses only on youth colleges and youth centres in Mombasa.

Concentration on demographic factors and focusing on young people in institutions leaves out critical factors that are crucial in bringing out the primary drivers of teen pregnancy that contribute to the increased rate of adolescent fertility within the coastal region, particularly in informal settlements. There is the need, therefore, to carry out a

survey that can bring out individual social and cultural factors that contribute to teenage fertility in the area.

1.3 Research questions

This study aimed at addressing above gaps through the following four questions:

i. What are the individual risk factors contributing to adolescent fertility among adolescents?
ii. How do adolescents perceive sexuality about consequences of sexuality?
iii. Does parental attachment constitute a protective factor against adolescent pregnancy?
iv. What are the barriers hindering adolescents from accessing contraceptives?

1.4 Objectives of the study

1.4.1. Overall objective

The general aim of the survey entailed providing an understanding of the factors that contribute to adolescent pregnancy within the coastal region.

1.4.2. Specific Objectives

The specific aims of the study were:

i. To identify individual risk factors contributing to adolescent fertility among young people
ii. To establish how adolescents perceive sexuality about consequences of sexuality
iii. To examine types of parental attachment, that promote protection against teenage pregnancy.

iv. To identify forms of barriers that hinder adolescents from accessing contraceptives

1.5. Justification of the study

Backing for girls to circumvent pregnancy, remain in school, and slow household establishment means grander prospects for them to grow abilities and create revenue for themselves and their contemporary relations, structuring a financial ground to boost prospective age groups out of paucity. This necessitates interventions that are responsive to their economic, social and cultural contexts. The study goes beyond the analysis of demographic factors so as to provide an understanding to policymakers and program designers on the underlying factors that contribute to teenage fertility in the coastal region. Understanding factors that hinder contraceptive uptake would inform health service providers on the areas that needed strengthening the health systems for efficient delivery of services.

1.6. Scope and limitation of the study

The study targeted female adolescents aged 15-19 years. The key emphasis of the survey relied on the individual, parental, communal factors and barriers to contraceptive use among adolescents. The study, therefore, did not look at the consequences of teenage pregnancies. Data was to be obtained through structured questionnaires which relied heavily on self-reporting. This might have affected questions that may require recalling especially on issues such as sexual debut.

CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1Introduction

This section evaluates studies that have been undertaken on adolescent fertility. It begins by defining the term adolescent pregnancy and provides an overview of the state of adolescent fertility. It identifies risk factors contributing to adolescent fertility, investigates whether parental attachment as a form of social bond constitutes a protective factor against adolescent pregnancy, determines barriers are hindering adolescents from accessing contraceptives and establishes adolescents' perception to pregnancy.

Definition–different definitions have been adopted in writing literature on adolescent pregnancy. The World Health Organization defines teenage pregnancy as pregnancy in a female 10-19 years old (Rosen, 2010). Mothiba looks at adolescent pregnancy as the pregnancy of a woman of fewer than 19 years (Mothiba & Maputle, 2012) while Katamoyo defines teenage pregnancy as pregnancy in a girl aged between 13 and 19 years (Katayamoyo, 2010). Although occurrences of pregnancies within this age are minimal, the latter definition precludes pregnancies to girls under 13-who fall under adolescents. Tewodoros defines teenage pregnancy as a condition where a woman has given live birth before the age of 20 years (Tewodros Alemayehu, 2010).This implies that a woman who becomes pregnant at age 19 but gives birth at age 20 is not defined as an adolescent birth.

This paper adopts WHO definition of adolescent pregnancy as any pregnancy in a girl aged 10-19 years.

2.2Global adolescent fertility situation

A projected 14 to 16 million youngsters are born to teenage mothers aged 15 to 19 each year, representing 11% of total births worldwide (McQueston, 2012). While the decline in adolescent birth rate since 1990 is almost universal, adolescent fertility is still high in many developing countries including sub-Saharan Africa (Loaiza, 2013). UNFPA projects that the greatest increase in pregnancy among teenage girls less than 18 years of age over the next 20 years is likely to happen in sub-Saharan Africa.

2.3 Early marriage and childbearing

Early marriage remains a high factor underlying adolescent fertility. Many of teenage births are unplanned and take place within the context of early marriage especially in developing countries. Nearly half of girls in sub-Saharan Africa are wedded by age 18, compared with 20-40% in Latin America (McQueston, 2012).

Adolescent girls entering into marriage at an early age do so through marriages that have been organized by their relatives. They tend to marry older men where they have very minimal decision making roles. They face communication challenges in such unions where such men are likely to be married to more than one wife (United Nations, 2013). This can put a lot of demand on the d teens, including getting pregnancy as soon as they

are married off. In addition, the girls are likely to engage into unprotected sexual activities thus exposing them to early pregnancy (ibid)

2.4 Adolescent fertility and education

There is an association between education attainment and adolescent fertility. This is because being able to obtain good education empowers the girls to get a comprehensive sexual education able to develop skills and negotiate for safer sexual practices and access better services for their reproductive health (UNFPA, 2013). According to the United Nations, countries that perform poorly on different dimensions of education are likely to have elevated chances of teenage pregnancy as opposed to countries that have good education indicators (United Nations, 2013). It has also been found that caregivers' literacy level is a significant determinant with teenage girls having caregivers having secondary level education are likely to engage in unprotected sexual activities (Mmari, et al., 2013).

2.5 Adolescent fertility poverty and inequality

Poverty and child mortality has also been identified as factors driving fertility in Kenya. Adolescent first births, particularly at the youngest ages, are most common among the unfortunate and advance in dropping levels within this group has not been made over the previous few years (Neal, Mouli, & Chou, 2015)

d) Why adolescents

Focus on efforts to delay early childbearing is based on several factors. This can be summarised into health, social and economic factors.

Health-According to world health organisation (WHO), the immaturity of the pelvic bones and the birth canal can be a strong feature in obstetric danger in young adolescents. Evidence suggests that because of the relative immaturity of their physiological development, adolescents are more expected than mature females to experience difficulties during delivery. Preterm birth (birth before 37 weeks of gestation) is one of the leading causes of neonatal and perinatal mortality. There is evidence from population-based and hospital-based studies both in developed and developing countries that pregnant adolescents are at increased risk for preterm labour and delivery, compared to older pregnant women. Infants born to teenage mothers are more likely to be of low birth weight (LBW) (defined as birth weight <2500 g), and therefore also more likely to suffer from the sequel of LBW (216). Some hospital-based studies in developing countries have shown a higher incidence of LBW among infants of adolescent mothers.

Socially, evidence suggests that teenage childbearing may interrupt school attendance and damage young women's long-term communal and financial mobility. Similarly, given the lower standing of women in various African backgrounds, once expectant, young females might have an incomplete capability to discuss choices around the pregnancy as well as within their relationships (Hindin, 2012).

Regarding economics, age at first union is relatively young in most high fertility societies less than age 20 on average (World Bank, 2010). These present several challenges to the community. For example, at the inhabitants level, latest evaluations indicate that the lifetime opportunity cost of teenage pregnancy for state economies—determined by the

young mother's predetermined yearly income over her lifespan—vary from one percent of gross domestic product (GDP) in China to 30 percent in Uganda (Chaaban and Cunningham, 2011).

2.6 Adolescent fertility in Kenya

An analysis of age-specific fertility trend shows that although there has been a decline in productivity, adolescent fertility remains high in Kenya (National Council for Population and Development, 2013). Existing literature on studies that have attempted to investigate factors contributing to adolescent pregnancy have primarily been based on secondary literature-mainly demographic health surveys (DHS) and Multi-Cluster Indicators (MCI)-in studying determinants of teenage childbearing. The common factors identified through these studies include: girl's educational qualification, type of place of residence, household wealth index, a region of residence, ever use of contraception and the partner's education requirement as statistically related to teenage motherhood (Alemayehu, 2010; Goicolea, 2009).

2.6.1 Over-reliance on demographic data

All the factors mentioned above can be summarised as structural determinants which mainly refers to central structures of the nation state that create social stratification, like state capital, income disparity, learning status, sexual or gender standards, or racial group (Viner, et al., 2012).The rate of adolescent fertility is underpinned by complex socioeconomic, educational, and cultural and service availability factors. Settings,

patterns and inclinations may differ markedly from different population within countries (Neal, Chandra-Mouli, & Chou, 2015).

The risk of teenage childbearing vary quite significantly across the predictor variables, and there are similarly obvious dissimilarities by area, creed and urban/rural habitation (Sarah E Neal, 2015; Marline J. W., 2012). In Kenya for instance, young women aged 15–19 are significantly more likely than older women to experience unintended pregnancy (Ikamari, 2013; Beguy, 2014).This could be due to Sexual violence and abuse by peers, parents and other adults, including teachers (Joyce Mumah, 2014). Similar findings have been noted in Mombasa where a study of sexual behaviour on youth in colleges and youth centres revealed that a significant proportion of women (16.9%) reported rape and financial gains (13.6%) respectively as reasons for sexual debut (JIN, 2012).

According to KDHS 2008-09, the Coastal region is among the areas with the highest rate of teenage pregnancy in Kenya. The survey shows that 25.7% of teenagers aged 15-19 had begun childbearing in the region compared to only 10% in Central Province (KNBS, 2009). By focusing mainly on the structural factors, the studies mentioned above fail to bring out factors associated with these determinants of teenage pregnancy. They fail to establish individual differences in exposure and vulnerability to factors that expose adolescents to pregnancy.

2.6.2 Individual risk factors

Adolescents' levels of knowledge, aspiration, risk taking, skills, age and self-esteem have been associated with ones predisposal to pregnancy. Teenagers lacking knowledge on the needs and signs of maturity are prone to unplanned pregnancy (Kabiru, 2014). The condition becomes austere when this is stretched to familiarity on the usage of protection. This is where, while the lack of facts on female functioning or hormones has been established to incline teenagers to adolescent pregnancy by three times, the absence of information on condoms has a parallel effect by two-fold (Katayamoyo, 2010; Mothiba, 2012).

Drug abuse is a risk factor associated with teenage pregnancy. Teenagers using drugs and alcohol are more likely to put themselves in sexually risky situations and are much less likely to use contraception (Jumbe, 2012). The age at which a person commences sex could be a danger factor. Age and first sex are considerably linked to unpremeditated pregnancy among the teenage women. This is where early commencement of sex intensifies the likelihoods of pregnancy as those who started sex before age 18 are likely to have had a pregnancy incident sooner than those who practised first sex from age 18 (Donatien, Joyce, & Lindesey, 2014). This denotes that an adolescent at this age is in a better position to prevent themselves against pregnancy as compared to those who start sexual activity at a younger age. Those initiating sex at an older age can use contraception as opposed those started earlier (Marston, 2013). Despite these revelations, it has been established that teenagers do not necessary get pregnant unintentionally but out of desire. This is captured in a study on young adults orphaned where adolescents

whose mother had perished in the previous five years longed for more youngsters than did those whose mother was still alive. Real fertility was raised among women whose father had died more than five years before and among males whose mother had passed away in the earlier five years or more than five years past (Rachel, 2014).

2.6.3 Peer pressure

Negative peer pressure has been identified to be a contributing factor to teenage pregnancy. A study conducted to investigate patterns and determinants of entry into motherhood in two informal settlements in Kenya established that having negative models in peer were associated with early childbearing among females aged 15–17 years (Donatien Beguy, 2013). Similar findings have been established in America where, even among friends, a friend's childbearing increases an individual's risk of becoming a parent (Nicoletta Balbo, 2014). The influence works in such a way that such pregnancies are usually not anticipated. As Kabiru notes, in most cases, lack of discouragement from friends not to have boyfriend predisposes teenagers to unplanned pregnancy (Kabiru K Salami, 2014).

A study on strategies and practices for managing the consequences of unintended pregnancy among young people show that boys usually face peer influence including validation of manhood regarding sexual activity and some sexual partners that one had (Mumah, 2014). The study further notes that boys without sexual partners or who did not show evidence of sexual activity were frequently treated disrespectfully by their peers.

As one of the adolescents put it: “You find the other [boys] telling you that you don’t have a girlfriend...That you are not a man enough.”

Peer pressure does not only work with adolescents who might not have correct information themselves but also goes against what would have been considered wise decision among parents and health providers. For instance, asked what they thought were factors contributing to adolescent pregnancy, a parent said: “Youngsters fail to regularly admit the right facts we give them about their sexuality. When you inform them on their sexual conduct, they go back and repeat the wrong things that their peers taught them” (Akwasi, 2014).

These shows the greatest impact peer pressure has on adolescents’ sexuality. The same can be said to teens with positive peer pressure where older adolescents with high levels of perceived peer orientation to or approval of pro-social behaviours are likely to delay childbearing (Donatien Beguy, 2013).

2.7 Parental control factors

The family provides an environment where adolescents learn norms and values that allow them to fit within the society. Where there is a deviation from any of these, they are corrected by their parents who also serve as role models that the adolescents would want to emulate. Within the family, adolescents are supported with the resources they need as they grow. Absences of parents and family dysfunctions and situations in which these roles are not well performed have a direct bearing on adolescent sexuality.

The presence of both parents in the family has been identified as a protective factor against teenage sexuality and pregnancy. In inspecting features at the family, partner distinct levels to define the relative impact of their relationship with the sexual actions of young females in Rakai, it was established that at the family level, young women who did not dwell with both parents were more probable than those who did to have had sex afore the age of 15 and to have faced sexual intimidation at first sex (Mmari, 2013). Poor parent-child communication was noted to impact on adolescent sexual behaviour. As a teenager put it: "… parents should take time and talk with their children about how these things happen...and how they can prevent them." Mumah, 2014.

It is not just the absence of both parents in an adolescent's life that poses a risk but also the level of abuse and family disruptions (living extended periods of life without both parents). As Isabel notes, having experienced family dysfunctions and having suffered from sexual assault during childhood-adolescence, was a predictor to early sexual debut among male and female adolescents were associated with adolescent pregnancy in Orellana (Isabel Goicolea, 2009). These factors, therefore, imply that within a family setting, the type of bond and support parents provide to the adolescents is crucial. The absence of both material and financial supports expected from parents puts teenagers at risk to unplanned pregnancy (Kabiru, 2014).

Other than parental support, the role of the family as a protective factor against early sex and adolescent pregnancy is performed through control and supervision. Lack of parental supervision has been identified as a predictor of sexual debut among adolescents.

Even though there is the understanding that family relation is a key determinant to teenage pregnancy, it is not clear to what extend parental control affects premarital relationships among adolescents. It has been found that juveniles living with their father only or mutual parents are considerably more probable to have had an unplanned pregnancy than their counterparts who live with either parent (Beguy, 2014).This implies that households with mothers alone are likely to raise teenagers unlikely to have teenage pregnancies. This contradicts other findings where the involvement of both parents and the level of control through parental/guardian reprimand has shown to have a deterrent effect on teenage pregnancy (Patrick Katayamoyo 2010). In fact, parental control that discourages premarital sexual relationships (Faride, 2011).

Given this contradiction, there is, therefore, the need to find out to whether mother headed families are more likely to protect adolescents from early pregnancy than those headed by the father. Also, there is need establish whether the level of parental control can prevent teenage pregnancy.

2.8 Geospatial and communal factors

Geographical and communal factors have a strong bearing on teenage pregnancy. A geospatial analysis conducted on community sexual health service users and teenage conceptions show that service location has vital when attempting to increase access to contraception and sexual health counsel. It is a distinct benefit to be in a good locality as the place of the service should guarantee quick and easy access while increasing travel

time from services is recognised as a primary factor which restricts patient preference and access. (Olsen, 2012)

Community members acknowledge and are crucial to Adolescent Sexual and Reproductive Health. They create an environment within which the norms that guide the family in raising adolescents are upheld. Outside the family, adult members of the community support parents in ensuring that adolescents lead a life that conforms to the values that have been set. A study conducted in Ghana shows that the two teenage sexual and reproductive health difficulties most generally testified (either impulsively or when investigated) by the grownups questioned were unplanned pregnancy and HIV/AIDS (Kumi-Kyereme, 2014). The community is a great determinant in addressing adolescent challenges determines a lot. In the western part of Kenya for instance, it is acknowledged that men and women had a reduced threat of sexual inauguration if they lived in a community where AIDS mortalities were openly accepted (Eric, 2014).

The community's level of tolerance to sexually explicit material and sexual violence can also expose adolescents to early sexual debut and teenage pregnancy. For instance, in two informal settlements of Nairobi, teens noted that exposure to sex and sexually explicit materials occurred quite early in the slum areas, often prompting them into experimenting with sex at very early ages. They reported that they were common victims of insecurity and violence including rape. The danger that characterised the lives of young people occurred at home and outside the home. They observed that it was common for young

people to be attacked on the streets, at school, while at play and in their homes (Mumah, 2014).

In spite of the acknowledgement by the community that adolescent pregnancy is a problem, there is no consensus among community members and youngsters on how the issue of teenage pregnancy can be approached. This is mainly due to public attitudes and cultural factors where different sexual roles and expectations are ascribed to adolescents based on gender. Provision of sexual and procreative health amenities remains a task in some communities. This is mainly due to a negative attitude where whereas some adults would offer services and support to young people in various ways, some of the adults reported that they were unable to play their expected roles because of resistance from some parents (Akwasi, 2014).Also, adolescents' norms against teenage pregnancy may vary by gender where; "boys always try to deny the responsibility of impregnating a girl… The boy's parents were supporting him and not trying to be objective in their approach to the case" (ibid). In spite of these findings, no studies have been documented on communal constraints affecting programs seeking to address adolescent pregnancies in Kenya focusing on the coastal region. There is, therefore, the need to identify these factors from community members and get their input on ways they think such constraints can be addressed.

2.9 Contraceptive use

Use of contraceptive has a direct bearing on teenage pregnancy. Advanced levels of adolescent fertility are allied to a higher proportion of demand for family planning that is

unsatisfied. More disturbing is the reality that the rate of demand that is unsatisfied is more than 50 percent of female adolescents in sub-Saharan Africa. (World Bank, 2010). The proportion of the application that is unsatisfied is higher among female teens who are married than among their sexually active unmarried peers (United Nations, 2013). This is mainly due to increased utilization of contraceptives among sexually active teenagers not in marriage accounting for less unsatisfied demand for family planning that is satisfied as opposed to those in marriage.

Condom use, however, seems to go hand in hand with geographical location and age. Whereas single girls are said to use condoms more, the same cannot be said of rural girls where pregnancy is associated with low use of contraception. A study conducted to determine factors related to adolescent childbearing in Kenya established that youth who never used a contraception were statistically related to adolescent motherhood (Omedi 2014).

Having initiated sex at age 15 or older was the strongest individual-level characteristic associated with having used a condom at first sex (Kristin, 2013). The same goes for adopting condom use where age at first sex and current use of modern contraceptives. (Jumbe Marline 2012) This, therefore, underscores the fact that the older an individual becomes sexually active, the higher the chances for them to use a contraceptive. Even though, these could be because of their maturity and ability to negotiate and make informed decisions there are cases when levels of awareness and knowledge of contraception do not necessarily translate to their utilisation.

According to a study on the barriers to modern contraceptives in Kenya, the key obstacles to contemporary contraceptive acceptance among juvenile females are myths and fallacies where young women study about both factual side effects and myths from their social setups. (Ochako, 2015).

By focusing on the role social networks, this study is crucial in bringing out the role of peer pressure where adolescents get influenced. The method adopted in conducting the study was limiting as it fails to consider other factors such as the perception of a teenager on teenage fertility, availability of the preferred method of contraception among other barriers. Based on a study on perceptions and barriers to contraceptive use among adolescents Aged 15 - 19 years in Kenya, it is not just peers' hostile attitudes towards contraception that influences contraceptive use among adolescents only (Kinaro, 2015). Significant others such as parents and teachers have a greater contribution to low contraceptive use. This is particularly when they have unfavourable perceptions where their influence is bigger likened to barriers such as sexual spouse communication, view on youngsters to use contraceptives and capability to search for contraceptives.

Most providers lack the capacity to provide some of the services, have negative attitudes towards the provision of contraceptives to young people (Nalwadda, 2012; Estelle M. Sidze, 2014)). In examining the prevalence of protective eligibility restrictions based on age and marital status among family planning providers in Senegal, Sidze found that suppliers were best probable to set lowest age limits for the pill and the injectable two of the approaches most regularly used by young women (Sidze, 2014). In other situations,

the challenges have been systematic where system-contraceptive utilisation and provision to young persons were inhibited by irregular contraceptive stocks, poor amenity organisation, inadequate number of qualified workers, high costs, and unfriendly service (ibid).

This, therefore, indicates that barriers to contraceptives are not necessarily at an individual level but service provider level and institutional as well. By focusing on the service providers alone, this study leaves out adolescents' experiences with service providers in seeking their preferred choice of contraceptives. Including teens in such study would have illuminated on issues that service providers might have left out.

2.10 Summary of gaps

In examining the literature on circumstances contributing to adolescent pregnancy, it has been established that school attendance can bring down the level of early pregnancy. This, however, has not been reflected in Kenya where the adolescent birth rate is high despite low out-of-school rates for girls. Also, trends over time show that there has been poor development in decreasing teenage first births generally, with no drops among the unfortunate.

Most studies reviewed on adolescent fertility in Kenya have focused mainly on the direct structural factors based on the periodic demographic health surveys as determinants of adolescent pregnancy. The reviewed studies fail to bring out distal factors associated with the direct determinants. They fail to establish individual differences in exposure and

vulnerability to factors that compromise protective behaviour that lead to adolescent pregnancy. By looking at various contributing factors, it has been found that key individual factors that predispose adolescents to early pregnancy include: low knowledge on maturity and female physiology, drug abuse, age at sexual debut and self-esteem. All these factors imply that teenagers would want to delay sexual debut to avoid early pregnancies. These findings are not in line with a study on orphaned adolescents where teenagers do not necessary get pregnant unintentionally but out of desire.

As a protective factor, there is a contradiction on the role of parenting in addressing adolescent pregnancy. Whereas some studies have brought out the presence of both parenthood as a protective factor, other studies indicate that families, where a mother is present, are more likely to protect adolescents from early pregnancy than those headed by the father. Regarding control, whereas it has been found that parental reprimand is necessary for preventing teenage pregnancy, addition, there is need establish whether the level of parental control can prevent teenage pregnancy.

About contraception, existing literature has primarily focused on individual levels. Studies in other countries indicate that barriers to contraceptives are not necessarily at an individual level but service provider level and institutional as well. There are no documented studies on the role of these factors in Kenya especially coastal region. Also, the methods used in conducting these studies primarily focused on service providers leaving out adolescents to help in understanding any service provider and systematic institutional barriers they are facing in accessing their preferred choice of contraceptives.

In spite of the acknowledgement by the community that adolescent pregnancy is a problem, there is no consensus among community members and teens on how the issue of teenage pregnancy can be approached. This is mainly due to public attitudes and cultural factors where different sexual roles and expectations are ascribed to adolescents based on gender. No study has been conducted to identify communal constraints in implementing adolescent pregnancy interventions. Understanding these limitations is critical to allow the development of common strategies to support interventions.

There is, therefore, the need to conduct further study going beyond the structural determinants of adolescent pregnancy and establish individual differences that expose youths to pregnancy, the role of parents, barriers to contraceptives and communal constraints experienced in addressing teenage pregnancy. This will help in the design of programs and policies that can be used to address adolescent pregnancy in Kenya.

2.11 Theoretical framework

This study will be guided by rational theory, fundamental functional and symbolic interaction theory.

2.11.1 Rational choice theory

The rational choice model attempts to expound why individuals make decisions or take actions that have certain consequences, how they do so and to forecast the choices they will make given certain conditions. It is founded on the notion that when individuals make judgments and act on those decisions, they do so in their self-interest. The model

not only clarifies the calculations of expenses and profits people make before they act but similarly how these calculations are done in the framework of social relations and how they add to an unwavering social order. It presupposes that cash is the main motivator for most individuals and that the resolutions they make are inspired by exploiting the prospect for amassing money.

Sociology distinguishes, primarily, that additional types of prizes may encourage people and second, that rational calculations are made through social interaction. Therefore, though choices and deeds can be reasonably calculated to exploit benefits, such decisions and actions necessitate a degree of mutuality or social exchange. Besides, though the payments that individuals pursue may be physical, they are as or more possible to be social. Sociologists have established that wealth such as time, status, and endorsement are social prizes that inspire individuals to act in certain ways. In specific, through social contact, people emphasise or undermine particular conducts through an exchange of rewards and sanctions and in this method, maintain social order. This theory is criticised for generally ignoring the social determinants of decisions, choices and actions. It over-rationalizes human thought and measures and privileges an individualised approach to explaining decision-making and action.

2.11.2. Functional theory

This method assumes that Social steadiness is essential for a healthy society, and sufficient socialisation and social incorporation are crucial for social constancy. Society's social establishments carry out vital roles to aid guarantee social stability. The concept of

anomie, as first introduced by Emile Durkheim in his work The Division of Labor in Society (1893), refers to a breakdown of social norms and is a state where standards no longer regulate the actions of members in society. Individuals cannot find their place in society without clear rules designed to guide them. Changing conditions, as well as adjustments of life, lead to dissatisfaction, conflict, and deviance. Durkheim observed that social periods of disruption (e. economic depression) resulted in greater anomie and higher rates of crime, suicide, and deviance. Robert K. Merton copied Durkheim's idea of anomie to create his model of general strain in Social Structure and Anomie (1938). The real problem, he argued, is not created by a sudden social change, but rather by a social structure that proclaims the same goals to all its members without giving them equal means to achieve them. Deviant desires are therefore entirely a social product.

2.11.3. Symbolic interaction theory

In this outlook, people are influential in how they form the domain and not simply victims conforming to greater social powers. Individuals build their roles as they interrelate; they do not just learn the characters that civilisation has set out for them. As this contact transpires, people negotiate their descriptions of the circumstances in which they find themselves and communally create the realism of these conditions. In so doing, they bank heavily on signs like words and gesticulations to reach a mutual understanding of their contact. The chief ideologies claimed by Mead are sense, language, thought, and identity (Rank & LeCroy, 1983). Symbols are random signs employed to craft meaning and messages, which are discussed through language. The symbols are construed and changed by a person's thought procedure called minding. The self is formed by an

individual's contact with society, which governs who this being is and puts anticipations on people and how they are supposed to act. Social difficulties arise from the interaction of individuals. Individuals who participate in socially challenging behaviours regularly study these habits from other persons. People similarly learn their views of social complications from other persons. A pro to this scheme would be you may perceive how individuals can infer things around them and make a conclusion. Nonetheless, a con is that it fails to emphasise on the larger picture. It concentrates on minor things.

2.11.4. Social control theory.

Well recognised as "social bond" concept, emphasises on social relations and how they impact conformity. Hirschi (1969) maintains that everybody is motivated towards impulsive and felonious behaviour owing to innate animalistic motivations, and it is the feature of our social ties that regulate whether or not we act on these natural impulses. Since everybody is similarly inspired to participate in such primitive behaviour, it is eventually the incidence of resilient ties which functions to contain such conduct; the lack of these liberates one to take part in it. The chief component of a bond, that is attachment, is acknowledged as the utmost imperative and affects entire other elements in a relationship (i.e., commitment, participation, and trust). Hirschi (1969) contends that connection to caregivers, and finally others, is essential for adopting norms and functions as a mechanism in monitoring misconduct. Inherent to this is the belief that people with stable attachments grow sensitivity to the sentiments of others and by doing so, would not want to fail those to whom they are devoted or risk the loss of affairs by participating in conduct considered unsuitable. As a result, they desist from misbehaviour. Nevertheless,

persons with weak or ruined attachments are unrestricted of limitations and consequently, are more inclined to act on rash yearnings.

2.12 Conceptual framework

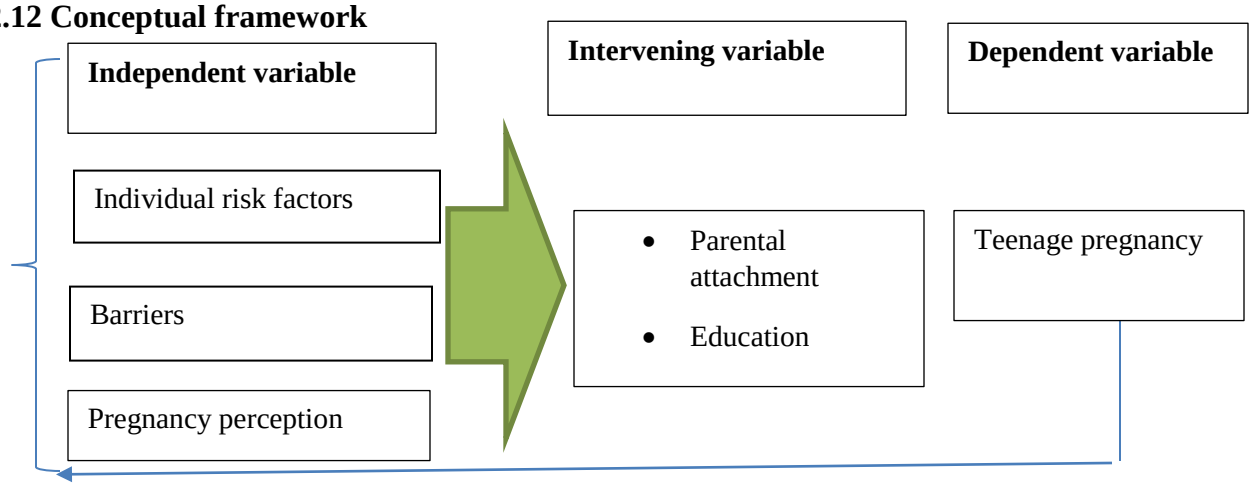

Figure 1: Conceptual framework

Teenage pregnancy was measured regarding having ever given birth or pregnant with the first child. The symbol was defined as coded meanings that are attached to behaviours and actions of adolescents including sexual conduct that results in teenage pregnancy. This was measured on an ordinal scale using five-point Likert scale to rate perceived benefits of childbearing.

The attachment was looked at as an element of social bond between teenage and parent or caregiver. The study focused on a teenager's feelings of admiration, levels of emotional closeness and trust towards their parents. A barrier was defined as any structural constraint that can hinder a girl to access contraceptive. Risky behaviour was conceptualised as any delinquent behaviour that could result in pregnancy among

teenage. The following indicators measured this: Drug and substance use, school dropout, early sexual debut and having delinquent friends.

Table 1: ***Data analysis frame work***

Depended variables

Variable	**Level of measurement**	**Variable indicator**	**Questionnaire response**
Teenage pregnancy	Interval scale	Ever delivered	Yes/No
		Pregnant with first child	Yes/No

Independent variable

Variable	Level of measurement	Variable indicator	
Risky Behavior	Nominal	Delinquent behavior • Drug abuse • Drop out • Early sexual debut • Delinquent friends	Yes/No
Parental Attachment	Ordinal	Scale of attachment • Admiration • Emotional • Involvement • Trust	• Very little • A little • Somewhat • Quite • very much
Barriers	Ordinal	Structural barriers • Nurses' stigmatize teenage sexuality • Scolding and harsh treatment • Reluctance to accept teenagers' experiences as birth control users, • Economic Cost	agree
Pregnancy Perception	Ordinal	Benefits of child bearing scale • Having a baby would offer me somebody to adore. • Getting a baby would make me feel significant. • Having a baby would support me contain the baby's father near. • Getting a baby would aid me get cash from the baby's father. • Having a baby could get me out of a difficult condition. • Having a baby would make me a woman. • Having a baby would make other individuals think I am essential. • Having a baby would make my bond with the baby's father stronger. • Having a baby means somebody will love me	Strongly Agree

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

This study sought to identify risk factors contributing to adolescent fertility among young people within the coastal region of Kenya. This was in addition to establishing how adolescents perceive sexuality in relation to consequences of sexuality while examining types of parental attachment that promote protection against teenage pregnancy. It further identified forms of barriers that hinder adolescents from accessing contraceptives.

Addressing these objectives was important in enhancing an understanding of factors contributing to the high teen birth rate and small reductions in births among teenagers living in poverty. Focusing on the main individual factors that predispose adolescents to early pregnancy would help understand why teenagers do not necessary get pregnant unintentionally but out of desire. Looking at parental attachment as protective factors would be useful in ascertaining the role of parenting as a control in preventing teenage pregnancy. Looking at barriers beyond individual factors to include institutional and service provider-related obstacles to contraception's among adolescents were crucial in providing a comprehensive understanding of challenges that need to be targeted in enhancing access to contraception among teenagers within the coastal region.

3.2. Site description

The study was conducted within Bangladesh slum found in Birihani Sub location, Mikindani Location, Jomvu Division-Changamwe District- 5.5 Kilometers West of Mombasa Island within the Coastal region. The area has approximate inhabitants of

20,000 individuals (with an average of seven persons per family) though its size is not accurately documented, it comprises of 7 villages namely: Nairobi area, Mkupe, Kachimbeni, Majengo , Centre, Nairobi and Giriamani.

Figure 2: ***Bangladesh informal settlements map***

Source: Community health strategy, Bangladesh

The populace is composed of a multi-ethnic community with the mainstream of inhabitants being Luos, trailed by Luhyas and then Kambas. Other tribes found comprise Giriamas, Kikuyus, Kisiis and Taitas. The mainstream of the residents are females, which is uncommon for an urban settlement (it is typically males who regularly move to metropolises and towns in quest of employments). Increased figures of widows and single mothers may have added to the extraordinary number of women. Youths

characterise a greater set of people as elderly parents favour to move back to their natural backgrounds (upcountry).

3.3. Research design

A cross-sectional household survey based on both quantitative and qualitative approaches was used. A quantitative approach was useful in identification and quantification of risk factors contributing to adolescent fertility among young people, examining levels of parental attachment that were protective to teenage pregnancy and identifying forms of barriers that hinder teens from accessing contraceptives within the coastal region of Kenya. A qualitative approach was aimed at establishing how adults and adolescents perceive sexuality about its consequences.

3.4. Unit of analysis and unit of observation

The unit of analysis will be households with teenage girls aged between 15-19 years. The unit of observation was teens who have ever conceived at age 15-19 years.

3.5. Target population

The study targeted adolescent girls aged 15-19 years living in the seven villages of Bangladesh informal settlements namely: Mkupe, Nairobi, Majengo, Giriamani, Centre and Kachimbeni. Bangladesh informal settlements.

3.6. Sample size and sampling procedure

3.6.1. Sample size

A sample size of 180 adolescents aged 15-19 years was targeted

3.6.2. Sampling procedure

The study used proportionate sampling methodology in reaching the study population. The study area was divided into five villages. Each community was profiled to get the number of girls aged 15-19 years. A sample of 180 girls was proportionally drawn to reflect the population of girls aged 15-19 in each village. This was arrived at by dividing the total population of adolescents aged 15-19 in each village by the total population in the study area so as to get the proportion of adolescents to be targeted from each village. Through the support of community elders and community health workers, households with young girls aged 15-19 were identified. For every village, random selection of the targeted respondents from each village was made using a table of random numbers.

Table 2: ***Study sampling frame***

Village	**Population**	**Adolescent (15-19)**	**Households (%)**	**Target (n)**
Mkupe	4,935	705	15	27
Nairobi/Majengo	8,643	1235	26	47
Giriamani	5,800	829	18	32
Majengo mapya	5,772	825	17	31
Kachimbeni/Center	7,850	1,121	24	43
Total	**33,000**	**4,714**	**100**	**180**

Note. Data in column 2 and 3 are from Changamwe sub county community health strategy

3.7. Methods of data collection

3.7.1. Collection of quantitative data

Quantitative data was collected using closed questionnaires. This was to help address those who might be semi-literate and therefore fail to fill in a self-administered questionnaire. The researcher and the research assistant pre-tested data collections tools at Chaani informal settlement adjacent to the study area with young people and necessary adjustments made on the tools before embarking on the fieldwork. Ten research assistants were selected within the study area based on their experience in interviewing and knowledge of local languages and community settings.

3.7.2. Collection of qualitative data

Key informant interviews were held with six informants to collect qualitative data. They included health facilities in charges, community leaders, youth leaders and community health focal persons. Data collected was utilized to enrich and give more insight to quantitative data collected.

3.8. Ethical considerations

The investigator sensitised the target population about the study. These included research assistants, community health workers local administrators and community leaders. Data was only collected from the participants upon getting consent from them. The study

respondents were taken through an informed consent process which allowed them to decide whether to participate in the study or not.

The investigator trained research assistants on the consenting procedures as part of the fieldwork training. Further to this, the research assistants informed parents/guardians as legal representatives of the adolescents below the age of 18 about consenting procedures for their children so that they could give assent. In the event of any discomfort, a respondent was free to stop the session at any point.

3.9. Data management and statistical analysis plans

Qualitative data collected through key informant interview questions was analysed according to themes. The approach entailed collecting interview data, describing the data by summarising and marking the interviewee responses according to themes. The interpretation was made according to the respondent's views on the topics and across the issues to give a better understanding of their perspectives. This was also about other literature about the themes. Quantitative data was cleaned, coded, summarised and analysed using SPSS software. The collected information was analysed using descriptive statistics and cross-tabulations.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.0 Introduction

This chapter presents empirical data and an analysis of the responses derived from a cross-sectional household survey conducted to determine factors contributing to teenage fertility in coastal Kenya. The chapter covers presentations and interpretations of the data as obtained from adolescent girls aged 15-19 years. The data was collected using study questionnaire and key informant interview guides as indicated in annex I and II.

The results are shown according to the study objectives: individual risk factors contributing to adolescent fertility among young people, adolescents' perception to sexuality and consequences of sexuality, parental attachment that promote protection against teenage pregnancy and forms of barriers that hinder teens from accessing contraceptives. Quantitative data was analyzed using SPSS software while qualitative data was analyzed based on thematic respondents from key informants.

Although not within the study objectives, the chapter covers the demographic characteristics of the respondents so as to help in contextualizing and giving meaning to the results. Data analysis is organized according to the study objectives: This is further summarized in terms of frequencies, averages and proportions. The data is presentation using tables, graphs and charts for ease of understanding and interpretation.

4.1 Response rate

The analysis is based on one hundred and sixty five (165) responses out of the 180 respondents that had been targeted. This represents 92% of the targeted responses. The gap of 8% was as a results of some of the responses opting out in the middle of the interview.

4.2 Socio-demographic characteristics

4.2.1 Age distribution

Most of the respondents (31%) were aged 19 years. There was a similar composition of those aged 15 and 16 where each segment made 18% of the study respondents. The proportion of respondents aged 17 and 18 was 16% and 17% respectively.

Table 3: ***Age distribution of respondents***

Age	**Frequency (n)**	**Percentage (%)**
15	30	18
16	29	18
17	27	16
18	28	17
19	51	31
Total	**165**	**100**

4.2.2 Marital status

The respondents were asked to indicate their marital status and responses shown as follows:

Table 4: ***Respondents marital status***

Marital Status	**Frequency (n)**	**Percentage (%)**
Single	149	90.3
Married	14	8.5
Separated	2	1.2
Total	**165**	**100**

Table 3 shows that majority (90.3%) of the interviewees had a single marital status while a small percentage (8.5%) were married. Only two respondents were separated. This could be interpreted to mean that most of the respondents were still living with parents or care givers.

4.2.3 Education

An analysis of responses on the participants' level of education showed that a larger percentage (64%) of the respondents had a primary level education. Those who had attained secondary and college level education were 33% and 3% respectively. This implies that access to basic education remains a challenge in the study area.

Table 5: ***Respondents level of education***

Level of Education	**Frequency (n)**	**Percentage (%)**
Primary	106	64
Secondary	54	33
College	5	3
Total	**165**	**100**

4.2.4 Religion

The respondents were asked to indicate their religion. The study established that although the Kenya's coastal region is known to be predominantly Muslim, the majority of the respondents in the study area were Christians (73%) followed by Catholics (17%) and Muslims (10%). This could be taken to mean that the area's population is mainly composed of inhabitants from other sections of the country where Christianity is the main religion. Table 5 presents a summary of the respondents' religion.

Table 6: ***Respondents religion***

Religion	**Frequency (n)**	**Percentage (%)**
Christian	120	72.7
Muslim	16	9.7
Catholic	28	17
Others	1	0.6
Total	**165**	**100**

A higher proportion (89%) of the respondents had no formal employment. Among the 10.9% in employment, 6.1 were in formal employment while 4.8% were employed in the informal sector.

Table 7: ***Respondents employment status***

Occupation	**Frequency (n)**	**Percentage (%)**
Formal employment	10	6.1
Informal employment	8	4.8
Unemployed	146	88.5
Pupil/student	1	0.6
Total	**165**	**100**

4.3 Risky sexual behaviour

Out of the 165 respondents who had participated in the study, 59% were sexually active, and 43% had either ever given birth or were pregnant with their first child. This means that a higher number of adolescents in the area were already engaging in sexual activities without protection.

4.3.1 Sexual debut

The mean age of sexual inauguration was 15 years. 26% of the respondents initiated sex at the age 16. An analysis of sexual debut and teenage pregnancy showed relationship between the onset of sexual debut and having ever given birth where most of the respondents who reported early sexual debut were likely to have had a pregnancy while

those who had sexual debut at age 17 onwards were likely to have no child-an indication that the ability to protect oneself from getting pregnant was more enhanced as one advanced in age.

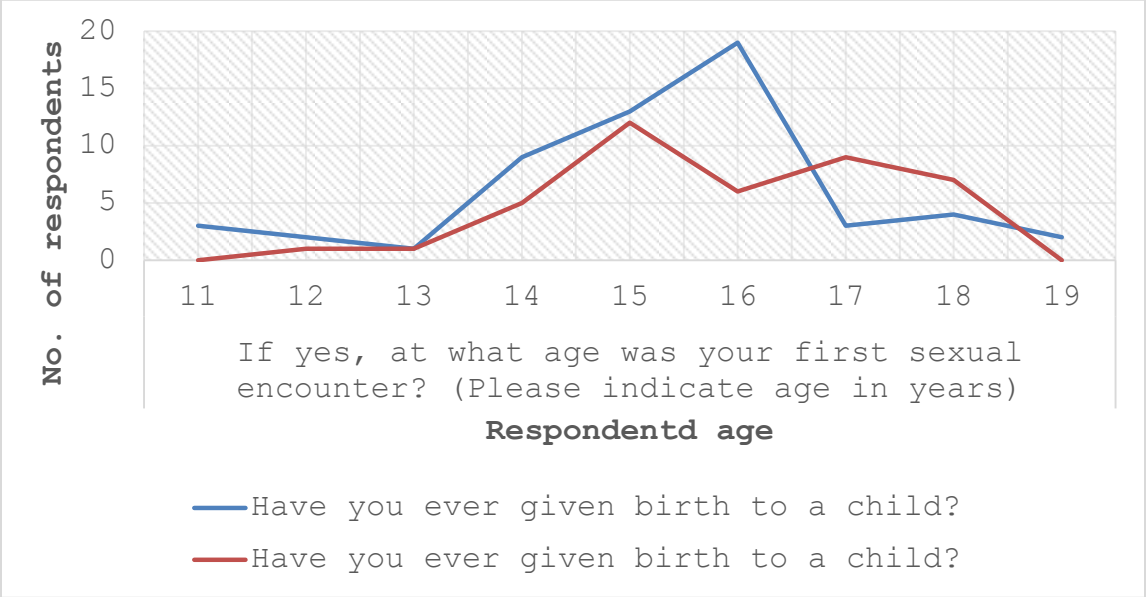

Figure 3: ***Sexual debut and child bearing among teenagers***

4.3.2 Sexual partners

The majority of the respondents (63%) had only one sexual partner. While 33% had more than one sexual partner. Among those having more than one partners, the majority (83%) were from 18-19 years old category and were likely to have given birth. This could be interpreted to mean that there was a high tendency of unstable or casual sexual relationships among the teenagers in the area. The relationships however were resulting into pregnancies that were out of wedlock. A case in point was the key informants' responses at both Mikindani health centre and St. Patrick Catholic dispensary that most of the clients that they served were aged 18-19 years.

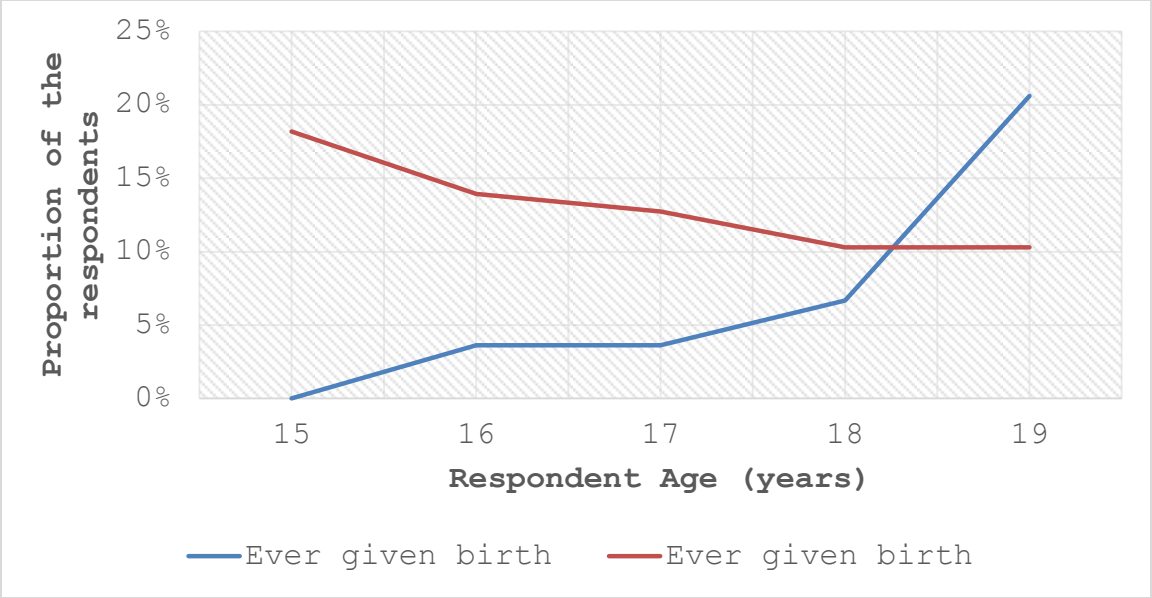

Figure 4: ***Age and ever given birth***

4.3.3 Level of education and teenage pregnancy

There existed a correlation in the level of literacy and teenage pregnancy. Out of those who had ever been pregnant, the majority (67%) had a primary level education. Those with secondary and college level education were 27% and 4% respectively. This implies that a teenager was less likely to get pregnant as she advanced higher academically. Unfortunately, education was not regarded highly in the study area. As one of the respondents said:

> *"There is no value for education in the area…even if one excels in school, there is no employment. Girls would, therefore, get married early. They would rather marry a boda-boda (motorcycle) rider who is ready at the time than delay and go all the way to form four only to get nothing in return".*

Table 8: Level of education and ever given birth

	No	%
None	1	2%
Primary school	37	67%
Secondary school	15	27%
College	2	4%
Total	**55**	**100**

4.3.4 Peer pressure

Peer pressure was a contributing factor to adolescent sexual activities. The majority of the respondents (89%) who were sexually active indicated that their friend was sexually active as well.

4.3.5 Drug and substance abuse

Only ten respondents were abusing a drug. The most abused drug was alcohol. Among those abusing drugs, majority 80% had a child as opposed to only 55% who were not suing drugs. This is an indication that drug abuse exposes one to unprotected sexual activity.

Table 9: Have you ever given birth to a child among those abusing drugs

		Ever given birth to a child		n
		Yes	No	
Use of non-medically prescribed drug	Yes	80%	20%	10
	No	55%	45%	87

4.3.6 Sexual violence

Among the six key informants interviewed, three of them mentioned sexual abuse as a contributing factor to adolescent pregnancy in the area. This study could however not quantify the extent to which this was prevalent in the study area.

4.4 Adolescent perception of sexuality about the consequence of teenage pregnancy

Questions under this objective were mainly answered by respondents aged 18-19 (78%). The common perception of having a baby across the respondents was becoming a woman, feel important and get someone to love (all at 61%). However, understanding differences were noted about the respondent's level of education, employment status, ever been pregnant and parental type as presented below.

4.4.1 Education and teenage pregnancy perception

There was a universal consensus of the opinion that getting pregnant would make someone a woman and feel important. The majority (79%) of the respondents with a primary level of education and 70 % of respondents with secondary level of education agreed to this statement. This was similar to feeling important where 79% of respondents with primary education and 76% of the interviewees with secondary education accepts the statement that getting pregnant would make them feel important.

A difference in the pattern was however noted on the perception of keeping the baby's father around, getting money, making a relationship stronger and love. A high proportion (68%) of respondents with primary level education either agreed or strongly agreed with the statement that getting pregnant would help them get money from the baby's father. In

contrast, very few respondents (33%) with secondary school level of education agreed to this perception. Similarly, most of the interviewees (68%) with primary compared to just a few (38%) with secondary education agreed with the statement that getting pregnant would help to keep father around. It could therefore be said that education has a role in determining the motivation to get pregnant where teenagers with low level education would want to get pregnant so as to get money and keep their partners around.

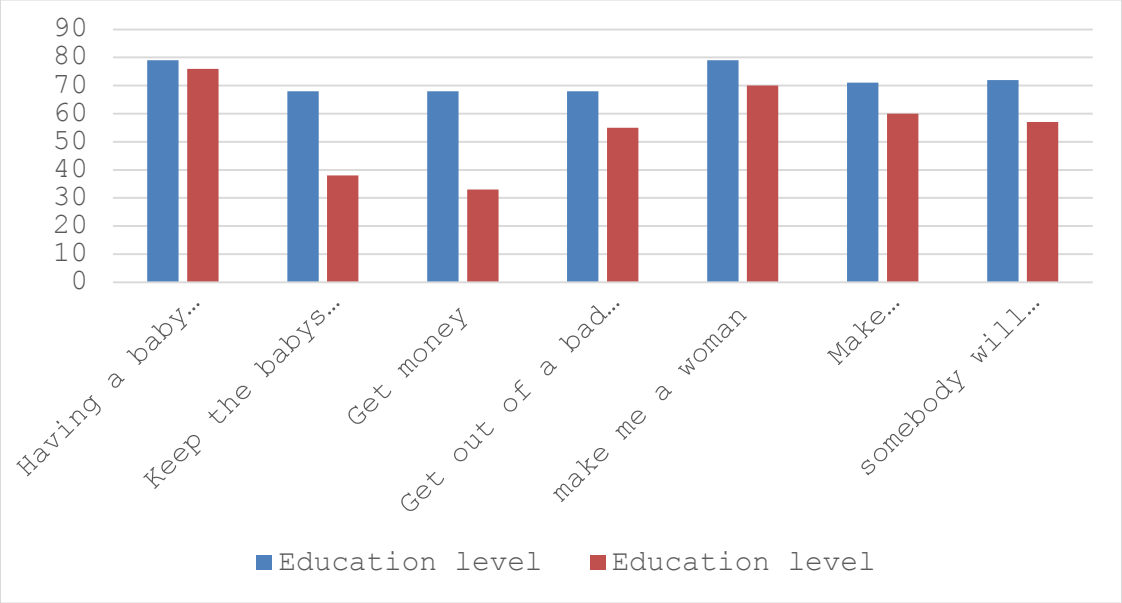

Figure 5: ***Education level and perception of getting pregnant among teenagers***

4.4.2 Employment and teenage pregnancy perception

The majority (87%) of the respondent to this question were unemployed (N=62). Most of the interviewees (67%) of the respondents agreed to the perception statement that getting pregnant was a way of getting out of a bad situation. This proportion however reduced on the expectation of getting money where 57% of the respondents among the unemployed agreed to the statement that getting pregnant would help them get money from the baby's father. A lower proportion (43%) of those in employment agreed to the declaration.

4.4.3 Ever been pregnant

An analysis of perception among respondents about ever fallen pregnant showed that the three initial impressions for being pregnant among those who had ever been pregnant were; getting someone to love, make one become a woman and somebody will like them. Eighty-two percent of the respondents either agreed or strongly accept the perception statement that begetting a child would give them someone to love. Similarly, 81% of the interviewees agreed that having a baby would make them become a woman. This, however, was different among those who have never been pregnant with just (57%) agreeing to the statement. Among those who had never given birth, 61% admitted that getting a baby would make them become a woman. The perception that having a baby would get someone money had the lowest responses (58%) among both respondents.

This is summarized in the chart below.

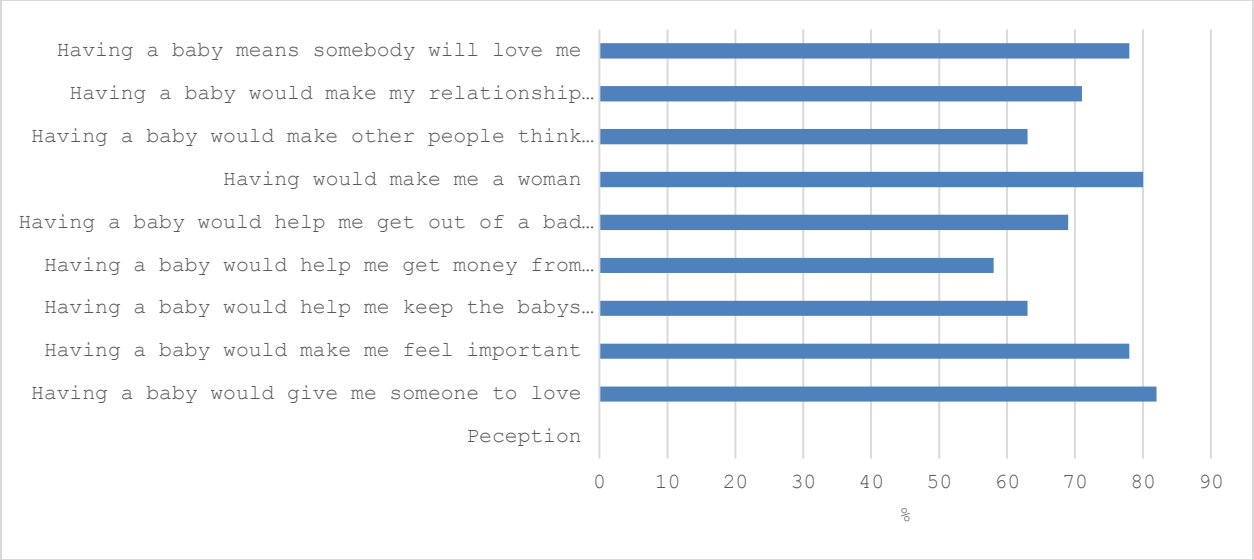

Figure 6: Sexual Perception among teenagers ever been pregnant

4.5 Parental type and perception

There were varying responses to teenage pregnancy knowledge and parental type. Among respondents living with mother only or caregiver, to become a woman and feel important were the favoured common perception for having a baby.

Among those living with mother only, for instance, the majority (90%) of the respondents agreed with the statement that having a baby would make them feel important. A similar response (92) was noted among those living with a caregiver. On the other hand, 95% of respondents living with mother only felt that having a baby would make me a woman. Though lower than above, 83% of the inhabitants with a caregiver agreed to the statement that having a baby would make me a woman.

This reflects the views of one of the key informants:

"Some girls want to prove they are adults to escape the tag "watoto wa siku hizi" (today's children) to demonstrate that they have become of age".

The anticipation of money, getting out of a bad situation and making love stronger had a strong perception among respondents living with a caregiver. The majority (84%) of respondent agreed/ strongly agreed that having a baby would help them get money from the child's father. This was similar to getting out of a bad situation where 83% of those living a caregiver at least agreed to the statement that having a baby could help them get out of a bad situation. The level of response was lower among those living with mother only and those living with both parents with 62% and 57% of those living with mother only those living with both parents agreeing to the statement respectively.

With regard relationship, 83% of the inhabitants with a caregiver agreed/strongly agreed that having a baby would make my relationship with the child's father stronger. Only 53% had a similar perception among those living with mother and 45% for those with both parents. This perceptions are reflected in a response given by one key informant where she states;

"In some cases, two girls are competing for one boy; to win these love, a girl chose to get pregnant so that she can prove her love and demarcate her territory. A new status that entitles them to adult privileges such as getting own money".

The perception that having a baby would help keep the baby's father around was least 55% of all among all the respondents regardless of the parental type.

4.5.1 Parental attachment

The majority of the interviewees (47%) were living with both parents. The proportion of respondents living with mother only was 29% while those living with caregiver and father only was 19% and 6% respectively.

About attachment, the level of attachment was stronger between the respondents and their mothers compared to father and caregiver. For instance, asked to indicate how emotionally close they were to their parents, 99% of those living with both parents reported that they felt quite/strongly much emotionally close with their mother. Only 66% felt the same for the father. For those living with a single parent, 84% of those living with mother only and 33%. Among those living with a caregiver, 69% indicated that they felt enough/strongly much with their caregiver.

Table 10: The extend of emotional feeling according to whether the feel is with mother, father, both mother and father, and care giver

Parent	**How emotionally close do you feel with your mother?**					**Total**	
	very little	a little	moderate	quite much	very much	(%)	N
Mother only	5%	7%	5%	23%	60%	100	44
Both mother and father	0%	0%	2%	23%	75%	100	62
	How emotionally close do you feel with your father?					**Total**	
	very little	a little	moderate	quite much	very much	(%)	N
Father only	22%	22%	22%	11%	23%	100	9
Both mother and father	2%	8%	24%	26%	40%	100	62
	How emotionally close do you feel with your care giver?					**Total**	
	very little	a little	moderate	quite much	very much	(%)	N
Care giver	7%	10%	14%	28%	41%	100	29

A higher percentage (97%) of those living with both parents said they strongly looked up to their mother compared to 44% who stated that they strongly looked up to their father. Those living with mother or father only indicated 86% compared with 56% for mother and father respectively. As for caregiver, 53% reported that they strongly looked up to their caregivers.

4.5.2 Spending time

Fifty-six percent of those leaving with father only rated the level at which they spend time with their father as quite/strongly much. While those living with both parents rated it at 40% and 95% for mother respectively. Those with caregiver-rated it at 60%.

4.5.3 Trust

About the level of trust they have with their parents, 74% of those living with both parents said they strongly trusted their father compared to 95% who stated that they strongly believed their mother. Those living with a single parent indicated 93% compared with 67% for mother and father respectively. The rate was 70% among those living with a caregiver.

4.5.4 Parental attachment and risky behaviour

In spite of a high level of attachment to the mother, the study noted a higher level of risks among respondents living with mother only where the majority had a higher number of sexual partners and reported to have ever given birth.

For instance, out of those living with single mother, 41% said to have given birth, this was followed by those living with caregiver 37%. Very few (22%) of those living with father had ever given birth- a figure lower than the others.

Table 11: ***Have you ever given birth and parental type cross tabulation***

		If yes, please indicate			
		Mother Only (N=46)	Father Only N=74	Both mother and father N=30	Care giver N=159
Ever given birth to a child?	Yes	41.3%	21.6%	26.7%	37.1%
	No	58.7%	78.4%	73.7%	62.9%
Total		100%	100%	100%	100%

On the number of sexual partners, a larger proportion of those living with mother had two or more sexual partners. On the contrary, the study noted a greater proportion of the inhabitants with both parents to be having one sexual partner. This is summarised in the figure below;

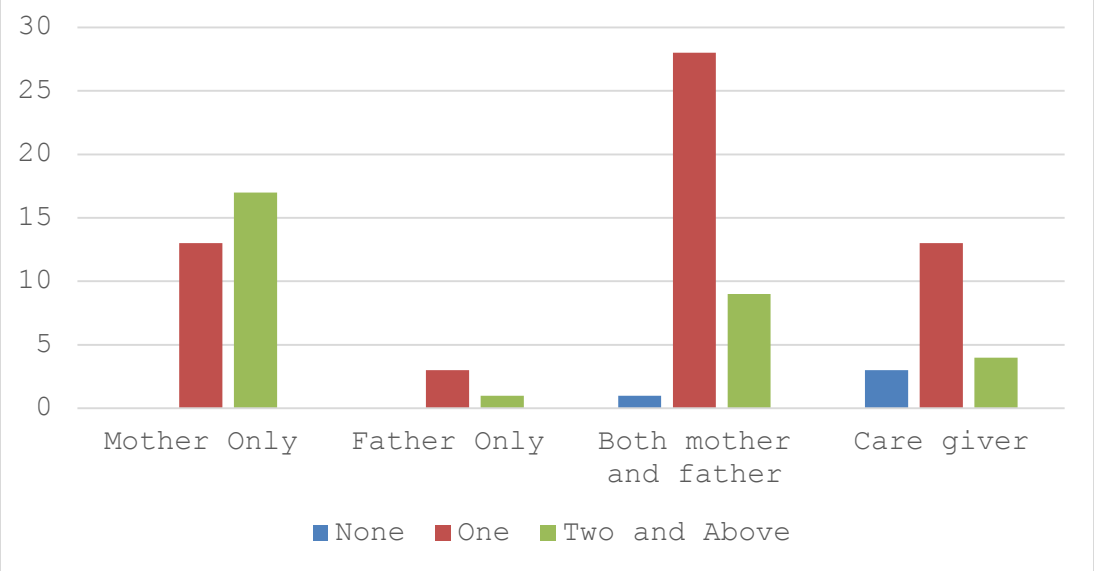

Figure 7: ***Number of sexual partners and parental type***

Those living with a caregiver showed a higher tendency towards sexual activity. Out of the respondents who were sexually active, 68% were living with a caregiver. This was followed by those living with mother only at 65%. Although lower, this could be a contribution to the high level recorded on ever having a child within this category. The summary is indicated in the table below;

Table 12: **Are you sexually active and parental type cross tabulation**

	Are you sexually active?				
Type of parent lives with	Yes		No		Total
Mother Only	30	65%	16	35%	46
Father Only	4	44%	5	56%	9
Both mother and father	37	50%	37	50%	74
Care giver	19	68%	9	32%	28
Total	**90**		**67**		**157**

These findings point out to what one of the key informant views who said:

"Most household heads are single mothers. They sell local brew like changaa and mnazi as a means to earn a living. They make these illicit brews at night and sleep during daytime. This leaves them with no time to talk to their children. They have abdicated their roles and have left everything to school".

Another key informant reported:

"Parents also do not separate their social life and their changaa (local brew) business, they engage the girls to sell for them where some customers especially men touch them and make sexual advances. In some cases, friends pool together and rent premises for their daughters, and they do not monitor to know what they do in the night".

4.6 Contraception barrier

Out of the respondents who were sexually active, 57% reported being using a contraceptive. This, however, showed a pattern where contraceptive used increased with age where a higher proportion (58%) of those aged 19 used a contraception compared to just 19% of those aged 17 and below.

This perhaps could be attributed to the design of contraceptive distribution program where as a key informant indicated:

> *"Although the government has trained community health workers and provided family planning commodities like pills and condom, teenagers have been left out and are not well targeted. Many parents fear that they will start engaging in sex if they are introduced to contraceptives early".*

There was a relationship between contraceptive knowledge and use where 78% of those who knew any contraceptive method were using a contraceptive while 99% of those who did not know any contraceptive method were not using any contraceptive. The most commonly used were implant (35%). This is summarised in the chart shown below.

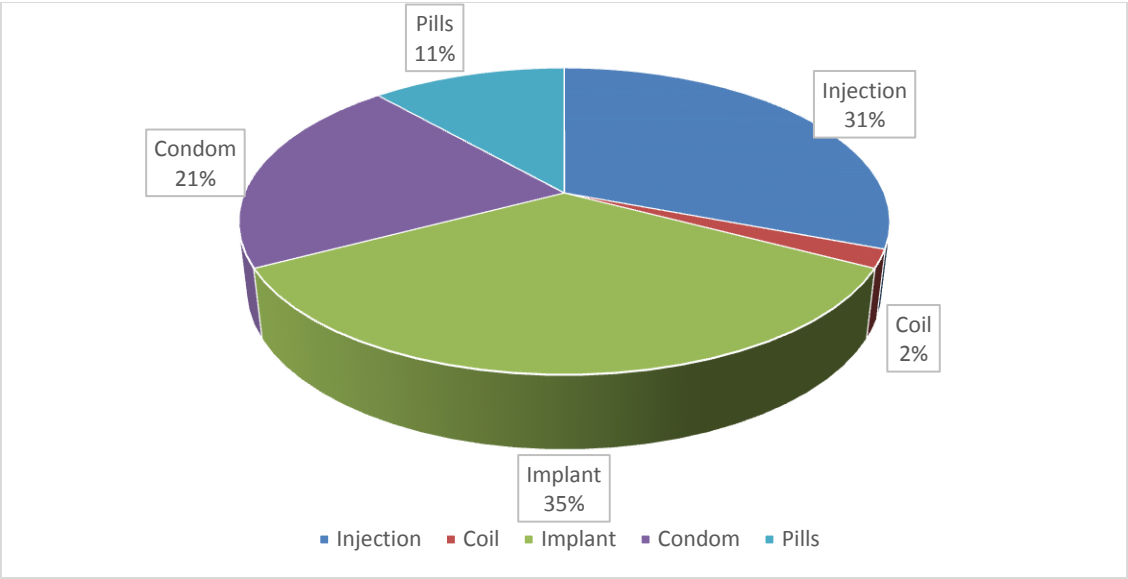

Figure 8: ***Methods of contraception used by teenagers (N=57)***

4.6.1 Access to contraception

Thirty-one percent of the respondents reported that they had a problem accessing contraceptives. Among these, the majority were either married or separated. Asked to specify the perceived barriers to contraception, the majority mentioned service provider (73%) and availability (67%).

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter synthesizes the empirical data and analysis presented in the previous chapter with findings made by other researchers on similar studies as covered in the literature review chapter. The discussion is hinged on: the individual risk factors contributing to adolescent fertility among young people, establish how adolescents perceive sexuality about consequences of sexuality and examine types of parental attachment that promote protection against teenage pregnancy. Additionally, it also entailed identifying forms of barriers that hinder teens from accessing contraceptives.

Based on the discussions of the findings, the chapter attempts to make a general evaluation of the study followed by a conclusion on the key factors contributing to teenage fertility in the coastal region. Further recommendations on what needs to be done in addressing adolescent pregnancy.

5.1 Discussion

From the study findings, it is evident that the level of teenage pregnancy within the study area was higher than the national (18%) and coastal region prevalence rate (25%) as per the KDHS 2008-09.

Numerous risk factors have been distinguished in the study that exposes teenagers to risks and vulnerability to factors that compromise protective behaviour that lead to adolescent pregnancy. The majority of the respondents who had ever been pregnant were

engaging in sex quite early. Teenagers at such a tender age are likely to be less equipped with knowledge and skills necessary to protect themselves against getting pregnant. They do not have the capacity to negotiate or make informed decisions. This reflects similar findings that have shown that initiating sex from age 18, or older is the resilient individual-level feature connected with having used a condom at first sex (Mmari, 2013 Donatien & Lindesey, 2014).

The study shows that most pregnancies were related level education. Few pregnancies occurred among respondents with secondary or college level of education compared to those with primary level education. This, therefore, supports other study findings that school attendance considerably delays entry into motherhood (Beguy 2013). Negative peer pressure has come out as a risk to teenage pregnancy. The majority of the respondents who were sexually active indicated that their friend was sexually active as well. The same trend was observed on drug and substance abuse as well. This echoes other findings in the country and world as a whole. For instance, in investigating patterns and determinants of entry into motherhood in two informal settlements in Kenya, having negative models in peers were associated with early childbearing among females teenagers (ibid). Similar findings have been made in America where a friend's childbearing increases an individual's risk of becoming a parent (Balbo, 2014). What is concerning here is that such pressure predisposes teenagers to unplanned pregnancy (Kabiru, 2014).

Although sexual and gender-based violence came out as risky factors during discussions with the key informant as drivers, the study could not exhaustively determine the extent to which this played a role in contributing to teenage fertility.

On how young people perceive sexuality and consequences, most teenagers indicated that they would want to have a baby to make them become women and feel important. The levels are higher among those who have ever given birth than those who never had. Worth noting also is the variation by type of parent where the majority of those living with either mother only or with a caregiver would want to have a baby to make them feel important.

Respondents living with a caregiver, however, attributed to their desire to have a baby as a way to help them get money from the baby's father and make a relationship with the child's father stronger. Similar responses were noted in education terms where unlike those with secondary level of education, teenagers with primary school level of education are likely to perceive getting pregnant as a way to get money from the baby's father and keep him around. This could be interpreted to mean that economic poverty is a key factor contributing to teenage pregnancy among teenagers living with a caregiver or mother.

The level of parental attachment was stronger between the respondents and their mothers compared to father and caregiver. Compared to respondents living with both father and mother, the study noted a higher level of risks among respondents living with mother only where the majority were sexually active, had a higher number of sexual partners and

reported to have ever given birth. This supports other findings where the involvement of both parents has shown to have a deterrent effect on teenage pregnancy (Katayamoyo 2010). The study has further shown that contraception utilisation increases with age. The findings are in harmony with the KDHS 2008-9 results that contraception among all women age 15-19 was the lowest regarding proportion of ever use of any method of contraception. Those expressing challenges are mainly married teenagers with the majority citing service providers a hindrance factor. It should be distinguished that the lone health facility within the study was a Catholic-sponsored facility. This was in itself an impediment to contraceptive access as the church does not support the use of such methods for birth control. A public health facility that could offer such services is located outside the settlement and young people cannot access such services for lack of transport. Although the government has trained CHW and provided FP commodities-pills and condoms. Teenagers have been left out and are not well targeted. Perhaps this could be a form of restriction similar to the one found in other countries where providers were most likely to set minimum age restrictions for certain contraceptives (Sidze, 2014).

5.2 Conclusion and recommendation

As factors contributing to teenage fertility, the study has identified early sexual debut, peer pressure, education and drug abuse as individual characteristics contributing to teenage pregnancy. The report shows that most teenagers would want to have a baby to make them become women and feel important. The hope of getting money and strengthening a relationship was a major factor among girls living with a caregiver as a determinant to pregnancy. Although most respondents indicated stronger attachment

towards their mothers, those living with both parents showed lower risks and tendency to teenage pregnancy compared to those living with single mothers only. The primary barrier to contraceptive was service providers' attitude and stigma towards adolescent.

Intervention programs should focus on creating awareness among teenagers that dissuade early pregnancy and the importance of women as valued member of society regardless of ever having a child or not. Single mothers need to be trained on parenthood. Economic empowerment programs targeting single mothers and caregivers need to be initiated and scaled up. There is a need for further research into the extent to which sexual and gender-based violence this played a role in contributing to teenage fertility.

Bibliography

Akwasi, K.-K. (2014). Attitudes of Gatekeepers Towards Adolescent Sexual and Reproductive Health in Ghana. *African Journal of Reproductive Health September*, 142.

Alemayehu, T. (2010). Determinants of adolescent fertility in Ethiopia. *Ethiop J Health Dev*, 24.

An Magritt Jensen, A. A. (2015). *Fertility and Poverty in Western and Coast Villages of Kenya.Re-Examining the Impacts of Female Autonomy on Fertility, Child Mortality and Poverty*.

Beguy, D. (2014). Unintended Pregnancies among Young Women Living in Urban Slums: Evidence from a Prospective Study in Nairobi City, Kenya. *PLOS ONE*.

Donatien Beguy, R. N. (2013, November). Entry into Motherhood among Adolescent Girls in Two Informal Settlements in Nairobi, Kenya. *Journal of Biosocial Science, Volume 45* (Issue 06), 721 - 742.

Edilberto Loaiza, M. L. (2013). *Adolescence pregnancy: Areview of the evidence.* New York: UNFPA.

Estelle M. Sidze, S. L. (2014, December). Young Women's Access to and Use of Contraceptives: The Role of Providers' Restrictions in Urban Senegal. *International Perspectives on Sexual and Reproductive Health, Vol. 40, No. 4 , 40*(4), 176-183.

Gilbert, O. (2014). Adolescent Motherhood in Kenya. *Ressearch on Humanities and Social Sciences*.

Goicolea, I. (2009). Risk factors for pregnancy among adolescent girls in Ecuador's Amazon basin: a case-control study. *Pan Am J Public Health* , 3.

Gyan, C. (2013). The Effects of Teenage Pregnancy on the Educational Attainment of Girls at Chorkor, a Suburb of Accra. *Journal of Educational and Social Research*, 53-60.

Hindin, M. (2012). *The Influence of Women's Early Childbearing on Subsequent Empowerment in sub Saharan Africa: A CrossNational Meta Analysis.* International Center for Research on Women (ICRW).

Ikamari, L. (2013). Prevalence and determinants of unintended pregnancy among women in Nairobi, Kenya. *BMC Pregnancy and Childbirth*, 3-9.

Isabel Goicolea, M. W. (2009). Risk factors for pregnancy among adolescent girls in Ecuador's Amazon basin: a case-control study. *Pan Am J Public Health* , 221–8.

JIN, H. M. (2012). *Sexual Behaviour amongst Youth in Colleges and Youth Centres in Mombasa.*

Joyce Kinaro, M. K. (2015). Perceptions and Barriers to Contraceptive Use among Adolescents Aged 15 - 19 Years in Kenya: A Case Study of Nairobi. *Health*, 85-97.

JOYCE MUMAH, C. W. (2014). *Coping with Unintended Pregnancies: Narratives from adolescents in Nairobi Slums.* Nairobi: African Population and Health Research Center.

K, S. (2010). Associations between early marriage and young women's marital and reproductive health outcomes: evidence from India. *International Perspectives on Sexual and Reproductive Health, 36*(3), 132–139.

Kabiru K Salami, M. A. (2014, December). Unmet social needs and teenage pregnancy in Ogbomosho, South-western Nigeria. *African Health Sciences , Vol 14*(4).

Katayamoyo, P. (2010). *Determinants of Teenage Pregnancy In Lusaka District:A dissertation submitted to the Universityof Zambia in partial fulfillment of the requirements for the degree of Masters in Public Health.*

KNBS. (2010). *Kenya Demographic and Health Survey 2008-09.* Calverton, Maryland: KNBS and ICF Macro.

KNBS. (2014). *Kenya Demographic and Health Survey Key Indicators.* Nairobi.

Kristin N. Mmari, E. K. (2013, September). Risk and Protective Correlates of Young Women's First Sexual Experiences in Rakai, Uganda. *International Perspectives on Sexual and Reproductive Health, Vol. 39*(No. 3), 153-162.

Kumi-Kyereme, A. (2014). Attitudes of Gatekeepers Towards Adolescent Sexual and Reproductive Health in Ghana. *African Journal of Reproductive Health* , 146.

Loaiza, E., & Liang, M. (2013). *Adolescent Pregnancy: areview of the evidence.* New York: UNFPA.

Marline, J. W. (2012). *Determinants of Teenage Fertility in Coast Province: Evidence from the 2008/9 Kenya Demographic and Health Survey (KDHS).*

Milly Marston, D. B. (2013, March). Predictors of Sexual Debut Among Young Adolescents In Nairobi's Informal Settlements. *International Perspectives on Sexual and Reproductive Health, , Vol. 39*(No. 1), 22-31.

MOH. (2011). *Kenya Service Provision Assessment.* Nairobi: MOH.

Mumah, J. K. (2014). *"Coping with unintended pregnancies: Narratives from adolescents in Nairobi's slums" STEP UP Research Report* . Nairobi: African Population and Health Research Center.

Nalwadda, G. K. (2012). *Contraceptive Use among Young People in Uganda: Exploration of obstacles, enablers, and quality of services.* Kampala and Stockholm: Karolinska Institutet and Makerere University.

National Bureau of Statistics. (2010). *Mombasa Informal Settlement Survey, Kenya.* Nairobi: Kenya National Bureau of Statistics.

National Council for Population and Development. (2013). *Kenya Population Situation Analysis.*

Nicoletta Balbo, N. B. (2014). Does Fertility Behavior Spread among Friends? *American Sociological Review*, 412-431.

Njonjo, K. S. (2010). *Youth Fact Book.* Nairobi: Institute of Economic Affairs.

Obare F., B. H. (2011). *Levels, trends and determinants of contraceptive use among adolescent girls in Kenya.* Nairobi: The Population Council.

Plan International. (2012). *Factors Influencing Girls' Access, Retention and Completion of Primary and Secondary School Education.* Nairobi: Plan International.

Rhoune Ochako, M. M. (2015). *Barriers to modern contraceptive methods uptake among young women in Kenya: a qualitative study.* Nairobi.

Russell M Viner, E. M. (2012, April 28). Adolescence and the social determinants of health. *The Lancet , Vol 379*, 1564 and 1567.

Sarah E Neal, V. C.-M. (2015). Adolescent first births in East Africa:disaggregating characteristics, trends and determinants. *Reproductive Health*.

Sidze, E. M. (2014). Young Women's Access to and Use of Contraceptives: The Role of Providers' Restrictions in Urban Senegal. *International Perspectives on Sexual and Reproductive Health*, 176–183.

Tebogo M. Mothiba, M. S. (2012). Factors contributing to teenage pregnancy in the Capricorn district of the Limpopo Province. *Curationis*, 1-5.

Tewodros Alemayehu, J. H. (2010). Determinants of adolescent fertility in Ethiopia. *Ethiop. J. Health Dev,* 24.

UNFPA. (2013). *ADOLESCENT PREGNANCY:A Review of the Evidence.* New York: UNFPA.

UNFPA. (2014). *State of World Population 2014.* New York: UNFPA.

United Nations. (2013). *Adolescent Fertility Since the International Conference on Population and Developement (ICPD) in Cairo.* New York: United Nations.

WHO. (2007). *Adolescent pregnancy –Unmet needs and undone deeds.*

WHO. (2008). Adolescent Pregnancy. *MPS Notes,* 1.

World Bank. (2010). *Determinants and Consequences of High Fertility:A Synopsis of the Evidence.* Washington, DC: World Bank.

World Bank. (2014). *2.17.* Retrieved from www.worldbank.org:

http://wdi.worldbank.org/table/2.17#

Appendices

Appendix 1: Study questionnaire

A. Social and demographic information

1. **Sex**

   Male ☐ Female ☐

2. **Age**……years

3. **Marital status**

   - ☐ Single
   - ☐ Married
   - ☐ Separated
   - ☐ Cohabiting

4. **Level of education**

   - ☐ None
   - ☐ Primary level
   - ☐ Secondary level
   - ☐ College level
   - ☐ University level

5. **Religion**

   - ☐ Christian
   - ☐ Muslim
   - ☐ Catholic

- Others (please specify)…….

6. Occupation

- Formal employed
- Informal employment
- Unemployed
- Other *(please specify)*……..

B. Individual risk factors

7. Have you ever delivered a child?

   - Yes
   - No

8. If 'No' to above, are you currently pregnant?

   - Yes
   - No

9. Do you use any non-medically prescribed drug?

   - Yes
   - No

10. If yes, indicate the type of drug.

    - Cigarette
    - Alcohol

- Miraa
- Cocaine
- Heroine
- Local brew
- Others *(Please specify)*……..……

11. Does your friend (s) abuse any of the above drugs?

- Yes
- No

12. Are you sexually active?

- Yes
- No

If you marked no, kindly continue to question No. 15

13. If yes, at what age was your first sexual encounter? *(Please indicate age in years)*.....
14. How many sexual companions do you presently have?

- ……

15. Is your friend sexually active?

- Yes
- No

16. Are you attending any school or college?

- Yes
- No

17. If no, what is your highest education attainment? *(please specify)*

C. Parental attachment

18. Are you living with your parent (s)?

- Yes
- No

19. If yes, please indicate

- Mother only
- Father only
- Both mother and father
- Care giver

20. Now I need you to ponder about your current relationship with your father. If your father is no longer living with you, please provide information on the relationship that existed with him. Skip if you have never lived with your father. **Give your response on a scale of 1 to 5 by ticking in the appropriate box. Where: 1=Very Little; 2=A little; 3=Moderate; 4=Quite Much; 5=Very Much**

Statement	**1**	**2**	**3**	**4**	**5**
How emotionally close or connected do you feel with your father?					
How much do you like spending time with your father?					
How much do you look up to or admire your father?					
How much do you trust your father to be faithful/loyal to you?					

21. Now I need you to reflect about your current relationship with your mother. If your mother is no longer living, please provide information on the relationship that existed with him/her. Skip if you have never lived with your mother. **Give your response on a scale of 1 to 5 by ticking in the appropriate box. Where: 1=Very Little; 2=A little; 3=Moderate; 4=Quite Much; 5=Very Much**

Statement	**1**	**2**	**3**	**4**	**5**
How emotionally close or connected do you feel with your mother?					
How much do you like spending time with your mother?					
How much do you look up to or admire your mother?					
How much do you trust your mother to be faithful/loyal to you?					

22. Now I need you to contemplate about your current relationship with your care giver. If your caregiver is no longer living, please provide information on the relationship that existed with him/her. Skip if you have never lived with a care giver. **Give your response on a scale of 1 to 5 by ticking in the appropriate box. Where: 1=Very Little; 2=A little; 3=Moderate; 4=Quite Much; 5=Very Much**

Statement	**1**	**2**	**3**	**4**	**5**
How emotionally close or connected do you feel with your care giver?					
How much do you like spending time with your care giver?					
How much do you look up to or admire your caregiver?					
How much do you trust your caregiver to be faithful/loyal to you?					

D. Structural Barriers to contraception

23. Do you know of any type of contraceptive?

- ☐ Yes
- ☐ No

24. If yes, name any five

25. Are you currently using a contraceptive?

- ☐ Yes
- ☐ No

26. If yes, please specify the method?

27. Do you have a problem getting a contraceptive of your choice?

- Yes
- No

28. If yes, please specify

- Service provider
- Religion
- Partner
- Cost
- Availability

29. If you ticked service provider, to what extent would you agree to the following statements?

Use a scale of 1 to 5 where: 1=strongly disagree (SD); 2=disagree (D) 3=neutral (N); 4=agree; 5=strongly agree

Statement	**SD**	**D**	**N**	**A**	**SA**
Nurse stigmatize me when I go for contraceptives					
I will be treated harshly if I went to seek contraceptive at the health facility					
Nurses do not acknowledge adolescents experience as contraceptive users					
I can't afford the costs of accessing the services					

E. Perception of sexuality in relation to teenage pregnancy

30. To what extend would you agree to the following? *(please tick in the appropriate box)*

Use a gauge of 1 to 5 where: 1=strongly disagree (sd); 2=disagree (d) 3=neutral (n); 4=agree; 5=strongly agree

Statement	**SD**	**D**	**N**	**A**	**SA**
Having a baby would provide me somebody to adore.					
Having a baby would make me feel significant.					
Having a baby would aid me keep the baby's father nearby.					
Having a baby would aid me get cash from the baby's father.					
Having a baby could get me out of a bad state.					
Statement	**SD**	**D**	**N**	**A**	**SA**
Having a baby would make me a lady.					
Having a baby would make other individuals think I am significant.					
Having a baby would make my connection with the baby's dad stronger.					
Having a baby means someone will adore me					

Appendix 2: Key informant interview guide

A. Social and Demographic Information

1. Sex

   Male ☐ Female ☐

2. Age……Years

3. Institution…….Position…….

B. Risk Factors

4. What would you contemplate to be the main risk factors contributing to fertility among girls aged 15-19 in this area?
5. How do these factors contribute to teenage fertility?

C. Barriers to accessing contraceptives

6. In your opinion, is there a connection between teenage fertility and access to contraceptive in this area?
7. If affirmative, what kind of link do you think exist?

D. Parental Attachment

8. What sort of role do you think parents play with regard to teenage fertility?
9. Why do you reflect this is the scenario?

E. **Pregnancy Perception**

10. How would you perceive a girl getting pregnant at the age of 15-19 years?
11. Why this perception (s)
12. What do you consider should be done as a commendation in addressing adolescent fertility in this region?