Socio - economic determinants of teen pregnancies in Mozambique

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A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Arts in Demography
Common Course
College of Population Studies
Chulalongkorn University
Academic Year 2018

ปัจจัยทางเศรษฐกิจสังคมของการตั้งครรภ์ในวัยรุ่นของสาธารณรัฐโมซัมบิก

นายอานาร์ลโด ทิโมเทโอ มันลาเต

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต
สาขาวิชาประชากรศาสตร์ ไม่สังกัดภาควิชา/เทียบเท่า
วิทยาลัยประชากรศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
ปีการศึกษา 2561

Thesis Title	Socio - economic determinants of teen pregnancies in Mozambique
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Field of Study	Demography
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อานาร์ลโด ทิโมเทโอ มันลาเต : ปัจจัยทางเศรษฐกิจสังคมของการตั้งครรภ์ในวัยรุ่นของสาธารณรัฐโมซัมบิก. (Socio - economic determinants of teen pregnancies in Mozambique) อ.ที่ปรึกษาหลัก : รัตติยา ภูละออ

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การตั้งครรภ์ของวัยรุ่นถือเป็นปัญหาสาธารณสุขทั่วโลก จากข้อมูลของกองทุนประชากรแห่งสหประชาชาติ (2014) รายงานว่าประเทศโมซัมบิกเป็นประเทศที่มีอัตราการตั้งครรภ์ของวัยรุ่นสูงที่สุดในภูมิภาคแอฟริกาตอนใต้ จากปี 2011 ถึงปี 2015 สัดส่วนของวัยรุ่นที่ตั้งครรภ์เพิ่มขึ้นอย่างมีนัยสำคัญจาก 38% เป็น 46% (IMASIDA, 2015) ดังนั้นจึงเป็นสิ่งสำคัญในการศึกษาปัจจัยที่นำไปสู่การเกิดการตั้งครรภ์ของวัยรุ่นเพื่อให้คำแนะนำด้านนโยบายในเรื่องนี้

การศึกษาก่อนหน้านี้ในประเทศโมซัมบิกใช้วิธีการเชิงคุณภาพ การศึกษาครั้งนี้เติมช่องว่างทางวรรณกรรมโดยใช้การถดถอยแบบลอจิสติกแบบไบนารีด้วยชุดข้อมูลแบบตัดขวางที่จัดทำโดยการสำรวจสุขภาพ (IMASIDA-Demographic Health) (2015) ถูกนำมาใช้โดยใช้ตัวอย่างของผู้หญิง 354 คนที่มีอายุ 20 ปีเป็นชุดข้อมูลที่ช่วยให้วิธีการศึกษาย้อนหลัง กลุ่มอายุ 20 ปีอยู่ในขอบเขตของวัยรุ่นจึงสันนิษฐานให้กลุ่มนี้ยังคงบุคลิกลักษณะของเมื่อยังวัยรุ่น การวิเคราะห์เริ่มที่การวิเคราะห์เชิงพรรณนาเพื่อเปรียบเทียบลักษณะของหญิงสาวในปัจจัยทางเศรษฐกิจและสังคมที่แตกต่างกัน แล้วจึงใช้แบบจำลองการถดถอยโลจิสติกเพื่อทำนายความเป็นไปได้ของหญิงสาวอายุ 20 ที่เคยตั้งครรภ์หรือตั้งครรภ์ในช่วง 5 ปีที่ผ่านมาก่อนการสำรวจ

ผลการศึกษาครั้งนี้แสดงให้เห็นว่าการศึกษามีความสำคัญอย่างมากในการอธิบายการตั้งครรภ์ของวัยรุ่นในประเทศโมซัมบิก หญิงสาวที่มีระดับการศึกษาสูงกว่ามีโอกาสน้อยที่จะตั้งครรภ์ในวัยรุ่นเทียบกับผู้หญิงที่มีการศึกษาระดับประถมหรือต่ำกว่า ภูมิภาคที่อยู่อาศัยยังแสดงให้เห็นว่ามีความเกี่ยวข้องกับการตั้งครรภ์วัยรุ่น หญิงสาวที่อาศัยอยู่ในภาคใต้ ซึ่งอยู่ใกล้กับเมืองหลวง มีโอกาสน้อยกว่าที่จะตั้งครรภ์หรือตั้งครรภ์ในปัจจุบัน เมื่อเทียบกับกลุ่มที่อาศัยอยู่ในภาคเหนือ การศึกษาครั้งนี้แสดงให้เห็นว่าจำเป็นต้องมีการดำเนินการที่แข็งแกร่งในการส่งเสริมการศึกษาที่สูงขึ้นสำหรับวัยรุ่น และลดความไม่เท่าเทียมเชิงพื้นที่เพื่อลดอุบัติการณ์การตั้งครรภ์ของวัยรุ่น

สาขาวิชา	ประชากรศาสตร์	ลายมือชื่อนิสิต .....
ปีการศึกษา	2561	ลายมือชื่อ อ.ที่ปรึกษาหลัก .....

6086907151 : MAJOR DEMOGRAPHY
KEYWORD: Socioeconomic determinants, Mozambique, Teen Pregnancy, Pregnancy

Arnaldo Timoteo Mandlate : Socio - economic determinants of teen pregnancies in Mozambique. Advisor: Asst. Prof. Ruttiya Bhula-or, Ph.D.

Teen pregnancy is considered a worldwide public health issue. According to United Nations Population Fund (2014), Mozambique was reported to be the country with the highest teen pregnancy rate in the Southern Africa region. From 2011 to 2015, the proportion of pregnant teens rose significantly from 38% to 46% (IMASIDA, 2015). Thereby, it is important to study factors leading to teen pregnancy incidence in order to draw policy recommendations in the issue.

Previous studies in Mozambique applied a qualitative approach. This study fills the literature gaps using the binary logistic regression with a national cross–sectional dataset provided by IMASIDA-Demographic Health survey (2015) is applied using a sample of 354 women aged 20 years old as the dataset allows a retrospective approach. The age group 20 years old is at the boundary of teenage, therefore women at aged 20 are assumed to maintain the same characteristics as their teenage. A descriptive analysis was firstly performed to compare characteristics of young women in different socioeconomic factors. Secondly, a logistic regression model was applied to predict the likelihood of young women aged 20 either ever been pregnant or currently pregnant in the last 5 years preceding the survey.

The results of this study show education attainment is highly significant in explaining teen pregnancy in Mozambique. Young women with higher level of education are less likely to either ever been pregnant or currently pregnant than those with primary and lower education. The region of residence also showed to be associated with teenage pregnancy. Young women living in South region, a proximity to the capital city, are less likely to either ever been pregnant or currently pregnant than those living in North region. This study shows that a strong intervention in promoting higher education for teens and reduce spatial inequality is needed to reduce teen pregnancy incidence.

Field of Study:	Demography	Student's Signature .....
Academic Year:	2018	Advisor's Signature .....

ACKNOWLEDGEMENTS

First of all, I would like to express my deepest gratitude to the Government of the Kingdom of Thailand, which, through the Thai International Cooperation Agency (TICA) in the field of mutual cooperation with the Government of the Republic of Mozambique offered me a scholarship Master's degree in demography at Chulalongkorn University, Thailand. Without this precious gesture I certainly could not have studied and completed the course with success. My thanks also extends to Chulalongkorn University, particularly to the governing body, staff of professors, and all workers of the college of population studies (CPS) for unconditional support in everything from the beginning to the end of the course program. I will be forever grateful to all of them!

For my supervisor Assistant Professor Ruttiya Bhula-or, Ph.D., who with patience dedicated her precious and valuable time helping me and supporting me during all my research work I want say to her thank you so much! I cannot forget to also express my gratitude to Associate Professor Wiraporn Pothisiri, Ph.D. and Assistant Professor Jongjit Rittirong, Ph.D. for their advice and enlightment when I needed it most.

None of this would have happened without the government of Mozambique through the Ministry of Interior - National Migration Service (SENAMI), the institution to which I belong, which first authorized and secondly created conditions for my studies to materialize. I also want to acknowledge and personally thank Mr. Alberto Sitoe and Mr. José Cofe, who believed and encouraged me to continue my studies at a moment when I myself did not believe I could do it. To all my co-workers in general who directly or indirectly gave their moral support during this long and not always easy journey I say thank you!

And finally I want to leave a special message of affection and gratitude coming from the deepest of my heart to my children Lara and Lars, who were the source of my motivation, strength and courage, and who, even complaining about my long absence, they always believed that we would be together again. This gratitude is also extended to all my relatives who from the beginning put confidence in me and always gave their moral support.

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CHAPTER I

INTRODUCTION

1.1 Introduction

In recent years, studies have paid attention on sexual behavior and pregnancy among female teenagers in Sub-Saharan Africa. The major concern of the studies has been the risk of HIV-AIDS infection, school attendance and education attainment, health outcomes, early sexual debut, early marriage, teenagers' vulnerability and economic assets. The results of the studies have shown that teen girls who initiated intercourse at an early age are more likely to get pregnant earlier and contract sexually transmitted diseases, which was found bringing traumatic consequences for the whole life of teenagers (Birdthistle et al., 2009; Chae, 2013; Erulkar & Ferede, 2009; Mojola, 2011; Nyirenda et al., 2010).

Teen pregnancy continues to be a worldwide challenge, especially for the developing countries (World Health organization et al., 2000). It is estimated that 11% of childbirths worldwide occur in adolescents aged 15–19, and more than 90% occur among low-income and average-income groups (World Health Organization, 2011). According to Survey of Indicators of Immunization, Malaria and HIV/AIDS in Mozambique (IMASIDA), the proportion of pregnant teens in Mozambique rose significantly from 38% to 46% from 2011 to 2015. About (54%) of teenagers in rural areas had already started childbearing against (35%) in urban areas. social norms, cultural habits, education, age in the first sexual intercourse, age at marriage, contraceptive use and poverty among others as the mobs of the problem (Dekker, 2014; Eloundou-Enyegue & Parfait, 2004; Ferré, 2009). Pregnancy in teenage can

damage teens' health and well-being, as well can bring high costs to families and to society as a whole (Ahmad et al., 2016).

As if it was not enough they are still at serious risks of having an abortion because of problems related to childbirth, such as eclampsia and obstructed work which can lead to premature childbirth or to the birth of low-weight babies (Gideon, 2013; World Health organization et al., 2000). In addition the health of babies born to adolescent mothers face a higher risk of infant mortality, low birth weight, and premature delivery (Conde-Agudelo et al., 2005; Machado, 2006; Sah et al., 2015). In Thailand, for example, when birth records of babies born between 2004-2013 were analyzed, a United Nations Children's Fund`s study showed that babies whose mothers were adolescent had averagely lower birth weight (from 12.3% to 17.5 %) than the children from adult mothers (UNICEF, 2015).

Education is strongly associated with low levels of teen pregnancy (Hockaday et al., 2000). According to the study of United Nations Population Fund (UNFPA), spending more time in schools keep teenagers away from risky environments, such as home or communities, thus diminishing the chance of getting pregnant. Early pregnancy is one of the causes of teen girls' schools dropouts (United Nations Population Fund, 2013). Discrimination actions and stigma from colleagues and society towards pregnant adolescents may be the cause. Schools codes and regulations themselves do not encourage pregnant students to continue their studies. In Mozambique, for example, pregnant teen girls were expelled from school because pregnancy was considered a breach of school rules and regulations, so pregnant teen girls could not continue to attend classes (Dekker, 2014; Gideon, 2013).

Furthermore, the pregnancy at an early age can also be an obstacle for the teen girls to complete the secondary degree (Clark & Mathur, 2012). Teen girls, who get pregnant before concluding secondary, can see their life expectations dismounted taking into account school girls who become pregnant rarely return to school after give birth because they must care for their children (Odu et al., 2015). For those who returned to school after pregnancy, a significant number were considered by their teachers to be below the minimum, which made them feel as if they had failed and displaced (Birch, 1987).

Meekers and Ahmed (1999) and Eloundou-Enyegue and Parfait (2004) found that a third quarter of school dropouts in rural areas in Kenya are related to teenage pregnancies. Studies have shown correlation between education and adolescent pregnancy emphasizing that teen girls who spend more time in school have little tendency to get pregnant, prepare them for jobs and livelihoods, increase their self-esteem and status within families and communities, and give them more voice in decisions that affect their lives, in addition to reduce the likelihood of early marriage, delay procreation and lead to healthier births (Biddlecom et al,. 2007;United Nations Population Fund, 2013).

Meanwhile achieving a secondary degree can be a gateway to getting a job and keeping it, and in this way contribute to the family's livelihood (Clark & Mathur, 2012). If the teen girls can postpone the pregnancy for later it is more likely to succeed socially, since they will stay longer in school and also increases the chance of empowering themselves economically considering that good studies bring more opportunities to achieve good jobs and attractive (Chaaban & Cunningham, 2011)

.Teenage mothers are more likely to live in poverty throughout their lives due to lack of employment opportunities because of low level of schooling, without neglecting the risk of perpetuating a cycle of poverty in families and communities (Odu et al., 2015). The transition from simple teenager to teen mother can bring risks of psychological suffering (Wilson-Mitchell et al., 2014). A study conducted by Pinheiro et al. (2012) found 13.3 % prevalence of suicidal behaviors with 1.3% attempts to kill themselves among teenagers. The same study revealed that adolescents with greater social support presented lower prevalence than those with lower support.

1.1.1 Overview of Mozambique

Mozambique, officially designated as the Republic of Mozambique, is a country located in the Southeast of the African continent. According to the preliminary results of the 2017 census, Mozambique has 28,861,863 inhabitants, an increase of 8,282,598 or 28.7% compared to the 20,579,265 registered in the 2007 census. Education has improved compared to previous years. The number of women and men without schooling was lowered to 29% and 17% in their respective 2015, compared with the previous 44% and 25% in 2003 (Ministério da Saúde et al., 2015). Improvement has been related to women and men who have completed the secondary level of education, 1% of men and 0.5% of women in 2003 to 5% of men and 3% of women in 2015.

1.1.2 Health

Regarding health, Mozambique is one of the 30 countries most affected by the HIV/AIDS pandemic, with a 13.2% HIV prevalence due to delayed diagnosis, poor prevention, insufficient treatment coverage and low adherence (Word Health Organization et al., 2017). Every year there are more than 120,000 new HIV

infections. The prevalence of malaria in children increased by two percentage points, having been 38% in 2011 and 40% in 2015, with greater incidence in rural areas than in urban ones, however, there have been improvements in the care of children and pregnant women. 70% of children under five and 76% of pregnant women have access to mosquito networks (Ministério da Saúde et al., 2015).

The National Health Service, with 1,277 health facilities, provides public health with more than 90% coverage of the nationwide. . According to Health Strategic Plan 2014-2019 (Ministério da Saúde, 2013). It stated that in the last 10 years there has been progress in the provision of health services, however there is still much to be done to reduce inequalities across regions. These inequalities are closely linked to economic issues, and in many countries access to sexual and reproductive health is 20% lower in low-income when compared to high-income households (Nixon & waters, 2017). Recent data shows a double ascent of access to contraceptives in order, 11.3% in 2011 and 25.3% in 2015, but even so inequalities remains (Nixon & waters, 2017). For example, the prevalence of contraceptive in Sofala was only 14.4%, 17.8% in Zambézia and 18.1% in Manica, comparatively to 46.5% in Maputo city which was (Ministério da Saúde et al., 2015).

However, the fund allocated to health is very low for achieving the goals. . 45% of population is young population (15 years old and younger) emphasize a need for greater investment in the areas of health and education (Nixon & waters, 2017).

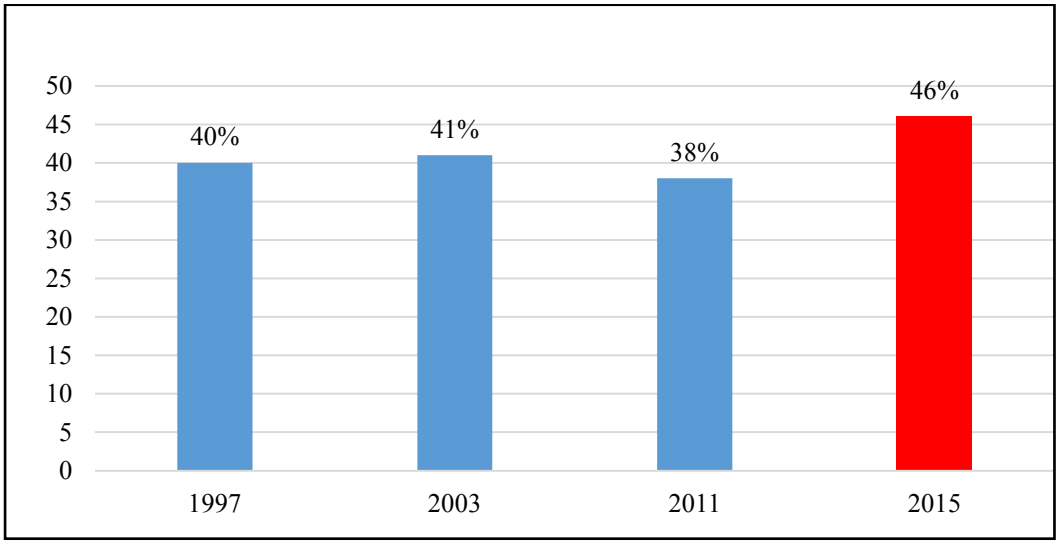
1.1.3 Teen fertility in Mozambique

In general, Mozambique has high fertility rates. The number of children per woman in reproductive age reported in 2003 was 5.5, 5.9 in 2011, and finally 5.3 in

2015 [Nixon and waters (2017)]**.** In terms of teen pregnancy specifically, 38% of teen girls had a surviving child and 8% were pregnant at the time of survey (Ministério da Saúde et al., 2015). At the level of the Economic Community for the development of Southern Africa (SADC), Mozambique is at the top in terms of teen pregnancy (Presler-Marshall & Jones, 2012). The proportion of young women already mothers or pregnant at age group 15 -19 is quite large (46 %), almost the same to women in the age group 20-24 which is 48.2 % (Nixon & waters, 2017).

The situation of teen pregnancy also varies across regions and provinces. Teen pregnancy is higher in rural areas and among poorer or lower educated young women, when compared to their peers in urban areas, with high economic status as well as higher schooling (Ministério da Saúde et al., 2015) . At the provincial level while Cabo Delgado showed the highest rate of teen pregnancy (65%) and Maputo city showed the lowest rate 18%. Regionally, the North presents on average 62% of teen pregnancy , the Central region 43.5% and finally the South region with 32% (Ministério da Saúde et al., 2015). Pregnancy in teenagers is almost associated with the early onset of sexual activity, which is in turn, negatively associated with the low level of education, economic status and residence. About 6 out of 10 teenagers, 64% had already started childbearing, 3 out of 10 with a secondary or higher level 31% (Ministério da Saúde et al., 2015). According to United Nations Population Fund (2013), Mozambique is a Southern African country with the highest rate of teen girls who reported pregnancy before the age of 18 with 42%.

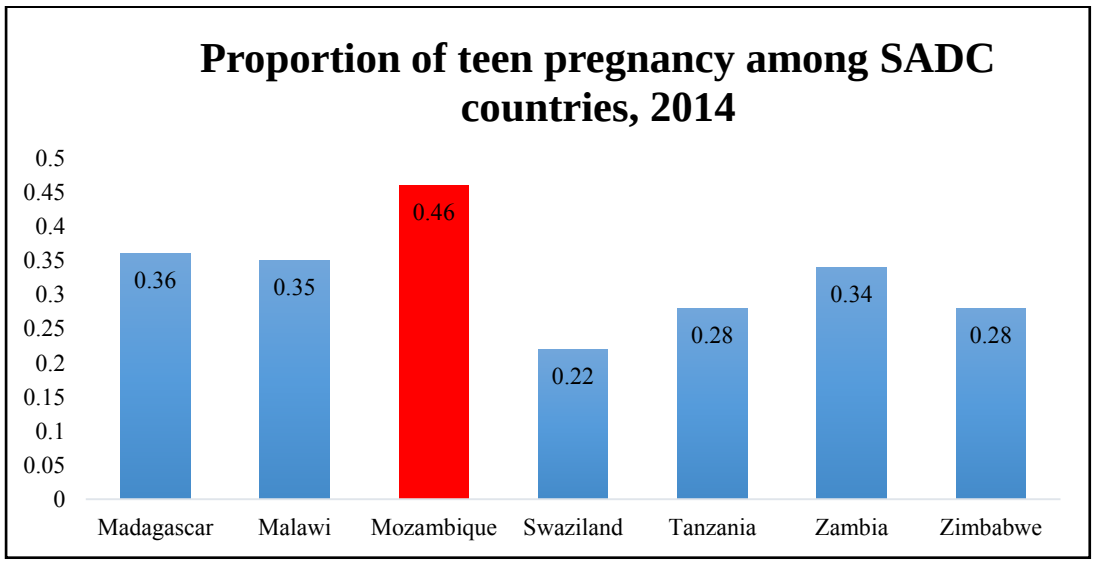
Figure 1. Percentage of teen pregnancy in Mozambique, 1997-2015



Source: Author's own compilation from IMASIDA, 2015

In addition, the regional difference is not only regarding to access to education and wealth. It was also found contraceptive use associated to the teen pregnancy. Just by way of example , prevalence of contraceptives in the province of Sofala was only 14.4%, in the Zambézia 17.8%, Manica 18.1%, much lower percentages compared to the city of Maputo, where the prevalence of contraceptives reaches the 46.5 % (Ministério da Saúde et al., 2015; Nixon & waters, 2017). However, even in situations in which contraceptives are available, statistics show that the age group 15-19 particularly, only 14.1% has used, proportion that is below the general national rate (25.3%) (Nixon & waters, 2017).

Figure 2. Teen pregnancy rates among Southern African Development Community



Source: Author's own compilation from UNFPA (2014)

1.1.4 Law and policies protecting teenagers

Early and forced marriages are pointed as one of the causes of teenage pregnancy in Mozambique (Ahmad et al., 2016; Rock, 2013). The Declaration of the Rights of the Mozambican Child 1979; Dispatch No. 39 / GM / 2003 on sexual harassment 2003; Articles (Articles 47, 120, 121 and 236) of the Constitution of the Republic 2004; Family Law (Law 10/2004 of August 10) 2004; Law 6/2008, of 9 July, on Prevention and Combating Trafficking in Persons, especially women. In 2009, a law was passed against domestic violence, which criminally punishes anyone who practices violence against women, marital rape and sexual harassment (Baird et al., 2011).

At the international level, the Universal Declaration of Human Rights imposes the maturity of the parties involved as a condition for "free and complete" consent to informed decision-making about the lifelong partner. Along the same lines, Article 16 (2) of the Convention on the Elimination of All Forms of Discrimination against Women provides that "the promise of marriage and the marriage of children shall not

produce legal effects and shall take all necessary measures, including legislative provisions ". "., must be taken to define a minimum age for marriage".

On December 1, 2015 was approved by the 42nd Ordinary Session of the Council of Ministers the National Strategy for Prevention and Combating Premature Marriages in Mozambique (2016-2019). One of the main objectives of this plan is to mitigate the incidence of early marriages among teenagers, which is considered the main cause of teen pregnancy. According to UNICEF (2015) 48% of women aged 20-24 were married before age 18 and 14% of teenagers of the same age group were married before age 15. The Northern provinces of the country, namely Cabo Delgado and Nampula, 61% and 62% of teenagers married before age of 18 respectively. Niassa, which is also one of the provinces located in the North of the country, has the highest rate of teenagers who married before the age of 15.

It should be noted that traditional practices, such as initiation rites[1], are deeply rooted in North region when compared with other regions of the country. However, they are considered as a risk to health and rights violation of teen girls and yet little or nothing has been done to discourage this practice.

1.2 Contribution of the study

This study attempts to fill in the literature gap by examining how socioeconomic status are associated with teen pregnancy. The literature on this important subject is rather little in Mozambique despite its social importance.

The understanding of the socio-economic factors that are the root causes of the issue would probably reduce the expenses in the National Health system and into

[1] Sexual initiation rites are a common action in rural Mozambique and consist of preparing girls between the ages of 9 and 13 to sexually satisfy their husbands, fulfill their desires and be pleasing to their future family. "A horrible practice," consider a UNICEF.

families, this study provides useful information to policy makers in order to adjust them and thereby contributes to reduce teen pregnancy rates. In addition, the study will provide a better and updated understanding of this incidence. It will contribute to the enrichment of the literature in demographic studies and provide policy recommendations.

1.3 Scope of the study

This study focuses on understanding which socioeconomic factors impact on pregnancy among young women (age of 20) in Mozambique during a single period of time. The cross-sectional data provided by Demographic Health Survey 2015 IMASIDA is applied in this study. It is a retrospective study to investigate which socioeconomic factors impact on teenage pregnancy, so instead of using age group 15-19, a sample of young 360 young women age 20 was selected.

1.4 Research question

What are socioeconomic determinants impacting on teen pregnancy?

1.5 Research objectives

- To investigate what socioeconomic determinants impact on teen pregnancy in Mozambique.
- To provide recommendations and suggestions in order to reduce a teenage pregnancy.

1.6 Definition of key concepts

1.6.1 Teenage

There is consensus in the literature about when the teenage phase starts and when it ends. According to UNICEF (2011), teenage can be divided into two phases: early teenage from 10 to 14 years and late teenage from15 to 19 years. It is in the early teenage phase in which physical changes usually begin, usually beginning with an outbreak of growth and soon followed by the development of sexual organs and secondary sexual characteristics. Boys and girls begin at this stage to become aware of their gender and their behaviors and appearance are adjusted in function of this to comply with the social norms perceived.

In the late teenage the analytical and reflexive capacity take place although the brain continues to develop. Teen girls at this stage face more risks than boys with regard to health outcomes, depression and gender-based discrimination (UNICEF, 2011). The "teenage" can still be defined as the intermediate age between childhood and adulthood, where a series of changes, since physical, psychological, emotional and economic occur (Cappa et al., 2012; Chae, 2013).

This is a retrospective study and the sample is selected from young women age 20 years, since is out of adolescence. Age group 20 has multiple advantages because is located at boundary between teenage and adulthood, so it is assumed that the young women age 20 still maintain many teenage characteristics. Despite teenage range is 10 to 19 years, for this study teenagers are considered those who are in age group 15- 19 due to the data limitation. The Health Demographic Survey (DHS) and other literature women´s reproductive age starts at age 15 and ends at 49 years.

1.6.2 Pregnancy

Pregnancy also known as gestation, is the time during which one or more offspring develops inside a woman (Landon, 2009). It occur in a natural way that is through sexual intercourse or artificial processes, called assisted reproductive technology and childbirth occurs normally 40 weeks after the last menstrual period (Lakshmi et al., 2016).

1.6.3 Teenage pregnancy

Teenage pregnancy is pregnancy in females under the age of 20 (Hofferth et al., 2001). Some authors distinguish between the first adolescence that occurs from the 10-14 years and the last one that takes place of the 15-19 years of age (Machado, 2006). For the present study, teen pregnancy will be that occurs in young women aged 15 – 19 years. This is the retrospective study. This study includes women age 20 who ever been pregnant or currently pregnant, excluding those who had first sex at age 20. However, the abortion and miscarriages are missing in the dataset. This study, thereby, cannot analyse data of those who might conduct abortion and experience miscarriage.

1.7 Outline of the thesis

The thesis comprises five chapters. The first chapter is reserved to introduce prominence to the situation of teen pregnancy in Mozambique, laws and policies aiming to protect the teen girl against violation of her rights, followed by chapter two. The chapter two is devoted to literature review. The third chapter is devoted to the

conceptual framework and methodology of the study. The forth chapter shows the findings and discussion, and finally the fifth chapter presents the conclusion and recommendations based on the findings of the study.

CHAPTER II

LITERATURE REVIEW

This chapter describes key related theories and the conceptual framework of this study. The first section explains some important theories of fertility, theories applied to fertility and determinants of teen fertility. The second section highlights literature of determinants of teen pregnancy, followed by the conceptual framework of this study.

2.1 Fertility theories

Teenage pregnancy profoundly affects girls' lives in almost every perspective of their lives. In this chapter, I will present some important theories of fertility. .Henry (1953), developed the concept of *natural fertility* and defined this concept as fertility that existed in the absence of deliberated control through abortion or contraceptive practice, implying that reproductive behavior does not depend on the number of children already born to a couple. In these natural fertility situations, reproduction is determined by biologic principles, such as age at menarche, fecundability (the monthly probability of conception), time required for gestation, intrauterine mortality, and postpartum amenorrhea. In addition, fertility is determined by a number of social behavioral factors, which are at least from the point of view of the couples concerned (not intended to restrict childbearing). These factors might include marriage patterns (in particular as far as related to marital duration), spousal separation, (religious) rules for sexual abstinence in certain periods, and duration and intensity of breast-feeding, with its effects on the period of postpartum amenorrhea.

Three years later on the *natural fertility* path provided a contribution with the development of an analytical framework of intermediate determinants of fertility (Davis & Blake, 1956). According to the two authors the fertility was affected by three important factors namely: Exposure to intercourse or the exposure to conception or gestation and successful parturition. Divided over these three categories were identified behavioral and biologic factors only through which, any social, economic and environmental variable can influence fertility.

Despite this, natural fertility levels differ widely among societies, depending on how each society is organized. Thus, societies with rigid norms regarding sexual and reproductive behaviors will certainly tend to have low fertility in relation to more liberal and less rigid societies. Age at first sex and the frequency which sex is practiced are very important factors in relation to fertility, especially for teenage pregnancy, hence the importance of social factors to prevent or encourage, and that depends on whether societies have high or low adolescent pregnancy rates.

In later stage Bongaarts (1978), developed the *model of proximate determinants* framework by quantifying the effect of Davis and Blake's intermediate variables and collapsing them into eight, and later seven, proximate determinants of fertility. This resulted in a simple but powerful model for analyzing how fertility changes over time or differs from one group to another. According to Bongaarts, fertility is affected directly by biological and behavioral factors and indirectly by socio-economic and socio-cultural factors. If an intermediate fertility variable, such as the prevalence of contraception, changes, then fertility necessarily changes also (assuming the other intermediate fertility variables remain constant), while this is not necessarily the case for an indirect determinant such as income or education.

Consequently, fertility differences among populations and trends in fertility over time can always be traced to variations in one or more of the intermediate fertility variables. So two groups of determinants must be taken into account in order to understand the factors affecting fertility:

1. Proximate variables (behavioral) through which the background variables must operate to affect fertility, and
2. Socio-economic background variables (social, cultural, economic) variables.

The important difference between proximate determinants and socioeconomic variables is that the determinant proximate can influence fertility directly and on its own, whereas the socioeconomic variables impact fertility indirectly, that is, they modify the proximate determinants. However, the effects of economic variables on the proximal variables can be either positive, negative or even have no effect. For example education has a negative effect on contraceptive use, but on the other hand the same education has a positive effect on the time of breastfeeding.

Social Cognitive theory (SCT), superiorly formulated by Bandura, explains human behavior, in terms of a triple, dynamic and reciprocal model in which personal factors, environmental influences and behavior interact continuously. The SCT synthesizes concepts and process from cognitive, behavioral and emotional behavioral change model so that it can be readily applied to counseling interventions for disease prevention and treatment. A basic premise of SCT is that people learn not only through their own experiences, but also by observing the actions of others and the results of these actions (Bandura, 1999).

One of the most important if not the most important theories, thus one of the most used theories in health education and health promotion is *Health Belief Model*,

(Glanz et al., 2008). It argues that behavior in relation to health is determined by personal beliefs or perceptions about a disease and strategies available to reduce its occurrence (Hochbaum, 1958). These personal perceptions are influenced by the full range of intrapersonal factors that affect health behavior. Health Belief Model (HBM) was developed as a way to answer the question of why people used or did not use the preventive services offered by public health departments in the 1950s and was later geared to respond to other problems the detection and prevention of new epidemics, (Becker & Maiman, 1975). In 1975 was proposed *reasoned action theory* by Fishbein and Ajzen which was originally a psychological theory (Glanz et al., 2008). Later was applied into demography, in the fields of fertility, contraceptive use, and female labor market participation (Blanchet, 1992). The Fishbein–Ajzen model states that the intention to perform certain behavior is a reliable indicator of the performance of that behavior. In turn, this intention can be assessed by measuring beliefs with regard to consequences of the behavior and the valuation of these consequences on one hand and perceptions of the opinions of others in combination with the importance attributed to these opinions on the other. In other words, it would be need to teenagers believe that contraceptive use is important and serves to prevent unwanted pregnancies and sexually transmitted infections (STI). Also, teenage pregnancy is not tolerated in their community, so teenagers would take preventive action such as sexual abstinence or contraceptive use.

2.2 Determinants of teen fertility

2.2.1 Proximate determinants

2.2.1.1 Age at first sexual intercourse

Sexual life for many men and women begins in adolescence (Glasier et al., 2006). Studies show that the median age at first sex among women aged 20-24 in some African countries ranges from a less than 16 years to of 19.6 (Khan & Mishra, 2008). But different situations occur in other places, such as in Latin America and the Caribbean, where the age at first sex was 18 and 19 years among young women (Hindin & Fatusi, 2009) . In all this, the onset of puberty plays an important role in teen girls puberty occurs when sexual and physical characteristics mature and usually occurs earlier than boys (Tunau et al., 2012). Usually, puberty does not coincide with intellectual enhancement and discernment for decision-making, (Williamson, 2013). Studies show that the earlier puberty comes the more chance the adolescent to start sexual life, so puberty is associated with earlier onset of sexual intercourse (United Nations Population Fund, 2013; Williamson, 2013), high-risk of sexual behavior (Tenkorang et al., 2011) , and adolescent pregnancy (Williamson, 2013). According to Mmari and Sabherwal (2013) it is at this stage soon after puberty that some teenagers begin to maintain sporadic sexual ties, often unprotected due to lack of awareness of risk or irresponsibility.

Puberty reaches at the age of 10 or 11 to 14 years, which coincides with the first stage of teenage, accompanied by physical and social transformations (Núñez & Flórez, 2001). The final stage takes place at 15 to 19 years, so sexual education reinforcement is needed with monitoring and vigilance by families and communities

in order to prevent them from sexual debut, investing more time in studies instead. The exposure of teenagers to television programs, where they regularly pass novels or films that exhibit erotic scenes can motivate teenagers to start their sex life (United Nations Population Fund, 2013).

2.2.1.2 Marital status/ cohabitation/ union

Marriage is one of the most important factors that most exposes girls to the risk of becoming pregnant (Núñez & Flórez, 2001). Early Marriages lead to early pregnancy among teenagers which often result in complications during childbirth and eventually health problems (Neema et al., 2004).

Even more early marriages are strongly associated with the onset of sexual activity and, consequently, high fertility rates among teen girls (Núñez & Flórez, 2001). Cultural practices such as initiation rites, as well as the economic benefits of paying the Lobolo[2], may weigh in the parents' decision to marry their daughters off at younger age (Parsons et al., 2015; UNICEF, 2015). In many countries early marriages find support in religious and cultural practices, often without the consent of the adolescent. Rigid social norms, differential treatment based on gender and exclusion of women in decision-making do not give the girl any opportunity to decide on her own destiny and her interests (Parsons et al., 2015).

[2] Traditional wedding ceremony predominant in southern Mozambique, where the groom's family offers goods to the bride's family in exchange for the wedding. The *Lobolo* has a very strong traditional and cultural meaning, to the point that even civil marriage is preceded by it in cases where it takes place.

The teen girl's life with early marriage changes completely, and she begins to subject herself to the command of the husband and in-laws and school stays behind because according to the traditions after the marriage the woman must begin to procreate. Normally, early marriage is associated with low schooling (Field & Ambrus, 2008; Nguyen & Wodon, 2012). Low schooling reduces the chances of girls training professionally and thus actively contribute to the workforce, and making decisions about childcare(Parsons et al., 2015).

In addition, early marriage is associated with physical, sexual, psychological and economic violence by one's husband and other family members soon after marriage (Plan, 2011). The median age at first union is 18.1 years among women. Almost half (49%) of women married at age 18 and 16% married at age 15 (Ministério da Saúde et al., 2015).

2.2.1.3 Contraceptive use

Use of modern contraceptives are very low among married teenagers in underdeveloped countries, especially in sub-Saharan Africa, where having children among married women is synonymous with social status (Cooper et al., 2007; Hindin & Fatusi, 2009). Married women who have no children have been the victim of stigmatization by the society in which they are inserted, (Dodoo & Frost, 2008; Dyer, 2007).

The desire to have another child decreases depending on the number of surviving children, varying from 80% in women without any surviving children to 7% in women with six or more children, while the desire to have no more children increases, varying from 2% among women without any surviving child to 56% in women with six or more children (Ministério da Saúde et al., 2015). According to

Presler-Marshall and Jones (2012) the use of contraceptives by teen girls may also face barriers diverse order such as:

1) Individual attitudes;
2) Emotional and interpersonal;
3) Social and religious norms;
4) Cognitive Economic Administrative; and
5) barrier-related quality of care.

Ignorance by contraceptives constitutes a cognitive barrier. A study in four sub-Saharan countries found that less than a third of teenagers had a low level of knowledge that allowed them to avoid pregnancy effectively (Biddlecom et al., 2007).

The same situation occurs among unmarried but sexually active teenagers in sub-Saharan Africa, where contraceptive use varies from 3% in Rwanda to 56% in Burkina Faso (Khan & Mishra, 2008). The unmet need for contraceptives in sub-Saharan Africa is high among unmarried teenagers although many want to limit childbirth or delay it by at least two years (40%), when compared to some Latin American countries where unsatisfied needs range from 10 to 31%(Khan & Mishra, 2008) . There are a number of reasons why teenagers engage in unprotected sex:

The need to prove fertility (Hindin & Fatusi, 2009).

1) Little or no consideration for contraceptives (Gomes et al., 2008)
2) Fear of possible side effects that may arise from the use of contraceptives (Abiodun & Balogun, 2009).
3) The absence or misinformation about the risk of pregnancy or STIs by unprotected sex (Adedimeji et al., 2007).

2.2.2 Socio-economic determinants

Early pregnancy is one of the natural consequences of early marriage, which in turn is fueled by poverty and economic inequalities in some households. Teen girls from the poorest 20 per cent of the households are three times more likely to marry before they are 18 than those who are from richest families (Jain & Kurz, 2007). The shortage of economic resources in families and the increasing costs of girls' education have led parents to turn their daughters to marriages, to perform household chores and to have children (Jain & Kurz, 2007). In schools, for example, it is where differences in economic status are evident, and poor girls without the means to acquire goods and clothes to compete on equal footing with wealthy teen girls have only the means of selling their bodies in exchange for money, usually with several men (Eloundou-Enyegue & Magazi, 2011).

The low school drop-out rate without the completion of secondary education among women, low incomes, and limited employment increase the dependence of women on men, especially in rural areas (INE, 2005). Teen girls sometimes intentionally impregnate when they find economically well-to-do and educated partners as a way of tightening bonds, forcing marriage.

However, the vast majority of adolescents have no intention of becoming pregnant because they want to continue their studies, but the shortage of contraceptives and the lack of money for their purchase obliges teenagers to have unprotected sexual relations putting themselves at risk of becoming pregnant, especially in rural areas (Eloundou-Enyegue & Magazi, 2011).

Education is widely accepted as one of the most important factors in delaying the marriage age of adolescent girls (Jain & Kurz, 2007). Studies in poor countries

show that the more education teen girls are, the less likely to marry before the age of 18, and on the contrary, they increase their chances of postponing pregnancy and having children (Loaiza & Wong, 2012; Mahy & Gupta, 2002). There is a strong association between formal education and reproductive outcomes especially for women (Biddlecom et al., 2007). In addition, education provides an opportunity for young people to think of an ever better future that they certainly want, and a better understanding of health information (Jones, 2007). Teen girls can postpone the pregnancy for later are more likely to succeed socially, since they will stay longer in school and also increases the chance of empowering themselves economically considering that good studies bring more opportunities to achieve good jobs and attractive salaries (Chaaban & Cunningham, 2011)

Early marriages are strongly associated with the onset of sexual activity and, consequently, high fertility rates among adolescents (Núñez & Flórez, 2001). In many countries, early marriages find support in religious and cultural practices, often without the consent of the adolescent. Rigid social norms, differential treatment based on gender and exclusion of women in decision-making do not give the girl any opportunity to decide on her own destiny and her interests (Parsons et al., 2015).

The cultural environment and social norms shape the behavior of young girls in all directions of life and reproductive behavior does not except. In underdeveloped countries, girls are treated differently from boys, and from an early age, and it is incumbent on them that reproduction is the noblest social value and that the extent of this value will depend on their ability to bear children for the family of their husbands (Najafi et al., 2011). In these countries families invest less in the education of the girls who are relegated to the background, because it is believed that the priority is to

prepare teen girls for a future married life, such as treating her husband so that they can be a good wives.

In sub-Saharan Africa and South Asia, married girls are typically pressured by their husbands, their in-laws and their communities to start procreation, so in these countries most girls who gave birth at an early age also married before the age of 16 years (Cappa et al., 2012; Hindin & Fatusi, 2009). However, not only married teen girls are under pressure, but equally unmarried girls are encouraged by their mothers, grandmothers and husbands to have children to keep them company, show love and commitment respectively (Wood & Jewkes, 2006). For example, in South Africa, where 35% of girls who had children before the age of 20 claimed to have been pressured by mothers and boyfriends to get pregnant.

Meanwhile, another important factor is the religion. According to Presler-Marshall and Jones (2012), religion can have direct as well as indirect influence on teenagers' sexual behavior and contraceptive use. Regions where there is a strong religious influence if the use of contraceptives is not discouraged, family planning is quite inconsequential. In Swaziland, for example, some religions emphasize the spiritual importance of the gift of procreation, and to use contraceptives is to prevent children from being born so that their ancestors can incarnate in them (Ziyane & Ehlers, 2007). For Muslims, children born are to be accepted with humility rather than a fatality (Izugbara & Ezeh, 2010). In Honduras it was the Supreme Court that ordered the banning of all emergency contraceptives (Hevia, 2012).

According to the results of the World Bank study, young women living in unfavorable conditions are more likely to get pregnant, as a result teenage mothers are more likely to have unfavorable outcomes, such as failures in education or

unemployment (Azevedo et al., 2012). In addition, studies in Peru and Paraguay show that for some adolescent girls, pregnancy is a unique option as the education system shows no hope of improving their lives in the future (Näslund-Hadley & Binstock, 2011). Among other factors, unemployment and education failure are both determinants and consequences of teen pregnancy (Azevedo et al., 2012).

Table 1. Summary of determinants of teen pregnancy

Author	Data sets	Results
Gideon,(2013)	Uganda 2011 Demographic and Health Survey Data	Marital status (+), Richest (-), poorest (+); poorer (+); Middle (+); higher education (+); rural (-) Central (+); East Central (+); age (+); Muslim (+); Protestant (-); family planning(-); ever married (+); never married (-); previously married (+); richest (-); poorest (+), poorer(+); middle(+); higher education (+) ; No education (-)-
(Penman-Aguilar et al., 2013)	Medline, ERIC, Psych Lit, and Sociological Abstracts databases for articles published from January 1995 to November 2011.	low income (+) low education levels(+), neighborhood disadvantage (-) neighborhood physical disorder (+), or neighborhood-level income inequality (-)
(Sah et al., 2015)	A cross-sectional study was conducted among the residents of Rangeli Village Development Committees (VDC) in the Morang District with 300 households as respondents.	Low education (+), high education(-), living in marginalized areas (+), illiterate (+); low birth weight (+); Hindu (+), Muslims and Christian(-); (Jajanati; Terai Caste and Brahmin) (+); (Dalit; kirati) (-); housewife (+),

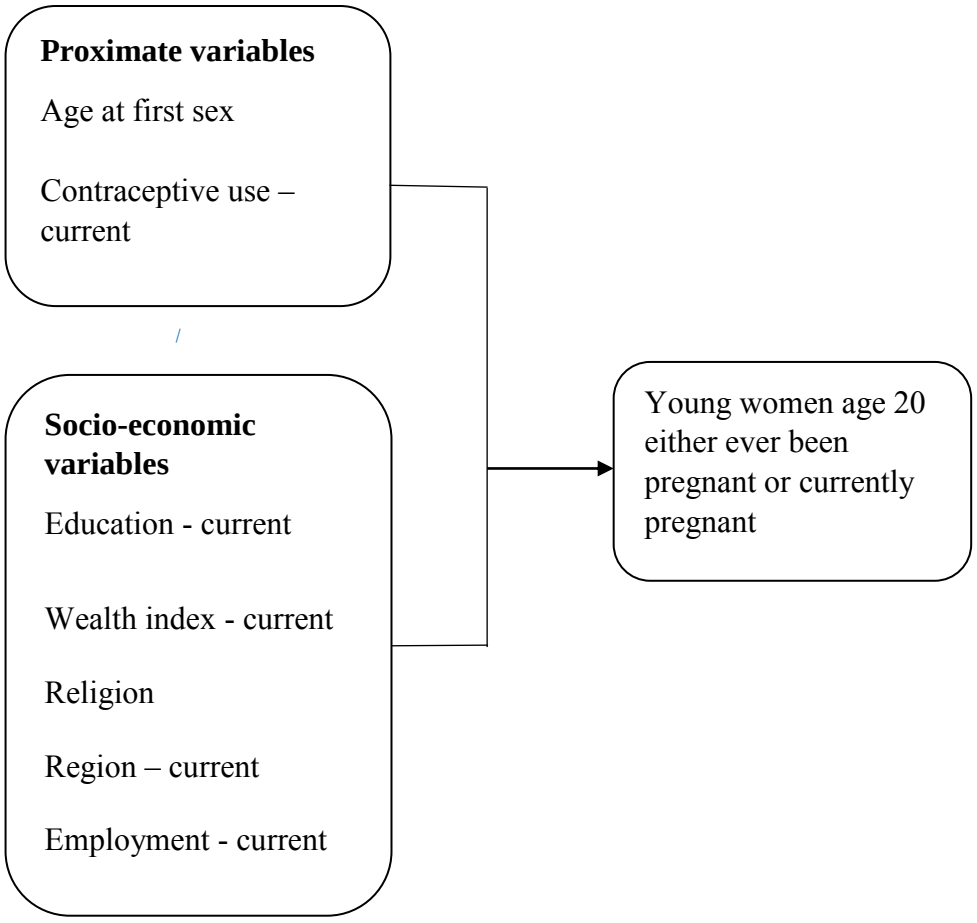
Author	Data sets	Results
(McKinnon et al, 2008)	2000 Brazil Census	Religious affiliation (-); education (-); ethnicity (-), age (no difference); income (-); Urban area (-), rural area (+),
Eloundo – Enyegu; Magazi, (2011)	Namibia's 2006/07 Demographic and Health Surveys and a teen survey	Education (-); Wealth (-); contraceptive use (-); parental control (-); age at first sex (+)
Chae, (2013)	the 2004 National Survey of Adolescents (NSA)	Early sexual debut (+); Education (-); orphahood (+)
Gogna et al, (2008)	A survey among young women aged 15–19 who had just given birth in 14 public health sector facilities in the study sites during the two months from December 2003 to February 2004.	Marital status (-); Education (-); Contraceptive Use (-); poor knowledge (+), Lack information (+); Poverty (+); rural (+); urban (-); age (+); Lost loved one (+).
Gurmu & Dejene, (2012)	2005 Ethiopian Demographic and Health Survey data.	Marital Status (+); age at first intercourse (+); Education (-); Urban (-) Rural (+); non-agricultural sector (-); agricultural sector (+); exposure media (-); Religion (no effect).
Jani, (2011)	This study draws on the Demographic and Health Survey conducted in Zimbabwe in 2011.	Orphanhood (+); Education (-); Wealth (-); urban (-); rural (+)
Operario et al, (2011)	Data from 19,140 participants (4874 classified as orphaned and 14,266 as non-orphaned.	Orphanhood (+); Education (-); psychological problems (+), family disruptions (+), wealth (-), urban (-); rural (+); age (+).

Note: Compiled by the author.

2.3 Conceptual framework

Based on the literature and data available for this study, the determinants of adolescent pregnancy according to Bongaarts are showed below.

Figure 3. Conceptual model showing relationship between socio-economic variables, proximate variables and teen pregnancy



CHAPTER III

RESEARCH METHODOLOGY

In this chapter, it presents the methodology used for the present study. Various theories have surfaced throughout to explain the phenomenon of teen pregnancy in the best way. The study model, research hypotheses, data source, sample design and coverage and operationalization of variables for the study are presented.

3.1 Empirical model of the study

The empirical model used for data analysis is binary logistic regression as showed below:

$$logit\left(f(x)\right) = \ln\left(\frac{f(x)}{1-f(x)}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 \ldots \beta_n X_n + \varepsilon_i$$

Where Y refers to likelihood to a young women aged 20 either ever been pregnant or currently pregnant in last 5 years.

β_0 refers to intercept of the regression model;

Where Y is the dependent variable (Either ever been pregnant or currently pregnant). If Yes=1 otherwise =0

β_0 refers to intercept of the regression model;

β_n is the coefficients of independent variables or slope values

X_n represents independent variables (age at first sex; religion; contraceptive use; wealth; education; employment and region).

ε_i is the term for unobservable variables.

The model is performed to explore the relationship between one or more explanatory (or independent) variables and a response variable (or dependent variable). Logistic regression is a modeling technique used to deal with binary variables (0 or 1). It is widely used to predict the likelihood of an event occurring or not. For this particular study, I want to explore how independent variables such as education, wealth, age at first sex, among others explain teen pregnancy (dependent variable). This thesis aims to analyze the likelihood of young women age 20 years either ever been pregnant or currently pregnant explained by socio - economic characteristics mentioned above. This model was also utilized by Gideon (2013), Núñez and Flórez (2001) in their studies on teen pregnancy.

3.2 Research hypothesis of the study

H1 Women who start sexual intercourse at early age are more likely to get pregnant than those who delay.

H2 Young women living in low income families are more likely to get pregnant than those who live in high-income households;

H3 Women with lower education are more likely to get pregnant than those with higher education.

H4 Young women using contraceptives are less likely to get pregnant than those who do not.

H5 Women who are employed are less likely to get pregnant than those who are not.

H6 Young women attending catholic religion are more likely to get pregnant than those who belong other religions.

H7 Women living in regions where fertility rate is higher are more likely to get pregnant those who live in regions with lower fertility rate.

3.3 Study sample

The 2015 Survey of Indicators of Immunization, Malaria and HIV/AIDS (IMASIDA) sample was defined based on the results of the 3rd General Census of Population and Housing (RGPH) of Mozambique, conducted by the National Statistics Institute in 2007. It ensured representativeness at national, regional, urban and rural levels. In this 2015 IMASIDA, 7,368 households were selected, but the interviews took place in 7,169 only. Of this number, 3,088 interviewed households were located in urban areas, while 4,081 households are located in rural areas. The total number of women aged 15-49 years eligible for interview was 8204, however only 7,749 of these eligible women were interviewed, of which 3,685 lived in urban areas and 4,064 resided in rural areas. The response rate was 98%.

The sample design was composed of three steps. In the first, the sample was stratified by province and by urban / rural area, and then 307 primary sampling units (PSU) were selected, using a systematic selection of equal probability. In the second step, an enumeration area (EA) was selected from each of the 307 primary sampling units with probability proportional to the size of the EAs, resulting in a selection of 134 EAs in urban areas and 173 EAs in rural areas. In the third step, all households (PA) were enumerated in each of the 307 AEs.

The listing was conducted in a systematic manner, using specially designed tokens. The complete list of households was used to select the 24 households eligible for the interviews in each EA. Based on this procedure, 7,368 households were selected for the survey.

However, from this general sample population of 7,749 women, only 354 young women age 20 years were selected for study sample in order to perceive teen pregnancy determinants among this age group.

3.4 Data and methods

This study utilizes data provided by the Survey of Indicators of Immunization, Malaria and HIV/AIDS 2015 (IMASIDA) in Mozambique, under the Demographic and Health Surveys (DHS Program). The survey was designed to provide data at national, provincial, by area of residence (urban and rural) and other selected characteristics. 7,368 households were selected and 7,749 women interviewed. Despite the age group of interest is 15-19 the sample is selected from young women aged 20.

It is a retrospective study to investigate which socioeconomic factors impact on teen pregnancy, so instead of using age group 15-19, a sample of young 360 young women age 20 was selected. Within this sample those who had sex at age 20 years were excluded, since at the time they had sex were not teenagers anymore, and it may result in their status in the current pregnancy. Therefore, this group is excluded resulting in the remaining number at 354.

Using the samples of age 20 assures that the selected young women have just already went through the age of adolescence. If age group 15-19 is used as a sample many teen girls will be excluded because at the time the survey was conducted not all teen girls either ever been pregnant or were currently pregnant, but it was still possible. Another problem of using data from age group 15-19 is that it may not reflect reality, as it will exclude all those teen girls who were not pregnant and had not

even gave a birth at the time of the survey but could still do so since they were still in their teens. Thereby, to avoid such inconsistency retrospective approach is then applied.

In addition, it is assumed that 20-year-old young women still maintain many teenage characteristics as it is located at boundary between teenage and adulthood. Note that the possibility to include those who had abortion and miscarriages is one of author's concern, however there is no data available.

Cross tabulation is utilized to describe characteristics of young women across the different socioeconomic determinants namely, age at first sex, contraceptive use, region, wealth index, education attainment, employment and religion. Secondly, logistic regression models will be performed to estimate the likelihood of young women aged 20 either ever been pregnant or currently pregnant in last five years.

It should be noted that this study aims at analyzing all young women aged 20 years. However, the number of teenage girls who never had sex in the teenage was only 6 people out of 354 people (348 people or 1.7 per cent) in the dataset. The very small number of teenage girls, who never have sex, results in the exclusion of this group in the logistic regression. Thus, the descriptive section includes 354 people (all teen girls) and 348 people (without teenage girls, who never have sex). However, the logistic regression includes only 348 people due to such limitation.

3.5 Operationalization of variables

3.5.1 Dependent variable

Using data from DHS 2015 IMASIDA, this study aims to examine to what extent socio-economic determinants may have an impact on teenage pregnancy in the

households. The dependent variable is "Young women age either ever been or currently pregnant" which is measured by children ever born plus currently pregnant among young women aged 20.

Table 2. Dependent variables and measurements

Dependent variable	Description	Measurement scale/ binary			Specific source of information
		Dummy	Yes	No	
Women either ever been pregnant or currently pregnant	Total children ever born to women aged 20 plus currently pregnant	If yes	1	0	Section. 2, Reproduction Q201. 1-Do you have any sons or daughters to whom you have given birth who are living with you? 2- Do you have any sons or daughters to whom you have given a birth who are alive but do not live with you 3- Have you ever given birth to a boy or girl who was born but later died? 4- Are you currently pregnant? Q213

3.5.2 Independent variables

Age at first sexual intercourse: It is a very important factor when the subject of study is fertility in general, especially teen fertility. The earlier teenagers start sexual intercourse the higher is the risk of getting pregnant, since most of times they are more likely not knowing the right contraceptive method. They are more likely to

be a risk neutral preference resulting in an unprotected sexual intercourse without anyyear old and 2- 15-19 year old.

Contraceptive use*:* Contraceptives use is a proximate determinant, so it has a direct effect on fertility. In this study it is measured by the question: "Have you ever used anything or tried to delay or avoid getting pregnant?" If No=0; Yes=1.

Education Attainment: The levels of education have a great influence on how girls look at birth control through the use of contraceptives. Usually high levels of education are synonymous with a better perception of the importance of using contraceptive methods to avoid pregnancy. The highest education level of women is categorized by: **(**1) No education + incomplete primary education + primary graduates (2) Incomplete secondary; and (3) Complete secondary + higher education.

Wealth index*:* The wealth index is a composite measure of a household's cumulative living standard. The wealth index is calculated by the DHS using household's ownership of selected assets, such as televisions and bicycles; materials used for housing construction; and types of water access and sanitation facilities. The wealth index places individual households on a continuous scale of wealth. The DHS separates all interviewed households into 5 wealth quintiles: (1) poorest, (2) poorer, (3) middle, (4) richer and (5) richest.

Religion*:* Religion plays an important role in moralizing and in terms of the type of education given to young people and society in general regarding to sexuality and reproduction. The most importance for our study contraceptives use. Zion, Evangelical / Pentecostal, Protestant and Anglican are all within Christianity but on the Protestant side so these were all grouped in the same Protestant category. Thus, in

this study, religion will be categorized into 4 categories namely: (0) no religion and other region, (1) Catholic, (2) Islamic, and (3) Protestant.

Region: Usually, the cultural context where girls are born and grow influences their fertility behavior. Teen girls living in regions where fertility rates are high tend to have children earlier than girls living in regions where fertility is low. Region is categorized by North, Central and South. The region is categorized as follows: (0) North, (1) Central, (2) South.

Employment: Among other socio-economic factors, unemployment and education failure are both determinants and consequences of teen pregnancy (Azevedo et al., 2012). The question is "Aside from your own housework, have you done any work in last 7 days?" If No = 0 and yes =1

Table 3. Description, measurement scale and source of independent variables

Variable	**Description**	**Measurement scale/ binary**			**Specific source of information**
		Dummy	**Yes**	**No**	
Age at first sexual intercourse*	Age at first sexual intercourse	10-14 =0 15-19 =1	1 1	0 0	Section.6 Q–61 Marriage and sexual activity How old were you when you had sexual intercourse for the very first time?
Contraceptive use	Ever used contraceptive method to avoid or delay	No=0 yes= 1	1 1	0 0	Section 3. Q 313 - Contraception Have you ever used anything or tried in any way to delay or avoid getting pregnant?

Variable	Description	Measurement scale/ binary			Specific source of information
		Dummy	**Yes**	**No**	
	pregnancy				
Religion	Religion of the women aged 20	No religion [RC]=0 Catholic=1 Islam=2 Protestant=3	1 1 1 1	0 1 0 0	Section 1. Q 113 - Respondent´s Background What religion do you profess?
Religion	The region where women aged 20 live	North [RC]=0 Central =1 South = 2	1 1 1	0 0 0	Section1. Respondent´s Background, Province
Education attainment	Highest educational level attended	Lower/Primary[Rc] =0 Incomplete secondary =1 Secondary/ Higher = 2	1 1 1	0 0 0	Section1. Q 106 - Respondent´s Background Have you ever attended school? What is the highest grade/form/year you completed at that level?
Wealth Index	Wealth index of the teenagers	Poorest [RC] =0 Poorer =1 Middle =2 Richer =3 Richest=4	1 1 1 1 1	0 0 0 0 0	Household Characteristics Does your household have: Electricity? Radio? 0 0Television? Bicycle? Telephone? Main material of the floor Main material of the roof Main material of the exterior walls Does any member of this household own

					A bicycle? A motorcycle or motor scooter? A car or truck?
Employment	Whether the respondent have done any work in last 7 days.	yes=1 No=0	1 1	0 0	Section8. Q-807 Husband´s background and women´s work, Aside from your own housework, have you done any work in last 7 days?

CHAPTER IV

FINDINGS AND DISUCUSSION

This chapter presents the findings and discussion around descriptive statistics and the logistic regression of determinants that significantly impact adolescent pregnancy. The determinants selected for the study are: age at first sexual intercourse religion, contraceptive use, region, employment, wealth index and education.

4.1 Descriptive statistics

Descriptive analysis was carried out to evaluate the distribution and frequency of independent variables as well as the independent variable. In addition, the descriptive analysis allowed to recodify some variables such as education attainment, religion, region in order to reduce the number of categories to facilitate logistic regression analysis and significance interpretations of each determinant in the model.

4.1.1 Young women age 20 either ever been pregnant or currently pregnant (Dependent variable)

In the total sample of 354 women aged 20 years based on the data 70.62% (N = 250) of them either ever been pregnant or had a child born, while 29.38% (N = 104) had never been pregnant or currently pregnant. It is a retrospective study on the understanding of the determinants of adolescent pregnancy. The age of 20 years presents multiple advantages due to its proximity to teenage.

Table 4. Descriptive statistic of women age 20 either ever been pregnant or had gave birth

Women age 20 either ever been pregnant or currently pregnant	All women, except those who never had sex (N=348)	%	All women (N=354)	%
No	98	28.16	104	29.38
Yes	250	71.84	250	70.62
Total	348	100.00	354	100.00

Source: Author`s own estimation from IMASIDA, 2015

4.1.2 Determinants of teen pregnancy (Explanatory variables)

Descriptive findings in the Table 5 are presented in two data sets. As mentioned previously, this study included all young women aged 15-19 years. However, the number of teenage girls who never had sex in the teenage was only 6 people out of 354 people (348 people or 1.7%) in the dataset. The very small number of teenage girls, who never have sex, results in the exclusion of this group in the logistic regression. Thus, in this section, the descriptive section includes 354 people (all teen girls) and 348 people (without teenage girls, who never have sex). However, the findings described are from dataset that include those who never had sex (N =348).

It shows that the highest proportion belongs to young women who had first sex in the age group 15-19. Among the 354 (100%) interviewed women aged 20, a number of 268 (75.71%) of them had already had sex, and within this 185 (74%) either ever been pregnant or currently pregnant. The second highest number 80

(22.60%) belongs to those who had sex at age 10-14 (Within this age group 65 (26%) either ever been pregnant or currently pregnant.

Table 5. Descriptive statistic of demographic and socio-economic variables affecting women either ever been pregnant or had gave a birth, IMASIDA 2015

	All women, except those who never had sex				All women			
	All young women at age 20	%	Women age 20 either ever been pregnant or currently pregnant	%	All young women age 20	%	Women age 20 either ever been pregnant or currently pregnant	%
Variables	**N=348**		**N=250**		**N=354**		**N=250**	
Age at first sexual intercourse								
Never had	0	-	0	-	6	1.7	0	-
10-14	80	23.0	65	26.0	80	22.6	65	26.0
15-19	268	77.0	185	74.0	268	75.7	185	74.0
Contraceptive use								
No	304	87.4	212	84.8	310	87.6	212	84.8
Yes	44	12.6	38	15.2	44	12.4	38	15.2
Region								
North	99	28.5	78	28.0	99	28.3	78	28.0
Central	147	42.2	113	41.8	148	41.9	113	41.8
South	102	29.3	59	30.2	107	29.7	59	30.2
Education Attainment								
Lower & primary	204	58.6	168	67.2	205	57.9	168	67.2
Incomplete secondary	116	33.4	73	29.2	120	33.9	73	29.2
Secondary & higher	28	8.06	9	3.6	29	8.2	9	3.6
Religion								
No religion and others	23	6.6	18	7.2	23	6.5	18	7.2
Catholic	91	26.2	56	22.4	91	25.7	56	22.4
Islam	70	20.1	57	22.8	70	19.8	57	22.8
Protestant	164	47.1	119	47.6	170	48.0	119	47.6
Wealth Index								
Poorest	54	15.5	42	16.8	54	15.3	42	16.8
Poorer	59	17.0	47	18.8	59	16.7	47	18.8

	All women, except those who never had sex				All women			
	All young women at age 20	**%**	**Women age 20 either ever been pregnant or currently pregnant**	**%**	**All young women age 20**	**%**	**Women age 20 either ever been pregnant or currently pregnant**	**%**
Middle	52	14.9	47	18.8	52	14.7	47	18.8
Richer	92	26.4	70	28.0	93	26.3	70	28.0
Richest	91	26.2	44	17.6	96	27.1	44	17.6
Employment								
No	234	67.2	169	67.6	239	67.5	169	67.6
Yes	114	32.8	81	32.4	115	32.5	81	32.4

Source: Author´s own compilation from 2015 IMASIDA

With regard to the wealth index, the number of poorest and poorer young women is 54 (15.25%) and 59 (16.67%) respectively. Among them the first category poorest, 42 (16.80%) and the second category poorer 47 (18.80%) had respectively either ever been pregnant or currently pregnant. The middle wealthy category with 52 (14.69%) young women, 47 (18.80%) either ever been pregnant or currently pregnant. Young women in the richer and richest categories corresponds 93 (26.27%) and 98 (27.22%) respectively. In the richer category 70 (28 %) of them either ever been pregnant or currently pregnant while and in the richest one it was 44 (17.60%).

Regarding women's education attainment, it was found that 205 (57. 9%) young women aged 20 have no lower and primary education. Among them 168 (67.2 %) either ever been pregnant or currently pregnant. Young women with incomplete secondary level represent to 120 (33.9 %), in which 73 (29.2 %) either ever been pregnant or currently pregnant. The Table 5 also shows that 29 (8.2%) had completed

secondary & higher education, and among them 9 (3.6%) had either ever been pregnant or currently pregnant.

Findings regarding religion show that Protestants has largest proportion 170 (48.02%), followed by Catholics 91 (25.71%). Among Protestants 119 either ever been pregnant or currently pregnant, while 56 Catholics were in the similar situation. No religion young women correspond to a proportion of 23 (6.50%) and Muslims 70 (19.77%), within 18 (7.20%) and 57 (22.80%) ever been pregnant or currently pregnant respectively.

With respect to region Table 5 presents three regions, namely North, Central and South. The number of young women living in North region is 99 people (28.33%). Among this proportion, 78 people (27.99%) either ever been pregnant or currently pregnant. The Central and South regions have 148 people (41.94%) and 107 people (29.73%) young women respectively. 113 (41.81%) young women from Central either ever been pregnant or currently pregnant and so did 59 (30.22%) from South region.

The highest proportion 310 (87.57%) of young women aged 20 belongs to those who never used contraceptives, and among them 212 (84.80%) either ever been pregnant or had gave a birth. 44 (12.43%) reported ever used contraceptives to avoid pregnancy and within this proportion 38 (15.20%) either ever been pregnant or had gave a birth.

Finally, the number of employed young women is 115 (32.49%) with 169 (67.60%) either ever been pregnant or had gave a birth. Among the non-employed young women 239 (67.51%) were either ever been pregnant or currently pregnant.

4.2 Logistic regression results (estimation)

For data analysis, the binary logistic regression is utilized to estimate the log odds of women either ever been pregnant or currently pregnant using a set of explanatory variables such as contraceptive use, region, religion, education attainment, wealth index and employment.

Three models, namely model I, II and III, were also created for analysis: Model I includes demographic variables (age at fist sexual intercourse, region and contraceptive use); model II includes socio-economic variables such as (education, wealth index, religion, and employment); and finally the model III which is the sum of the Models I and Model II. Since Model III includes all variables, it is the one that will be focused in this study. The logistic regression findings is shown in the table 6.

Table 6. Odd ratios of socioeconomic determinants affecting teen pregnancy

Variables	Model I	Model II	Model III
Age at first sexual intercourse			
10-14[Rc]			
15-19	.606 (.202)		.838 (.309)
Contraceptive use			
No[Rc]			
Yes	3.395*** (1.599)		4.286*** (2.211)
Region			
North[Rc]			
Central	.997 (.323)		.896 (.369)
South	.376** (.125)		.413*(.192)
Education attainment			
Lower & primary			
Incomplete secondary		.515*(.177)	.495* (.180)
Secondary/Higher		.180*** (.095)	.150*** (.082)

Religion			
No religion[Rc]			
Catholic		.551 (.326)	.530 (.324)
Islamic		1.170 (.742)	1.107 (.769)
Protestant		1.054 (.605)	1.304 (.763)
Wealth Index			
Poorest[Rc]			
Poorer		1.050 (.493)	1.092 (.517)
Middle		2.548 (1.488)	2.806* (1.688)
Richer		1.303 (.592)	1.540 (.748)
Richest		.494 (.236)	.719 (.370)
Employment			
No[Rc]			
Yes		.828 (.233)	.876 (.254)
Pseudo R^2	0.0592	0.1331	0.1699
Observations	348	348	348

*[Rc]= reference category; * = Significance coefficient (P<0.1); **= (P<0.05); ***= (P<0.01)*

Note: Multicollinearity test was performed and the findings showed that wealth index and education attainment are highly correlated. In this situation Gujarat & Porter (2009) suggest that one of "simplest" things to do is to drop one of the collinear variables, however since such variables are very important and required by the theory it was decide not to do so.

The age at first sexual intercourse was not statistically significant. There is no clear association with either ever been pregnant or currently pregnant among young women in Mozambique. With regard to the economic status, only the wealth middle category was found to be statistically significant and associated with increasing in log odds of childbearing among young women. All those belonging middle category are more likely to either ever been pregnant or currently pregnant 3 times than young women in the poorest one (*OR= 2.80*; P=0.087).* The poorer, richer and richest categories were not found statistically significant in the model, however the richest

category shows a strong tendency to reduce the likelihood of childbearing among young women.

Concerning educational attainment, findings show that secondary/higher education category is strongly associated to decreasing in likelihood of childbearing as shown by the coefficients of significance in Table 6. All those young women who completed secondary/higher education are 85% less likely to either ever been pregnant or currently pregnant *(.*149***; *P=0.001)* when compared to those who have lower/primary levels. The incomplete secondary level was also found significant and decreases the log odds of either ever been pregnant or currently pregnant in 50% *(.495*, P = 0.053)*.

The region was also examined and showed to be important. The South region is associated with a lower rate of pregnancy among young women. Young women living in the Southern region are 59 % *(OR =*.413*; *P = 0.057)* less likely to either ever been pregnant or currently pregnant than young women living in the North region, as shown in table 6. These findings are consistent with those previously reported in the descriptive statistics in the Table 5.

Regarding religion, none of its categories were found significant and associated with childbearing among young. The Catholic category showed the strongest positive effect on reducing childbearing but was not statically significant. The women employment was also insignificant to becoming teen pregnancies in this study.

Contraceptive use was also examined as previous studies found it affecting fertility in general. The findings of descriptive statistics and logistic regression are consistent. The predictor coefficient of contraceptive use is strongly significant, but in

the opposite direction. Those young women who used contraceptives were 4 times *(OR=4.28; P=0.005)* more likely to either ever been pregnant or currently pregnant than those who did not.

4.3 Discussion

The findings on age at first sexual intercourse were not statistically significant, but even so cannot be ignored since the practice early marriage is very common in Mozambique (Dekker, 2014). Some parents married off their daughters at an early age for economic gain. The well-known "*Lobolo"* which is the price due to groom´s family is an example especially in the Southern region. Extreme poverty some families live in is also considered one of the reasons for this practice.

In parallel with this, in the Central and North regions of the country is common another cultural practice known as initiation sexual rites. It is said its essence is to provide teenagers with all the tools, especially sexual and reproductive information for adult life. According to UNICEF (2011), initiation sexual rites violate a girl's basic rights as well as a means of promoting child marriage to the extent that teen girls are taught of the completion of these rites signify a transition to adult life, that is, after the rites the teenagers are considered no children anymore, but young women with aptitudes, especially to be good wives.

Meanwhile alongside of the age at first sexual intercourse, region also shows a strong association. Inequalities in terms of the availability of education and health facilities which affect mainly poor settings are a reality to be taken into account. Many teen girls are forced to stop their studies because there are no secondary schools or they are far from their homes (Odu et al., 2015). For example, according to the simple size used in this study, 12.99% of young women living in the North and

18.92% living in the Central regions respectively had not completed primary, while only 4.52% young women living in the South region where is located the capital city had not.

Hence, due to the low level of schooling, young women living in less developed regions have fewer opportunities for access to the job market or other economic projects for women empowerment, in general. Núñez and Flórez (2001), Eloundou-Enyegue and Magazi (2011) and Gideon (2013) had similar findings, although the result of Núñez and Flórez´s study was not statically significant.

In addition, those young women living in regions where fertility rate is high are more likely to either ever been pregnant or currently pregnant than those who live in regions with lower fertility rate. The regions of Mozambique differ in many respects, namely cultural, social and economic development. However, the common characteristic is that rural areas always have the higher pregnancy rates than urban areas.

Regional inequalities, according to Ministério da Saúde et al. (2015), can be one of the reasons. The contraceptive prevalence rate was only 14.4% in Sofala province, 17.8% in Zambézia province, and 18.1% in Manica province. Those provinces showed significantly lower percentages compared those in the city of Maputo city, where the prevalence of contraceptives reached 46.5% (Ministério da Saúde et al., 2015; Nixon & waters, 2017). This is only one side of the inequalities. They are indeed present in all walks of social life, bearing in mind that poverty levels in some regions are extremely prevailing. In fact, the regional inequalities affect the most disadvantaged groups and put their health at risk.

With regard to education attainment, findings show that higher levels are associated with lower likelihood of childbearing. Young women with higher education are less likely of either ever been pregnant or currently pregnant than those with lower/primary education. These findings are consistent with findings from previous studies (Gideon, 2013).

Findings on wealth index shows an important effect on pregnancy among young women. Table 6 shows the middle wealth category increases the likelihood of either ever been pregnant or currently pregnant when compared to the poorest category. In contrary, the poorer, richer and richest categories were not found significant, but those young women belonging the richest category presents the lowest log odds, therefore, are less likely to either ever been pregnant or currently pregnant. These results contradict the findings of previous studies on teen pregnancy. It is possible that other variables, such as culture, may overlap to socio-economic factors.

Contraceptive use findings conflicts with previous studies conducted on teen pregnancy. It is surprising that those young women who ever used contraceptives were more likely to either ever been pregnant or currently pregnant than those who did not. For this to happen, it is possible that all those who reported having used contraceptives did so improperly or may have started using them after they became pregnant and, as a consequence, are currently using them to avoid getting pregnant again. Finally, women's employment variable showed a slight reduction in the log odds of either ever been pregnant or currently pregnant, however it was not significant. The possible explanation might link to the limitation of the data, as the employment demonstrates the current status rather than the status at their teenage.

CHAPTER V

CONCLUSION AND RECOMENDATIONS

5.1 Conclusion

This chapter presents conclusions and recommendations on socioeconomic determinants on teen pregnancies, taking into account the findings of the previous chapter of this study. The results were obtained through the analysis of direction and effect of some socioeconomic variables, such as, age at the first sexual intercourse, contraceptive use, education, wealth index, religion, region and employment.

Teen pregnancy is considered a worldwide public health problem due to negative socioeconomic and health consequences causing to young girls. It is estimated that 11% of deliveries around the world occur in adolescents aged 15 to 19 (World Health organization et al., 2000). Mozambique is the country of Southern Africa with the highest teen pregnancy (United Nations Population Fund, 2014). From 2011 to 2015, the proportion of pregnant teens rose significantly from 38% to 46% with greater incidence in the rural areas, where about 54% of teenagers had already started childbearing against 35% in urban areas (Ministério da Saúde et al., 2015).

Pregnancy in teenagers can damage teens' health and well-being, as well as high costs to families and to society as a whole(Ahmad et al., 2016) In addition, the health of babies born to adolescent mothers face a higher risk of infant mortality, low birth weight, and premature delivery (Conde-Agudelo et al., 2005; Machado, 2006; Sah et al., 2015).

This study aimed to investigate the socioeconomic factors that constitute a risk for teenage pregnancy in Mozambique. Data for this retrospective study was provided by the Survey of Indicators of Immunization, Malaria and HIV/AIDS 2015 IMASIDA

conducted in Mozambique, under the Demographic and Health Surveys (DHS Program). The sample was representative at national level and consisted in 360 women aged 20 years.

Age 20 years was purposely chosen. Firstly, it was at the boundary age between teenage and adulthood, so those into this age still were more likely to maintain teenage main characteristics. Secondly, the certainty that the reproductive activity as a teenager has finished, therefore those all either ever been pregnant or currently pregnant were included.

In a total of these 354 (100%) 20-year-old young women, 250 (70%) women either ever been pregnant or currently pregnant, which means that only 30% have not yet experienced pregnancy.

Results of logistic regression showed that education attainment was one of the most important variables in the model explaining pregnancy. Young women with secondary/higher levels were less likely to either ever been pregnant or currently pregnant. The completion of secondary level showed a reducing effect, therefore, those young women who had completed secondary school present lower risks of either ever been pregnant or currently pregnant.

Finally, region was also important and associated with teenage pregnancy. The Southern region, compared to the Northern region showed lower teen pregnancy rate. The log odds of young women age 20 either ever been pregnant or currently pregnant living in the Southern region decreased by 59% than their peers living in the Northern region. This study contributed to fill gaps in the literature, showing key determinants impacting on incidence of teen pregnancy and providing recommendations for policymakers.

5.2. Recommendations

This study found that education as an important variable explaining pregnancy among young women. One of the important measures that can be taken is to raise awareness and outreach to communities. There is a need to make efforts for teen girls to stay longer in school, until they complete at least the secondary level. Raising the compulsory level of education to the secondary level can also be one of the solutions. It is necessary to enhance educational accessibility and tools to promote the enforcement.

The region variable is also important, thus showing that the differences between the North, Center and South regions have an impact on teen pregnancy. Reducing inequalities among regions through a better accessibility to basic services, such as education and health could reduce the incidence of pregnancy among teenagers. Women's empowerment can be also important to decrease the teen pregnancy rate.

The age at the first sexual intercourse was not found significant in the study, but it cannot be put aside because child marriage is common in Mozambique. According to this study, almost 98% of teenagers had already had sex at teen, and this behavior certainly increases the risk of pregnancy. To improve this situation, it is necessary to involve a whole society, community leaders, religious leaders, initiation rites performers, opinion leaders, teachers and journalists to promote changes in some social practices leading to early sexual debut and early marriage.

Another important and practical measure to be taken is to involve mothers in educating girls about reproductive health at very early age and to encourage them to develop employment creation, including self-employment.

5.3. Limitations of the study

The study has several limitations since it applied a secondary data which is very comprehensive one, however based on previous literature significant variables such as race, husband´s age, husband´s education, abortion and miscarriages among others are missing in the dataset. Some variables e.g. (ethnicity, age of respondents at first birth, ever used any method, among others) appear in the DHS questionnaire, but there is no information available,

Furthermore, previous literature also indicate a number of key variables that influencing the teen pregnancy, for example, level of women's self-esteem, drug abuse, family conflict. However, there is no questions in the DHS questionnaire. If such variables can be added in the DHS questionnaire, they could benefit future studies.

Another variable that would be extremely important for this study is the age at first union, however the number of valid answers in that question s is so small that it cannot be used in this study.

It is important also to emphasize that the dependent variable besides integrating all the women who had child and those who are currently pregnant should also integrate all those who had abortions and miscarriages, but our dataset does not have any abortion information.

APPENDIX 1

3 Jan 2012

DEMOGRAPHIC AND HEALTH SURVEYS
MODEL WOMAN'S QUESTIONNAIRE

[NAME OF COUNTRY]
[NAME OF ORGANIZATION]

IDENTIFICATION (1)

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER ..... | | | |

HOUSEHOLD NUMBER ..... | | |

NAME AND LINE NUMBER OF WOMAN _____ | | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH / YEAR
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:

1	COMPLETED	4	REFUSED		
2	NOT AT HOME	5	PARTLY COMPLETED	7	OTHER _____ (SPECIFY)
3	POSTPONED	6	INCAPACITATED		

COUNTRY-SPECIFIC INFORMATION: LANGUAGE OF QUESTIONNAIRE, LANGUAGE OF INTERVIEW, NATIVE LANGUAGE OF RESPONDENT, AND WHETHER TRANSLATOR USED

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____ |			
	NAME _____ |		

(1) This section should be adapted for country-specific survey design.

Note: Questions with blue highlighting in the question number column are HIV related questions that may be deleted in some circumstances (see footnotes). Questions with pink highlighting in the question number column are malaria related questions that may be deleted in some circumstances (see footnotes). Questions with yellow highlighting in the question number column are other questions that may be deleted in some circumstances (see footnotes).

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____. I am working with (NAME OF ORGANIZATION). We are conducting a survey about health all over (NAME OF COUNTRY). The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions? May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 → END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . ☐☐ MINUTES . . . . . ☐☐	
102	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS ☐☐	
104	Have you ever attended school?	YES . . . . . 1 NO 2	→ 108
105	What is the highest level of school you attended: primary, secondary, or higher? (1)	PRIMARY . . . . . 1 SECONDARY . . . . . 2 HIGHER 3	
106	What is the highest (grade/form/year) you completed at that level? (1) IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE/FORM/YEAR . . . . . ☐☐	
107	CHECK 105: PRIMARY ☐ ↓ SECONDARY OR HIGHER ☐ →		110

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
108	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. **(2)** IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL ..... 1 ABLE TO READ ONLY PARTS OF SENTENCE ..... 2 ABLE TO READ WHOLE SENTENCE 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
109	CHECK 108: CODE '2', '3' OR '4' CIRCLED CODE '1' OR '5' CIRCLED → 111		
110	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK ..... 1 LESS THAN ONCE A WEEK ..... 2 NOT AT ALL 3	
111	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK ..... 1 LESS THAN ONCE A WEEK ..... 2 NOT AT ALL 3	
112	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK ..... 1 LESS THAN ONCE A WEEK ..... 2 NOT AT ALL 3	
113	COUNTRY-SPECIFIC QUESTION ON RELIGION, IF APPROPRIATE.		
114	COUNTRY-SPECIFIC QUESTION ON ETHNICITY, IF APPROPRIATE.		
115 **(3)**	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES ..... ☐☐ NONE ..... 00 → 201	
116 **(3)**	In the last 12 months, have you been away from home for more than one month at a time?	YES ..... 1 NO 2	

(1) Revise according to the local education system.

(2) Each card should have four simple sentences appropriate to the country (e.g., "Parents love their children.", "Farming is hard work.", "The child is reading a book.", "Children work hard at school."). Cards should be prepared for every language in which respondents are likely to be literate.

(3) The question may be considered for deletion in countries with a very low HIV prevalence.

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	→ 206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME . . . . . [ ][ ] DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . [ ][ ] DAUGHTERS ELSEWHERE [ ][ ]	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO 2	→ 208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . [ ][ ] GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS . . . . . [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES ☐ NO ☐ → PROBE AND CORRECT 201-208 AS NECESSARY.		
210	CHECK 208: ONE OR MORE BIRTHS ☐ NO BIRTHS ☐ → 226		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	**C** FOR EACH BIRTH SINCE JANUARY 2005 (1), ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)		
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 230
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. **C** ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS . . . . . ☐☐	
228	When you got pregnant, did you want to get pregnant at that time?	YES . . . . . 1 NO 2	→ 230
229	Did you want to have a baby later on or did you not want any (more) children?	LATER . . . . . 1 NO MORE 2	
230	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES . . . . . 1 NO 2	→ 238
231	When did the last such pregnancy end?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
232	CHECK 231: LAST PREGNANCY ENDED IN JAN. 2005 (1) OR LATER ↓ LAST PREGNANCY ENDED BEFORE JAN. 2005 (1) →		→ 238
233	How many months pregnant were you when the last such pregnancy ended? **C** RECORD NUMBER OF COMPLETED MONTHS. ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.	MONTHS . . . . . ☐☐	
234	Since January 2005 (1), have you had any other pregnancies that did not result in a live birth?	YES . . . . . 1 NO 2	→ 236
235	ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO JANUARY 2005. (1) **C** ENTER 'T' IN THE CALENDAR IN THE MONTH THAT EACH PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.		
236	Did you have any miscarriages, abortions or stillbirths that ended before 2005 (1)?	YES . . . . . 1 NO 2	→ 238
237	When did the last such pregnancy that terminated before 2005 (1) end?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
238	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO ..... 1 [ ][ ] WEEKS AGO ..... 2 [ ][ ] MONTHS AGO ..... 3 [ ][ ] YEARS AGO ..... 4 [ ][ ] IN MENOPAUSE/ HAS HAD HYSTERECTOMY ... 994 BEFORE LAST BIRTH ..... 995 NEVER MENSTRUATED 996	
239	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES ..... 1 NO ..... 2 DON'T KNOW 8	→ 301
240	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS ..... 1 DURING HER PERIOD ..... 2 RIGHT AFTER HER PERIOD HAS ENDED ..... 3 HALFWAY BETWEEN TWO PERIODS ..... 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	

(1) Year of fieldwork is assumed to be 2010. For fieldwork beginning in 2011 or 2012, the year should be 2006 or 2007, respectively.

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)? **(1)**		
01	**Female Sterilization**. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
02	**Male Sterilization**. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
03	**IUD**. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO 2	
04	**Injectables**. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2	
05	**Implants**. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	
06	**Pill**. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2	
07	**Condom**. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	
08	**Female Condom**. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	
09 **(2)**	**Lactational Amenorrhea Method (LAM). (2)**	YES . . . . . 1 NO 2	
10	**Rhythm Method**. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2	
11	**Withdrawal**. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	
12	**Emergency Contraception**. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy. **(3)**	YES . . . . . 1 NO 2	
13	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO 2	
302	CHECK 226: NOT PREGNANT OR UNSURE ☐ ↓ PREGNANT ☐ → 311		
303	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO . . . . . 2 → 311	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Which method are you using? **(4)** CIRCLE ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION ..... A MALE STERILIZATION ..... B IUD ..... C INJECTABLES ..... D IMPLANTS ..... E PILL ..... F CONDOM ..... G FEMALE CONDOM ..... H DIAPHRAGM ..... I FOAM/JELLY ..... J LACTATIONAL AMEN. METHOD ..... K RHYTHM METHOD ..... L WITHDRAWAL ..... M OTHER MODERN METHOD ..... X OTHER TRADITIONAL METHOD ... Y	→ 307 → 308A → 306 → 308A
305	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	BRAND A ..... 01 BRAND B ..... 02 BRAND C ..... 03 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 308A
306	What is the brand name of the condoms you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	BRAND A ..... 01 BRAND B ..... 02 BRAND C ..... 03 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 308A
307	In what facility did the sterilization take place? **(5)** PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVT. HOSPITAL ..... 11 GOVT. HEALTH CENTER ..... 12 FAMILY PLANNING CLINIC ..... 13 MOBILE CLINIC ..... 14 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... 21 PRIVATE DOCTOR'S OFFICE ..... 23 MOBILE CLINIC ..... 24 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
312	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ANY METHOD USED ☐ → 314		
313	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO . . . . . 2 → 324	
314	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 → 324 FEMALE STERILIZATION . . . . . 01 → 317A MALE STERILIZATION . . . . . 02 → 326 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD . . . . . 12 → 315A WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 → 326 OTHER TRADITIONAL METHOD 96	
315	You first started using (CURRENT METHOD) in (DATE FROM 308/308A). Where did you get it at that time? **(5)**	PUBLIC SECTOR GOVT. HOSPITAL . . . . . 11 GOVT. HEALTH CENTER . . . . . 12 FAMILY PLANNING CLINIC . . . . . 13 MOBILE CLINIC . . . . . 14 FIELDWORKER . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY)	
315A	Where did you learn how to use the rhythm/lactational amenorrhea method? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 21 PHARMACY . . . . . 22 PRIVATE DOCTOR . . . . . 23 MOBILE CLINIC . . . . . 24 FIELDWORKER . . . . . 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER SOURCE SHOP . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
316	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD 12	→ 323 → 320 → 326 → 326
317	At that time, were you told about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 319
317A	When you got sterilized, were you told about side effects or problems you might have with the method?		
318	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	 → 320
319	Were you told what to do if you experienced side effects or problems?	YES . . . . . 1 NO 2	
320	CHECK 317: CODE '1' CIRCLED → At that time, were you told about other methods of family planning that you could use? CODE '1' NOT CIRCLED → When you obtained (CURRENT METHOD FROM 314) from (SOURCE OF METHOD FROM 307 OR 315), were you told about other methods of family planning that you could use?	YES . . . . . 1 NO 2	→ 322
321	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES . . . . . 1 NO 2	
322	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD . . . 96	→ 326 → 326

SECTION 6. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED ..... 1 YES, LIVING WITH A MAN ..... 2 NO, NOT IN UNION 3	→ 604
602	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED ..... 1 YES, LIVED WITH A MAN ..... 2 NO 3	→ 612
603	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED ..... 1 DIVORCED ..... 2 SEPARATED 3	→ 609
604	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER ..... 1 STAYING ELSEWHERE 2	
605	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO.	
606 (1)	Does your (husband/partner) have other wives or does he live with other women as if married?	YES ..... 1 NO ..... 2 DON'T KNOW 8	→ 609
607 (1)	Including yourself, in total, how many wives or live-in partners does he have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS ..... DON'T KNOW 98	
608 (1)	Are you the first, second, ... wife?	RANK	
609	Have you been married or lived with a man only once or more than once?	ONLY ONCE ..... 1 MORE THAN ONCE 2	
610	CHECK 609: MARRIED/ LIVED WITH A MAN ONLY ONCE → In what month and year did you start living with your (husband/partner)? MARRIED/ LIVED WITH A MAN MORE THAN ONCE → Now I would like to ask about your first (husband/partner). In what month and year did you start living with him?	MONTH ..... DON'T KNOW MONTH ..... 98 YEAR ..... DON'T KNOW YEAR 9998	→ 612
611	How old were you when you first started living with him?	AGE	
612	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
613	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE ..... 00 AGE IN YEARS ..... FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNER 95	→ 628

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
614	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.		
615	When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 WEEKS AGO . . . . . 2 MONTHS AGO . . . . . 3 YEARS AGO 4	→ 627

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
616	When was the last time you had sexual intercourse with this person?		DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3
617	The last time you had sexual intercourse (with this second/third person), was a condom used? (2)	YES . . . . 1 NO . . . . 2 (SKIP TO 619)	YES . . . . 1 NO . . . . 2 (SKIP TO 619)	YES . . . . 1 NO . . . . 2 (SKIP TO 619)
618	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2
619	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND: Were you living together as if married? IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.	HUSBAND . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER __________ 6 (SPECIFY) (SKIP TO 622)	HUSBAND . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER __________ 6 (SPECIFY) (SKIP TO 622)	HUSBAND . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER __________ 6 (SPECIFY) (SKIP TO 622)
620	CHECK 609:	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 622)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 622)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 622)
621	CHECK 613:	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND (SKIP TO 623) OTHER	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND (SKIP TO 623) OTHER	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND (SKIP TO 623) OTHER
622	How long ago did you first have sexual intercourse with this (second/third) person?	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4
623	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, WRITE '95'.	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
624	How old is this person?	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98
625	Apart from (this person/these two people), have you had sexual intercourse with any other person in the last 12 months?	YES . . . . 1 (GO BACK TO 616 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 627)	YES . . . . 1 (GO BACK TO 616 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 627)	
626	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . . DON'T KNOW . . . 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
627	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.	NUMBER OF PARTNERS IN LIFETIME ..... [ ][ ] DON'T KNOW 98	
628	PRESENCE OF OTHERS DURING THIS SECTION	YES NO CHILDREN <10 ..... 1 2 MALE ADULTS ..... 1 2 FEMALE ADULTS 1 2	
629	Do you know of a place where a person can get condoms?	YES ..... 1 NO 2	→ 632
630	Where is that? (3) Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... A GOVT. HEALTH CENTER ..... B FAMILY PLANNING CLINIC ..... C MOBILE CLINIC ..... D FIELDWORKER ..... E OTHER PUBLIC SECTOR _____ F (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... G PHARMACY ..... H PRIVATE DOCTOR ..... I MOBILE CLINIC ..... J FIELDWORKER ..... K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) OTHER SOURCE SHOP ..... M CHURCH ..... N FRIENDS/RELATIVES ..... O OTHER _____ X (SPECIFY)	
631	If you wanted to, could you yourself get a condom?	YES ..... 1 NO ..... 2 DON'T KNOW/UNSURE 8	
632 (4)	Do you know of a place where a person can get female condoms?	YES ..... 1 NO 2	→ 701

SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 601 AND 602: CURRENTLY MARRIED/ LIVING WITH A MAN FORMERLY MARRIED/ LIVED WITH A MAN NEVER MARRIED AND NEVER LIVED WITH A MAN		→ 803 → 807
802	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS ☐☐	
803	Did your (last) (husband/partner) ever attend school?	YES . . . . . 1 NO 2	→ 806
804	What was the highest level of school he attended: primary, secondary, or higher? **(1)**	PRIMARY . . . . . 1 SECONDARY . . . . . 2 HIGHER . . . . . 3 DON'T KNOW 8	→ 806
805	What was the highest (grade/form/year) he completed at that level? **(1)** IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE . . . . . ☐☐ DON'T KNOW 98	
806	CHECK 801: CURRENTLY MARRIED/ LIVING WITH A MAN: What is your (husband's/ partner's) occupation? That is, what kind of work does he mainly do? FORMERLY MARRIED/ LIVED WITH A MAN: What was your (last) (husband's/ partner's) occupation? That is, what kind of work did he mainly do?	_____ ☐☐ _____ _____	
807	Aside from your own housework, have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 811
808	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES . . . . . 1 NO 2	→ 811
809	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES . . . . . 1 NO 2	→ 811
810	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 815
811	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
812	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
813	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR ..... 1 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3	
814	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY ..... 1 CASH AND KIND ..... 2 IN KIND ONLY ..... 3 NOT PAID 4	
815	CHECK 601: CURRENTLY MARRIED/LIVING WITH A MAN ☐ NOT IN UNION ☐		→ 823
816	CHECK 814: CODE 1 OR 2 CIRCLED ☐ OTHER ☐		→ 819
817	Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY ... 3 OTHER _____ 6 (SPECIFY)	
818	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM ..... 1 LESS THAN HIM ..... 2 ABOUT THE SAME ..... 3 HUSBAND/PARTNER HAS NO EARNINGS ..... 4 DON'T KNOW 8	→ 820
819	Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY ... 3 HUSBAND/PARTNER HAS NO EARNINGS ..... 4 OTHER _____ 6 (SPECIFY)	
820	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY ... 3 SOMEONE ELSE ..... 4 OTHER 6	
821	Who usually makes decisions about making major household purchases?	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY ... 3 SOMEONE ELSE ..... 4 OTHER 6	
822	Who usually makes decisions about visits to your family or relatives?	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY ... 3 SOMEONE ELSE ..... 4 OTHER 6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
823	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY ..... 1 JOINTLY ONLY ..... 2 BOTH ALONE AND JOINTLY ..... 3 DOES NOT OWN 4	
824	Do you own any land either alone or jointly with someone else?	ALONE ONLY ..... 1 JOINTLY ONLY ..... 2 BOTH ALONE AND JOINTLY ..... 3 DOES NOT OWN 4	
825	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ LISTEN. / PRES./ NOT LISTEN. / NOT PRES. CHILDREN < 10 ..... 1 2 3 HUSBAND ..... 1 2 3 OTHER MALES ..... 1 2 3 OTHER FEMALES ... 1 2 3	
826	In your opinion, is a husband justified in hitting or beating his wife in the following situations: If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food?	YES / NO / DK GOES OUT ..... 1 2 8 NEGL. CHILDREN ... 1 2 8 ARGUES ..... 1 2 8 REFUSES SEX ..... 1 2 8 BURNS FOOD 1 2 8	

(1) Revise according to the local educational system.

APPENDIX 2

Map of Mozambique

Map No. 3706 Rev. 6 UNITED NATIONS May 2016

https://www.un.org/Depts/Cartographic/map/profile/mozambiq.pdf

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