

# Exploring Maternal Health Experiences of Contraceptive Use and Anti-Natal Care for Young Women who marry Early in Namaacha, Mozambique

BY

# MAXIMINO COSTUMADO

214574176

# A DISSERTATION SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF POPULATION STUDIES

IN THE

SCHOOL OF BUILT ENVIRONMENT AND DEVELOPMENT STUDIES

**July 2017** 

**DURBAN, SOUTH AFRICA** 

**SUPERVISOR: MR. MOHAMED VAWDA** 

## DECLARATION AND COPYRIGHT

I, Maximino Gervásio Sebastião Costumado, declare that this dissertation is a result of my own original work and that all the sources that I have used and cited have been methodically acknowledged in the reference list and this thesis has not been presented and will not be presented to any other University for a similar or any other degree award.			
Signature Date			

#### **ACKNOWLEDGEMENT**

First and foremost, I want to thank the lecturers of the master program in Population studies, of the College of Humanities, School of Built Environment and Development Studies, University of Kwazulu Natal, for their support and academic guidance throughout the duration of my course.

I extended my sincere gratitude to my supervisor Mr Mohamed Vawda for his continued assistance and technical guidance during the period of this study.

I am particularly thankful to my mentor, Professor Ernest Khalema, for his encouragement, commentary and constructive criticism that helped shape the development of my research and for emphasizing the value of excellence, hard work and ethics in research.

I would like to deeply thank Kgolo Institute and its CEO, Dr Ephraim Makgato for providing a bursary and internship that contributed to the success of my academic program.

I am grateful for the support of Dr Carlos Arnaldo and Boaventura Cau of the Department of Geography, Eduardo Mondlane University, Mozambique during the duration of this study. Moreover, I am extremely grateful for the support of my research assistant Lucia Sitoe, who conducted some of the interviews and transcribed the data onto Xichangaan to Portuguese.

I extend my gratitude to the peer educators of Tiane Association, who helped the research team identify suitable participants for this study. In fact, without their help and from their leadership, it would be extremely difficult to identify in short time the study participants.

I am extremely grateful for the patience, sacrifice, love and understanding of my lovely daughter Sayuri Costumado. This dissertation is dedicated to you my little flower.

I am grateful to Marlene for the understanding and for caring for our daughter during my studies.

I also extend my gratitude to my young brothers, Nelson and Jackson, my sister, Olivia, and my extended family and friends in Mozambique and around the world for the continuous support during my studies.

I appreciate the support and love of my mother, Helena Gervásio, who always prayed and constantly wishing me success in my career. I will never forget my late father, Vicente Costumado, my hero, who always taught me the value of education and hard work.

For the Government of Namaacha District, I express my gratitude for granting me permission to conduct the study.

I am extremely grateful to the women who participated in this study for their rich contribution. This would not happen without you.

Lastly, all the praises and glories to almighty God for being my guidance throughout this period of my study.

#### LIST OF ABBREVIATIONS

AIDS Acquired Immune Deficiency Syndrome

APHRC African Population & Health Research Center

ANC Antenatal care

ART Anti-Retroviral

CARMMA The Campaign on Accelerated Reduction of Maternal Mortality in Africa

CBO'S Community Based Organizations

CIA Central Inteligence Agency

CDC The United States Centers for Disease Control and Prevention

CIP Centro de Integridade Pública

CMM Conselho de Ministros de Moçambique-

CESCR Committee on Economic, Social and Cultural Rights

DFID Department for International Development

DHS Demographic Health Survey

DRC The Democratic Republic of Congo

ECPs Emergency Contraceptive Pills

FCI Family Care International

FRELIMO Front for the Liberation of Mozambique

ICPD The International Conference on Population and Development

ICRW International Center for Research on Women

IMB The Information-Motivation Behavioural Skills (IMB) theory

IOM International Organization for Migration

IMASIDA Mozambique Indicators of Immunization, Malaria and HIV and AIDS

survey

IPA Interpretative Phenomenological Analysis

INE Instituto Nacional de Estatistica (National Statistic Institute)

IUD Intrauterine device

HBM The Health Belief Model

HIV Human Immune deficiency Virus

HRC Human Rights Committee

HRP Human Resources Plan

MDGs The Millennium Development Goals

MAE Ministério de Administração Estatal (Ministry of State Administration)

MISAU Ministério de Saúde de Moçambique (Ministry of Health)

MICS Multiple Indicator Cluster Surveys

NDOH The South Africa National Department of Health

NGO Non-Governmental Organization

PARP Action Plan for the Reduction of Poverty

PESS The Strategic Plan for the Health Sector

PRB Population Reference Bureau

RENAMO National Resistance Movement

RHSs Reproductive Health Surveys

UDHR The Universal Declaration of Human Rights

UN United Nations

UNAIDS United Nations Program on HIV/AIDS

UNESCO United Nations Educational, Scientific and Cultural Organization

UNFPA United Nations Population Fund

UNICEF United Nations Children's Fund

UKZN University of Kwazulu Natal

USAID United States Agency for International Development

SADC The Southern Africa Development Community

STIs Sexually Transmitted Infections

SRHR Sexual and Reproductive Health and Rights

SSA Sub-Saharan Africa

SWAP Sector wide approach programme

WB World Bank

WHO World Health Organization

#### **ABSTRACT**

This study explores the Sexual Reproductive Health and Rights (SRHR) experiences of women who marry early in Namaacha District of Mozambique. Young women who marry early are often forced into marriages and experience a life void of choices, about their SRHR. This study is anchored through a review of literature that examined the impact of early marriage practice, its trends, and determinants to influence SRHR decision-making both globally and locally; and is informed by a critical theoretical framework of Gender and Power proposed by Connell (1987). The research specifically explored how women talk about their experiences of maternal health (i.e., use of modern contraceptives and attendance of antenatal (ANC) care services during pregnancies); decision making processes regarding the use of contraceptive methods; and barriers/facilitators for effective use of modern contraceptives and antenatal care services. A life grid methodology from the qualitative interpretivist tradition was used to collect narrative data of ten adult women residing in Namaacha District in Mozambique. The women were selected using a purposive/judgmental and snowball sampling methods and selection was based on self reported criteria that they married early and had their first pregnancy before the age of eighteen. Two open ended interview guides were utilised to collect data and the interpretative phenomenological analytical method guided the data analysis process. The findings in this study revealed a positive prognosis regarding women's use of modern contraceptives (MC) as well as attendance of ANC during pregnancy in Namaacha district. Despite reports of low and inconsistent use of MC as well as later attendance of ANC during pregnancy, participants reported having support from their community and respective husbands to utilise maternal health services. The majority of participants described how the information about the benefits of family planning methods that they have accessed, whether at the health centers, media or in community gatherings, motivate them to seek and use modern contraceptives. Participants mentioned using at least one or more modern contraceptive method during marriage and they could name some of the modern contraceptive methods currently available. Participants did not report attending four or more times ANC appointments during normal pregnancies as recommended by the literature on ANC model, however, they did report attending at least once during some of their pregnancies. The current struggle includes motivating women to start attending these services earlier in their pregnancies. From the participants' stories, awareness of the personal and external barriers and facilitators to accessing information to empower themselves is critical. For them, early marriage is still deeply rooted in the community and culture, which in many ways affects their decision to seek

and use contraceptives and ANC during pregnancy. The participants described living in privation of basic necessities and in an environment where their decision-making power around general issues and private ones were very low, particularly at early stages of their marriage. Thus, this study found that early marriage had negatively impacted women's well-being and further possibilities of growth. Overall, participants described being satisfied with the marriage despite the challenges of it. They understand the negative impacts of early marriage on their lives but work within such patriarchal systems to change them.

**Keywords:** Sexual Reproductive Health and Rights; Maternal Health; Contraceptive Use; Early Marriage; Namaacha, Demography; Mozambique; Antenatal Care; Qualitative; Life Grid; Gender; and Women Health.

TABLE OF CONTENTS	_
ACKNOWLEDGEMENTii	
LIST OF ABBREVIATIONSiii ABSTRACTv	
CHAPTER 1: INTRODUCTION	
1.1 STUDY BACKGROUND	<u>1</u>
1.2 PROBLEM STATEMENT	<u>4</u>
1.3 RESEARCH QUESTION	<u>7</u>
1.4 STUDY MOTIVATION	<u>7</u>
1.5 SIGNIFICANCE OF THE STUDY	<u>8</u>
1.6 RESEARCH DESIGN AND METHOD	<u>9</u>
1.7 ETHICAL CONSIDERATION	<u>9</u>
1.8 THEORETICAL FRAMEWORK	<u>10</u>
1.8 .1 Theory of Gender and Power	10
1.8 .2 Explaining women's use of maternal issues through the social structures of gend	lor
and power	
1.8 .2.1 Structure of Sexual division of labour	
1.8 .2.2 The Structure of Sexual Division of Power	
1.8 .2.3 The Structure of Affective Attachements and Social norms	
1.8 .2.3 The Structure of Affective Attachements and Social norms	13
1.8 .3Adaptation of the theory of Gender and Power in previous health related studies	<u>14</u>
1.8 .4 An overview of theories used in women's health related studies	14
1.8 .5Theory of Gender and Power in this present study	<u> 15</u>
1.9 CONCEPTUAL FRAMEWORK	<u>16</u>
1.9 .1 Sexual Reproductive Health and Rights	<u>16</u>
1.9 .2 Family Planning	<u> 19</u>
1.9 .2.1 Contraceptive methods	<u> 19</u>
1.9 .3 Antenatal Care	<u>21</u>
1.9 .4 Maternal Mortality and Morbidity	.24
1.9 .5 Marriage vs Early Marriage	

<u>1.11</u> SUMMARY <u>26</u>
CHAPTER 2: SOCIO-DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS OF THE STUDY AREA
2.1 A BRIEF BACKGROUND OF MOZAMBIQUE27
$\underline{\textbf{2.2 STRUCTURAL ORGANIZATION OF THE MOZAMBICAN HEALTH SECTOR}}$
<u>29</u>
2.2 .1 SRHR Framework in Mozambique
2.2 .2 Health situation in Mozambique: Highlighting sexual reproductive health issues 32
CHAPTER 3:LITERATURE REVIEW
<u>3.1 INTRODUCTION</u> <u>35</u>
<u>3.2 EARLY MARRIAGE</u> <u>36</u>
<u>3.2 .1 Introduction</u> <u>36</u>
3.2 .2 Early marriage ocurrence in developing countries: Evidence from mid -90 and earlies
<u>2000</u> <u>37</u>
3.2 .3 Early marriage ocurrence in developing countries: Evidence from 2011- 201437
3.2 .4 Factors influencing early marriage ocurrence38
<u>3.2 .4.1 Introduction</u> <u>39</u>
3.2 .4.2 Poverty and economic constraints
<u>3.2 .4.3 Level of education</u>
3.2 .4.4 Early sexual initiation
3.2 .4.5 Cultural beliefs that influence early marriage ocurrence
3.2 .5 Impact of early marriage for women health and well being
3.2 .5.1 Early marriage and the link with HIV
3.2 .6 Interventions to end early marriage
3.3 MODERN CONTRACEPTIVES METHODS FOR YOUNG MARRIED WOMEN
<u>48</u>

3.3 .2 Global trends of contraceptive use and methods of choice among married women in
developing countries
3.3 .3 Regional differences in prevalence rate of modern contraceptive use among married
women in developing countries
3.3 .3.1 Latin America and Caribbean
<u>3.3 .3.2. Asia</u> <u>50</u>
<u>3.3 .3.3 Sub Saharan Africa</u> <u>50</u>
3.3.3.1. Trend of modern contraceptive use by married women in Mozambique51
3.3 .4 Proportion of married women at reproductive age by type of modern method used 52
<u>3.3 .4 .1 Introduction</u> <u>52</u>
3.3 .4.2 Latin America and Caribbean53
<u>3.3 .4.3 Asia</u> <u>53</u>
<u>3.3 .4.4 Sub Saharan Africa</u> <u>54</u>
3.3 .4.4.1 Mozambique: Modern contraceptive of choice among married women at
reproductive age <u>55</u>
3.3 .5 External and behavioural factors influencing contraceptive use among young married
<u>women</u> <u>55</u>
$\underline{3.3.5.1\ Socio-\ economic,\ cultural\ and\ religious\ factors\ associated\ with\ modern\ contraceptive}$
<u>use</u> <u>57</u>
<u>3.3 .5.1.1 Socio-cultural norms</u> <u>57</u>
<u>3.3 .5.1.2 Education level</u> <u>57</u>
<u>3.3 .5.1.3 Socio-economic status</u>
<u>3.3 .5.1.4 Place of residence</u>
<u>3.3 .5.1.5 Religion</u> <u>59</u>
<u>3.3 .5.1.6 Number of children</u>
3.3 .5.2 Knowledge and personal beliefs regarding modern contraceptive methods60
3.3 .5.2.1 Knowledge of modern contraceptive methods among married women in
Mozambique <u>60</u>
3.3 .5.3 Myths and side effects surrounding modern contraceptive use
3.3 .5.4 Husbands and extended family's influence
3.3 .5.5 Health provider attitude and quality of health services

3.3 .6 Impact of contraceptive use in women's well being
3.4 ANTENATAL CARE ATTENDANCE AMONG YOUNG MARRIED WOMEN67
<u>3.4 .1 Introduction</u>
3.4 .2 Background about antenatal care attendance by young married women <u>67</u>
3.4 .2.1 Antenatal care attendance (at least) one visit in less developed countries: early 1990
<u>to 2013</u>
3.4 .2.2 Antenatal care attendance (four visits or more)
3.4 .3 Factors influencing the use of antenatal care by young married women69
<u>3.4 .3.1 Introduction</u>
3.4 .3.2 Demographic, Socio-economic, cultural and religious factors associated with
antenatal care attendance
<u>3.4 .3.2.1 Place of residence</u>
<u>3.4 .3.2.2 Education level</u>
3.4 .3.2.3 Religion and social norms
<u>3.4 .3.2.4 Wealth status</u>
3.4 .3.2.5 Women's age and parity
3.4 .3.2.6 Exposure to mass media and violence
3.4 .3.3 Women's knowledge, information and personal beliefs regarding the use of maternal
health services
3.4 .3. 4 Quality of antenatal care services
3.4 .3. 5 Influence of the husband and extended family
3.4 .4 Impact of antenatal care attendance in women well being
3.5.SUMMARY OF LITERATURE REVIEW <u>78</u>
CHAPTER 4:
<u>4.1 INTRODUCTION</u> <u>82</u>
4.2 SOCIO-DEMOGRAPHIC BACKGROUND OF NAMAACHA DISTRICT-STUDY
<u>AREA</u>

4.2 DESEADOU DESIGN AND METHODOLOGICAL STUDY DESCRIPTION 94
4.3 RESEARCH DESIGN AND METHODOLOGICAL STUDY DESCRIPTION84
4.4 STUDY POPULATION
4.5 SAMPLING PROCEDURES FOR PARTICIPANTS SELECTION
4.5 .1 Sample size
4.6 DATA COLLECTION METHODS
4.6 .1 Life grid methodology: A tool for qualitative data collection
4.6.2 Life grid methodology: The design and implementation for this study
4.6.3 Characteristics and procedures for data collection in this study90
4.7 DATA ANALISYS METHODS97
4.8 ETHICAL CONSIDERATIONS111
CHAPTER 5: RESULTS
<u>5.1 INTRODUCTION</u> <u>99</u>
5.2 PARTICIPANTS DEMOGRAPHICS AND SOCIO-ECONOMIC
CHARACTERISTICS99
5.3 DESCRIPTIVE FINDINGS103
5.3 .1 Marriage and Sexual Reproductive Health and Rights
5.3 .1.1 Rights to marriage acceptance
5.3 .1.2 The right for marital satisfaction and responsabilities
5.3 .1.3 The understanding and knowledge of Sexual Reproductive Health and Rights108
5.3 .1.4 Right to female well being in early marriage
5.2.2 Francis and significant statements and statements are statements and statements are statements and stateme
5.3 .2 Female experience of modern contraceptive use
5.3 .2.1 Modern contraceptive method of choice
5.3 .2.2 Female perceptions regarding rights to modern contraceptives use
5.3 .2.3 Self reported determinants that influence modern contraceptive use
<u>5.3 .2.3.1 Fear of side effects</u> <u>115</u>
5.3 .2.3.2 Socio-economic conditions and proximity to health facilities116
5.3 .2.3.3 Community views regarding family planning methods
5.3 .2.3.4 Female perception regarding modern contraceptive methods119
5.3 .2.3.5 Female perception fo husband's and family role
<u>5.3 .3 Female experience of antenatal care</u> <u>121</u>

5.3 .3.1 Timing and reasons for attendance
5.3 .3.2 Services provided to pregnant women
5.3 .3.3 Self reported determinants that influence women attendance of antenatal care in
Namaacha district
5.3 .3.3.1 Socio-economic conditions and proximity to health center
5.3 .3.3.2 Morbidities during pregnancy
5.3 .3.3 Beliefs and behaviours as barriers to accessing antenatal care128
5.3 .3.3.4 Quality of antenatal care services and attitude of health providers129
5.3 .3.5 Female perception of husbands and family's role
5.3 .3.3.6 Community views regarding formal antenatal care services
5.4 SUMMARY OF FINDINGS133
5.4 .1 Women's rights within marriages
5.4 .2 Findings about participants experience of modern contraceptive use134
5.4 .3 Findings about participants experience of antenatal care attendance136
CHAPTER 6: DISCUSSION
<u>6.1 INTRODUCTION</u> <u>139</u>
6.2 DISCUSSION IN RELATION TO THE THEORY OF GENDER AND POWER 140
6.3 DISCUSSION OF THEMES IN RELATION TO RESEARCH LITERATURE 143
6.3 .1 Marriage and Sexual Reproductive Health and Rights
6.3 .2 Female experience of modern contraceptive use
6.3 .2.1 Self reported elements affecting women attendance of antenatal care during
<u>pregnancy</u>
6.3 .3 Female experience of antenatal care attendance
6.3 .3.1 Self reported elements affecting women attendance of antenatal care during
<u>pregnancy</u> 165
6.4 LIMITATIONS OF THE STUDY173
6.5 STRENGH OF THIS STUDY, IMPLICATIONS FOR POLICY AND FURTHER
RESEARCH

### **CHAPTER 7: CONCLUSION**

7.1 CONCLUSION	<u>178</u>
7.2 RECOMMENDATIONS	<u>182</u>
<u>REFERENCES</u>	<u>185</u>
<u>APPENDICES</u>	<u>223</u>
Appendix I: Interview Guide 1 (Snapshot- 1st phase) - English version	<u>224</u>
Appendix II: Interview Guide 1 (Snapshot- 1st phase) -Portuguese version	<u>226</u>
Appendix III: Interview guide 2 (life grid-in depht-2 <sup>nd</sup> phase) English	
version	<u>228</u>
Appendix IV: Interview guide 2 (life grid-in depht-2 <sup>nd</sup> phase) Portuguese	
version	<u>230</u>
Appendix 5: Informed consent-English version	<u>232</u>
Appendix 6: Informed consent- Portuguese version	<u>234</u>
Appendix 7: Declaration of participant	<u>236</u>
Appendix 8: Declaration of participant	237
Appendix 9; Ethical clearance certificate	<u>238</u>

## LIST OF TABLES

Table 1. Elements included in each ANC visit in the context of the ANC packa	ge23
Table 2. Proportion of health personnel by levels, 1990-2010	31
Table 3: Descriptive summary of methodological framework used in this study	97
Table 4: Participants demographic and socio-economic characteristics	100
Table 5: Contraceptives of choice by participant and length of use	113
Table 6: Participants ANC visitations calendar	123

## LIST OF FIGURES

Figure 1: Mozambican Population pyramid	27	*
Figure 2: Map of Mozambique administrative and border division	29	
Figure 3: Proportion of married girls between 14-17 years	old (%)	in
Mozambique2011	38	
Figure 4: Proportion (%) of married women using modern contraceptives	in develop	ing
regions	51	
Figure 5: Proportion (%) of married women (15-49 years old) using modern con	ntraceptives	s by
province in Mozambique	52	
Figure 6: Knowledge of modern contraceptive methods by married women (%)	61	
Figure 7: Map of Namaacha district	83	

#### **Chapter 1: Introduction**

#### 1.1. Study Background

Data related to population growth indicate that the world population is currently growing at a rate of 1.2% annually, which means an annual increase of almost 79 million people (Weeks, 2010, p.36). The world's population in 1990 was estimated at 2.556 billion people and increased to almost 6.830 billion people in 2010 (UN Population Division, 2011, p.1). Moreover, the population is projected to reach 9.150 billion in the year 2050 (Bendorf, 2010; UN Population Division 2011). Furthermore, Bendorf (2010) argues that population projections show that only 0.4% of the world's population growth between 2010 and 2050 will occur in developed regions of the world. On the other hand, 70% of the world's population growth between 2010 and 2050 will occur in 24 of the world's poorest countries (p.2).

Sub-Saharan Africa (SSA), for instance, showed an increase in population growth rate: from 169 million people in 1950 to 640 million in 2000, corresponding to an increase from 6.7% in 1950 to 10.5% of the total population in 2000 (UN Population Division 2011). In addition, similar data for 2008 indicate that the total population in Africa was estimated at 967 million, with almost 42% of this population below 15 years of age, with a slight majority of females (Population Reference Bureau-PRB & African Population & Health Research Center - APHRC, 2008, p.2). Moreover, data indicated that in 2010, SSA accounted for 836 million people, which corresponds to 12% of the world population (PRB, 2010, p.6). Further to this, recent data from UNICEF's Generation 2030 Africa report published in 2014 reported for Africa an increase in the number of women at reproductive age from 54 million in 1950 to 280 million in 2015, with projections to increase to 407 and 607 million in 2030 and 2050 respectively (You et al., 2015, p.1).

This demographic characteristic of the African region, accompanied by the rise of women at reproductive age is a major contributor to the continuous growth of population estimated at 2.4% annually (PRB & APHRC, 2008; You et al., 2015).

Thus, contrary to the developed region characterised by having total fertility rates below replacement level, the SSA region is defined by having higher rates of fertility among young adolescents, particularly for the young married ones. Some research studies showed that in these poor regions of the world, the phenomenon of early marriage is still enrooted in most communities, bringing negative effects to the health and personal well-being of the married adolescent girl (Barua & Kurz, 2001; WHO, 2011; UNICEF, 2015).

According to Department for International Development - DFID (2011), ten million girls a year experience early or forced marriage, which is one girl in every three seconds (p.2). In this regard, additional data indicate that worldwide, more than 700 million women alive today are married before their 18th birthday, and more than one in three (about 250 million) enter into a union before the age of 15 (UNICEF, 2013, p.2). Data from 2011 showed that the proportion of adult women between 20 and 24 years old who married before the age of 18 was estimated to be between 39% to 46% in SSA and South Asia, respectively (DFID, 201, p.2). Different factors contribute to the increased risk of early marriage among young girls such as: poverty; the need to ensure girl's safety; family honour; and the need of a stable environment during unstable social periods (UNICEF, 2001). Thus, DFID (2011) argued that early and forced marriage is most prevalent where poverty, infant and maternal mortality are high and where political conflicts and civil frictions are happening, leading to lower levels of overall development with respect to schooling, employment and healthcare opportunities. In this regard, countries worldwide have acknowledged the struggle young married women encounter in less developed countries when it comes to exercising their health rights, particularly Sexual and Reproductive Health and Rights (SRHR) (Braxter & Moodley, 2015; Durojaye, 2011; WHO, 2011).

The International Conference on Population and Development (ICPD) held in Cairo in 1994, reaffirmed the global commitment to provide SRHR for all as a way to achieve their population's policy targets and development objectives by 2015 (FCI, 1999; Glasier, Metin, Schmid, Moreno, & Van Look, 2006; Hardee et al., 1998). Following this, five regional consultations that discussed adolescents' SRHR were held, namely: the ICPD + 5 Review held in 1999; the ICPD + 10 Review held in 2004; and the ICPD + 15 Review in 2009. In 2014, four consultations that focused on global consensus to address SRHR were held to further respond to this global challenge. According to Barot (2014) the first major global gathering produced a report entitled: The ICPD Beyond 2014 Global Review Report and Secretary General's Summary Report held in February. The second gathering produced: The 47th Session of UN Commisson on Population and Development in April; followed by The Secretary General's Index Report in August; and finally: The UN General Assembly Special Session on ICPD at 20 years in September (p. 22). In between the consultations previously cited, several agreements to promote SRHR for women were approved. Those included: The Beijing Declaration and Platform for Action in 1995; the Millennium Development Goals (MDGs) in 2000 (which aimed to reduce maternal mortality rates by 75% by the year of 2015); the 57th World Health Assembly in 2004; the MDG/10 Review Summit in 2010; and the Committee on the Elimination of Discrimination against Women in 2011 (UNFPA, 2012, p.5).

Additionally, in Africa, other continental and sub-regional policies and guidelines geared to address SRHR include the Campaign on Accelerated Reduction of Maternal Mortality in Africa (CARMMA) of 2009; the Continental Framework on SRHR of 2004; the Souther Africa Development Community (SADC) Framework on the Control of STIs of 2006; the SADC Gender Policy of 2007; the SADC Protocol on Gender and Development of 2008; and the Abuja Call for accelerated action towards universal access to HIV and AIDS prevention and treatment (Khalema *et al.*, 2014). Additionally, the "Africa Health strategy of 2007 to 2015" for the region was approved. In this regard, SADC (2008) argued that the SRHR strategy of the SADC region emphasises interventions aimed to tackle health issues such as maternal mortality, low attendance of antenatal care (ANC) services, abortion (safe and unsafe), a low contraceptive prevalence rate, high HIV and AIDS and STI infection in the region, as well as violence against women in the region.

Therefore, with the implementation of these international agreements and regional frameworks, women's maternal health has improved worldwide. For example, the rate of maternal mortality decreased worldwide from 543,000 in 1990 to 287,000 in 2010 (WHO, 2012a, p.1). In addition, studies related to women's SRH indicated that birth rates globally declined from 60 births per 1000 women in 1990 to 48 per 1000 in 2007 (WHO, 2012b, p.1). Regionally, data from 2007 showed birth rate differentials ranging from 5 births per 1000 women in eastern Asia to 121 per 1000 in SSA in 2007(WHO, 2012b, p.1). Moreover, between 1990 and 2011, SSA experienced a slight decline in birth rates among teenage girls from 123 births per 1000 women to 117 births per 1000 between the two periods (UN, 2014). For example, different from its neighbour countries, South Africa presents low rates of early marriage practice in the region, having also experienced declines in adolescent pregnancy during the past few decades. Thus, adolescent pregnancy in the country was estimated at 30% among girls between 15 and 19 years old (Willan, 2013, p.4). This may be the result of low and consistent use of modern contraceptives among this group in less developed regions.

Global data regarding contraceptive use show variations in the prevalence of use between regions. In one hand, for the developed region, this rate in 2008 was considered reasonable and was estimated at 61% whereas for less developed countries this rate was estimated at 56% (Population Reference Bureau, 2008, p.7), increasing to 74% in 2012 (Darroch & Singh, 2013). In other hand, UN (2012a) indicated that the rate of contraceptive use by married women at reproductive age (15-49 years old) has increased substantially from

52% in 1990 to 62% in 2010 in developing regions of the world (p.35). Currently, it is widely recognised that provision of antenatal care services (ANC) during pregnancy until childbirth is crucial to guarantee the health of the mother and the unborn child (Biza et al., 2015 UN, 2012; USAID, 2004). Over the past decades less developed countries experienced an increase in the proportion of pregnant women visiting health facilities for prenatal care purposes (WHO, 2003). However, recent data on ANC attendance for the period of 2005-2012 showed a decrease in the proportion of women attending one or more of these services. For example, regional differentials showed that in Africa the proportion of pregnant women attending ANC services one or more times decreased from 74% to 43% between 2005 and 2012 (WHO, 2013).

With the previous paragraphs in mind, the aim of the study is to explore the experiences of women in Namaacha District, Mozambique who married early and how they talk about their experiences of maternal health. In this respect, emphasis on examining their decisions regarding the use of modern contraceptive methods or attendance of ANC services during pregnancy and delivery. Note that provision of those health services implies that the patient has the assistance of a skilled health provider.

Furthermore, studies have outlined determinants contributing to poor maternal health outcomes, particularly ANC and contraceptive use by women. It was argued also that those barriers for maternal health utilisation occur at the individual level, provider level, and system or structural level (Ensor & Cooper, 2004; Scheppersa et al., 2006). At the individual level barriers may include individual characteristics, such as limited knowledge about SRHR, negative beliefs about contraceptive use, women's level of education and socio-economic status (Scheppersa et al., 2006). According to UNFPA (2012) barriers are also related to cultural norms and social beliefs about the role of marriage and gender in society. At the provider's level, system or structural level barriers identified in the literature include financial constraints, low availability of services in remote areas and mistrust of health providers (UNFPA, 2012). In this regard, the study's specific objectives also examine and identify barriers and facilitators for young married women's effective use of modern contraceptives and ANC services in Namaacha, Mozambique.

#### 1.2. Problem Statement

Despite all the efforts to improve women's SRHR worldwide, women still face poor maternal health conditions due to limited contraceptive use and access to ANC services during pregnancy and childbirth (Arnaldo et al., 2014; Baxter & Moodley, 2015; Bongaart, 2006; Clark, 2004; Glasier et al., 2006; Lewis, 2011; Khalema et al., 2015). For the low and middle income countries, maternal mortality and pregnancy complications are still a health burden for

women who marry early (Baxter & Moodley, 2015; Durojaye, 2011; WHO, 2011; WHO, 2015). For example, girls under 18 years of age face risky pregnancies, resulting in complications for mother and child, thus increasing both maternal and infant mortality (Bankole et al., 2009; Baxter & Moodley, 2015; Divage, Divage, & Marrengula, 2010; Ministerio de Saude (MISAU) et al., 2013; UNFPA, 2012; WHO, 2015). This can be explained due to the fact that young married girls are more likely to have early sexual initiation and forced sex which leads to an early pregnancy. Furthermore, a report from UNICEF about child marriage and adolescence pregnancy indicates that young married girls tend to become pregnant soon after marriage while they are not mentally and physically ready to be mothers, increasing the risks of maternal mortality and morbidity for the mother and the baby (UNICEF, 2015). Thus, teenage pregnancy within marriages constitutes a health burden for women in most of the countries in the SSA region, and this scenario is aggravated by the low use of contraceptives to prevent unwanted pregnancies and sexually transmitted infections (STIs), including HIV. A national representative, household survey among young South Africans aged 15-24 collecting information on HIV prevalence, concluded that the majority (66%) of pregnancies were reported to be unwanted and yet only half of the sexually active women reported that they were using contraception (Pettifor et al., 2005). In addition to the health risks to the young mother and her child, pregnancy during adolescence can negatively impact a young woman's opportunities for education. Young women who become pregnant while at school often drop out, and only a few return after childbirth (Baxter & Moodley, 2015; Omoeva, Hatch, & Sylla, 2014).

According to Green, Mukuria and Rubin, (2009) parents interviewed in a study conducted in Uganda indicated that they marry their daughter away in order to acquire economic benefits and social status as well as to protect their daughters from early pre-marital sexual intercourse preventing unwanted pregnancies, and STIs, including HIV. However, evidence showed that married adolescents are not immune to HIV and STIs as perceived. Data from different studies show that most married girls are more likely to marry older men (Clark, Bruce, & Dude, 2006; UNICEF, 2015b). Therefore, Clark et al. (2006) stated: "young women married to much older husbands are powerless to make decisions regarding their own health and therefore are in greater risk of HIV infection for not being able to convince the husband to use condoms with them or with their extra-marital sexual partners" (p. 84).

Moreover, adolescent pregnancy is related to low birth weight of the children, obstructed labour and maternal mortality (UNICEF, 2015). According to Dallao & Greene (2011) obstructed labour causes obstetric fistula that may lead to the baby's death and young

mother's morbidity and ultimately stigma, loneliness and violence. Additionally, data related to young girls risks to STIs showed a higher prevalence of chlamydia and herpes simplex virus-2 among younger girls when compared to the older ones (Dehne & Riedner, 2005). Overall, self-reported data from Demographic Health Survey (DHS) in SSA showed that 1%-11% of sexually- active 15-24-year-old females had an STI in the 12 months prior to the survey interview (Bankole et al., 2009). It was reported that in SSA alone, untreated early syphilis resulted in a stillbirth rate of 25% and a perinatal mortality of about 20% (Glasier, 2006).

Furthermore, an estimation of women's unmet needs for contraceptives indicates that 222 million women worldwide have an unmet need for contraceptives, with 90% of these women located in developing regions, (Speizer, Calhoun, Hoke, Sengupta, 2013; WHO, 2011). For the SSA region, Sedgh, Hussain, Bankole, & Singh (2007) indicated that the unmet need for family planning among married women for the period 2000 to 2005 was estimated to be 24% (p.30). Differential data about the unmet need for contraceptives within years showed that the level of unmet need decreased globally between 2003 and 2012, but remained high in West Africa with 74% compared to East Africa with 54% (Darroch & Singh, 2013). This may affect a couple's desire to reduce their family sise, increasing the risk of unwanted pregnancies and consequently health complications and maternal death. For example, globally, more than half a million women at reproductive age die per year from pregnancy-related complications that could be prevented whereas maternal deaths related to pregnancy and childbirth among girls aged 15–19 in the world is estimated at almost 70,000 deaths each year (UNICEF, 2009, p.1), with SSA accounting for the highest proportion of maternal death in the world (62 %), estimated at 179,000 deaths in 2013 (WHO, 2014a, p.1). Therefore, providing contraceptives for women with unmet need can help them space their pregnancies and childbirth, with a positive impact on the mother's and baby's health, leading to a reduction of maternal and child mortality (Mayo Clinic, 2011). Additionally, it was argued that the provision of modern contraceptive methods to reduce unintended pregnancies is not a solution itself, but it is important also to guarantee consistent, correct and effective use of these devices (Baxter & Moodley, 2015). However, poor countries in the South with higher rates of unmet need of contraceptives are facing challenges of providing modern contraceptive methods for women at reproductive age. For example, data from the SSA region showed a low proportion of modern contraceptive use among married women, estimated at 27% in 2012 (WHO, 2013).

Additionally, unintended pregnancies in a context of unavailability of medical and social assistance for women may lead to unsafe abortions, particularly in countries with restrictive abortion laws (UNFPA, 2013). In this regard, some studies indicated that adolescent

girls between 15 and 19 years old have been highly subjected to unsafe abortion practice than older women (Shah & Ahman, 2009; Glasier, 2006). Data showed that unsafe abortion still accounts for roughly 13% of maternal mortalities, resulting in approximately 47,000 maternal deaths from unsafe abortion annually worldwide (WHO, 2011).

Studies also showed the correlation between unplanned pregnancies and the delayed seeking of ANC services (Altfeld, Handler, Burton, & Berman, 1997; Eggleston, 2000; Wado, Afework, & Hindin, 2013). For example, data from 2003 for the SSA countries, showed lower rates of ANC visits by young women below 20 years of age, estimated at 41%, whereas for women between 20 and 34 years old that proportion was 44%, decreasing to 39% among women of 35 of age or above (WHO, 2003). Globally, from the period of 2005 to 2012, the number of women using ANC services one or more times decreased from 81% to 55% in 2012 (WHO, 2013). Regional differentials showed that in Africa, this proportion decreased from 74 to 43%. This scenario occurred due to the impact of a range of barriers that affected the utilization of maternal health services. According to Arnaldo et al. (2014), in a context where both the onset of sexual activity and marriage are early, the risk of unwanted pregnancies is higher if the young women do not access information about contraceptive and ANC services to prevent complications during pregnancy.

#### 1.3. Research Question

Generally, key research questions to be explored in the study include whether women who marry young understand their sexual and reproductive rights within traditional marriages. Who decides to use contraceptives or ANC, terminate pregnancy, seek maternal health services, etc.? Thus, do these young women feel that they have rights to make decisions about their maternal and sexual health? If so, what are their responsibilities to their children who grow up in such family formations? Specific questions include:

- What is the trend in contraceptive use and ANC use by pregnant married girls in Namaacha District?
- Which ANC and family planning services (i.e. contraceptives) are available for women to access?
- What are the factors that contribute to the use or lack of use of contraceptives and ANC?
- What is the method of choice for ANC and contraceptive use (if any)?
- What knowledge do early married girls have regarding SRHR choices that will benefit them and their unborn children's' health and well-being?

#### 1.4. Study Motivation

My professional interest in women's SRHR has come long way. I have participated in research in Mozambique about women's SRHR issues as well as working in projects aimed at providing information and material to protect women's SRHR, with emphasis on family planning methods. This was strengthened in a context where scientific evidence showed that health complications faced by young married girls are preventable and are related to HIV and other STIs, and mostly to pregnancies. Thus, it is acknowledged that women's health burden can be prevented and treated through the provision of modern contraceptive methods of choice (Ayanore et al., 2016; Darroch & Singh, 2013; Eliason, S., Williams, Eliason, Novignon, Nonvignon, & Aikins, 2014; Guttmacher Institute, 2015; Shah, 2010) and antenatal care services during pregnancy (Braxter & Moodley, 2015; Gill et al., 2007, WHO, 2012).

From the reviewed articles, it was found that most papers generally explore SRHR issues affecting all female adolescents, with less focus on subgroups such as young married women. Thus, as stated by Singh, Rai, Alagarajan, & Singh (2012), few research papers have described in detail the factors that motivate married young women to use maternal health services such as contraceptives, especially in regions where the patriarchal system is still in vogue. Few others provide maternal health statistics about married women in general, without aggregating the data into specific groups such as girls who married before 18 years old. The Mozambican National Strategy for Prevention and Elimination of Child Marriage (2015-2019), approved by the Government in 2015, described the existence of limited disaggregated data about early marriage in the country as one of the challenges to fight the practice. Subsequently, little attention has been given to understand what motivates early married women to make decisions about maternal health, sexual and reproductive health including contraceptive use and ANC in SSA, particularly Mozambique. Young women are forced into marriages and experience a life where they are not able to exercise choices, and this has an impact on how they understand their SRHR and act upon it while seeking health care. Early married girls experience fewer opportunities than boys in accessing education, employment and (natural) resources, reinforcing gender inequalities where men are in control of power. As such, the prevalence of early marriage may lead to acceptance of the practice of perpetuating a cycle where young women are subjected to exploitation and lack of decision-making power (Clark, 2004, 2006). In addition, there are still knowledge gaps in identifying the best strategies to end early marriage and its negative effects on women's and children's health, since its occurrence is still high in developing countries such as those in the SSA region, particularly in transitioning countries such as Mozambique (Svanemyr et al., 2015).

#### 1.5. Significance of the Study

The study therefore will increase the availability of evidence regarding the recent SRHR state of Mozambican married women (married before 18 years old), so actions to improve their health can be implemented. This can be accomplished by identifying through the voices and experiences of young women who married early the factors that prevent and/or promote the use of ANC and contraceptive options in Namaacha District in Mozambique. The study can also offer recommendations to improve the quality of service utilization and access for young women who marry early in Namaacha, Mozambique. That would mean provision of the 4 prenatal care check-ups as recommended by WHO. In addition, the results of the study would help policy makers and other local government officials to identify from respondents' perspectives the factors that prevent women from accessing quality maternal health services, particularly in the South region of the country. By using life grid methodology to collect data, this study can be seen as the only one in Mozambique to have used this methodology to collect sensitive information. Thus, detailed qualitative information should be expected from this study as shared by 10 women interviewed.

#### 1.6. Research Design and Method

For this study a qualitative research method was applied to explore young married women's experiences in using modern contraceptive methods and ANC services. Therefore, the study population for this research were 10 adult women at reproductive age, residing in Namaacha District, who were married before the age of 18 and have been pregnant with a successful child delivery while married. For the sampling of this group, purposive/judgmental and snowball sampling methods were used to select the participants. For data collection, the study used two distinct questionnaires, one to collect data regarding participants' demographic characteristics and an open-ended questionnaire for sensitive information regarding their experience of contraceptive use and ANC attendance. The questionnaires were reviewed by the study supervisor and tested among female University of Kwazulu Natal (UKZN) students and some married women residing in Maputo Province. On the other hand, those questionnaires were answered through the life grid tool. This tool was used during interviews as a way to engage the participants to disclose sensitive information related to the study subject. After data collection, the analysis was conducted through the Interpretative Phenomenological Analysis method, and the software Atlas was also used to facilitate data analysis.

#### 1.7. Ethical Considerations

Prior to the interviews, the Namaacha Local Government approved the realization of the study in the area with a letter of approval. Next, all the selected participants were briefed about the study and its objectives, and their consent was also drafted. The participants were informed about the confidentiality of the data collected and the process to guarantee their anonymity, which included the use of pseudonyms, labels and codes. They were also informed that their participation was entirely free and that they could refuse to answer any question, and even terminate the interview at any time they wished. In addition, during the participant selection process, married females from the same family or living in the same household were not selected in order to maintain confidentiality of the information collected from them.

#### 1.8. Theoretical Framework

The theory of Gender and Power proposed by Connell (1987) is reviewed and adapted as the theoretical and conceptual framework used in this study to explain the factors that influence the use of contraceptives and ANC services by married young women in Namaacha District. Therefore, since the theory of gender and power highlight the unequal power between men and women to explain the difficulties women face in accessing health services, I found it relevant to this study. Moreover, the theory was applied in previous studies related to women's health—e.g. studies aimed to identify the factors that influence the risk of women developing lung cancer (Chapman-Walsh, 1995) and HIV infection (Wingood & DiClemente, 2000).

#### 1.8.1. Theory of Gender and Power

Social structural theorist Robert Connell (1987) developed the theoretical framework adopted to guide this thesis where in his book entitled Gender and Power, he theorised that in order to understand power imbalances between men and women, we must comprehend gendered relationships between men and women. This gendered relationship is based in three social structures namely: sexual division of labour, sexual division of power, and cathexis structure also known as affective attachments and social norms. According to Connell (1987), each structure perpetuates inequalities and abuses of authority and control in relationships and institutions favouring males. Therefore, gender is perceived and viewed as "the roles and responsibilities of men and women that are created in our families, our societies and our cultures" (UNESCO, 2003, p. 17). Contrary to this, power is described as having authority over others to do what you want them to do ('power-over') [(Dahl, 1957 cited in Koester, 2015). Combined, the two concepts explain expectations and norms established for men and women that mostly favour men and are the result of the unequal power dynamics between men and women. According to Connell (1987) the structures of the Gender and Power theory are met at the individual, societal, and institutional levels. Individual factors explain how gender-based inequities and disparities in expectations enhance women's vulnerabilities to health problems. The societal and institutional levels enhance gendered expectations for men and women throughout history and socio-political forces. For example, the institutions of family, schools,

workplaces, religion, health and other cultural and social institutions such as the media reinforce the implementation of norms (Connell, 1987; Wingood & DiClemente, 2000). Thus, all these institutions play a role in defining the expectations and tasks for women and men, affecting their ability to experience life equally.

# 1.8.2. Explaining women's use of maternal issues through the social structures of the theory of Gender and Power

#### I. Structure of Sexual Division of Labour

According to Connell (1987), the first structure in the Gender and Power Theory, "the sexual division of labour," explores contextual issues such as the economic inequity between men and women and how this favours men over women, which in the context of Mozambique puts women in disempowered or submissive positions relative to their husbands or partners. The sexual division of labour category at the societal level is based on the acceptance of unequal division of work for men and women. Therefore, at the institutional level the sexual division of labour in sets like families is sustained by the existence of unpaid segregated work for women such as taking care of children and the elderly and doing the cooking; there is discrimination in training and promotion and unequal wages (Connell, 1987). Women's position as family care taker is their first role in their communities. Therefore, women will find themselves with less time to do their paid work and consequently with low financial conditions, they become more dependent on their husbands (Connell, 1987; Wingood & DiClemente, 2000). Thus, Connell (1987) identified several economic exposures and personal risk factors that are contributing factors to the effective use of maternal health services. In this regard, the economic exposures identified include: poverty, unemployment or underemployment; limited funds to pay for transport or health services and working in a high demand-low control environment. On the other hand, the personal risk factors include: women's and girls' low education level; and early marriage and girls' younger age (Connell, 1987; Wingood & DiClemente, 2000). A study conducted in Kenya aimed to describe the factors that determine where women deliver indicates that among others factors, economic circumstances can influence the decision for women to deliver in Health facilities (Kitui, Lewis, & Davey, 2013). Additionally, a study about factors influencing place of delivery identified economic exposures such as the mother's and husband's occupation; women's ability to pay for transport, medicines and others costs related to child delivery; and poverty as influencing the use of delivering in health facilities (Gabrysch, Cousens, Cox, & Campbell, 2011). Another study conducted in Nepal indicated that the lack of ANC use by pregnant women was due to their heavy and timeconsuming house duties (Simkhada, Porter, & Teijlingen, 2010). Moreover, a study conducted in Tanzania indicated that long travel distances, poor road infrastructures and transport cost inhibit pregnant women from using ANC services (Mubyazi et al., 2010).

Furthermore, Bankole et al. (2009) argued that poor women are less likely to use contraceptives such as condoms and have access to effective maternal health services. Another study about condom prevalence use indicated that unemployed women reported inconsistent condom use compared to their peers who are employed or are in school (Tawk, Simpson, & Mindel, 2004). With regards to married women's power and decisions about contraceptive use, a study conducted in Ethiopia indicated that in rural Ethiopia, married women with low education level and high economic dependence are less likely to play a role in decision making regarding the use of modern contraceptives (Bogale, Wondafrash, Tilahun, & Girma, 2011). In contrast, Bankole et al. (2009) argue that in the north central region of Nigeria, where young girls are experiencing an increase in their education level, the proportion of women accessing ANC services has also increased. Furthermore, a study conducted in Kenya and Zambia indicated that married girls (15-19 years old) are 75% more vulnerable to contracting HIV than their unmarried counterparts (Clark, 2004). The younger a woman's age, the higher the increase in her dependency and health risks was identified in several research studies as negatively influencing the use of maternal care services and contraceptive methods (AVERT, 2014; Baxter & Moodley, 2015; Brieger et al., 2001; Pell et al., 2013; Pettifor et al., 2005; Rai, 2015; Rai, Singh, Kumar, & Parasuraman, 2013; UNAIDS, 2013).

#### II. The Structure of Sexual Division of Power

The second structure in Connell's (1987) Gender and Power theory explains the "sexual division of power" at the societal level as demonstrated through the inequalities in power between men and women. At the institutional level, inequality is sustained by the abuse of power, authority and control (Connell, 1987). Thus, this structure, which gives power and control to men, decreases women's chances of freely using and accessing health services, such as ANC and family planning services (Wingood & DiClemente, 2000).

Moreover, the hierarchies of the Government and business practically prevent women from opportunities due to lack of power. In addition, those formal arrangements in public spheres perpetuate intimate and institutional violence against women and some other physical and behavioural constraints to their safety. This influence negatively affects women's ability to use contraceptive methods and access ANC services (Connell, 1987). An adaptation of the theory of gender and power in one study aimed at examining factors associated with HIV risk and protective practices among women and identified physical exposures and behavioural risk

factors that influenced women's use of health services. Those physical exposures will also be tested for this study and include: being sexually abused and/or physically abused; experiencing drug abuse; having multiple partners; being exposed to sexually explicit media; lacking or having limited access to condoms or drug treatment; and having stressful workload (Wingood & DiClemente, 2000). Additionally, the behavioural risk factors include the use of alcohol or drugs and lack of negotiation skills (Wingood & DiClemente, 2000).

According to Panchanadeswaran et al. (2008), gender disparities in power are mostly visible through cases of physical and sexual violence against women. In addition, UN Women (2011) argued that violence against women and girls is viewed as a risk factor for acquiring diseases and infections. Therefore, exposure to physical and sexual violence can negatively affect women's health and consequently their well-being (UN Women, 2011). Alcohol abuse by men was identified as being associated with forced sex, increasing the risk of negative health outcomes (Koenig et al., 2004). Moreover, due to power imbalances in the relationships, gender based violence is directed mostly towards young women and girls and increases the risk for HIV infection, decreases the ability to negotiate for safer sex and maintains other negative health behaviours (Kenya National AIDS Control Council, 2015). Research indicated that girls who are married to older husbands, who own the power in the relationship and may have multiple sexual partners, are more likely to engage in risky sexual behaviours, increasing the risk of women contracting sexual and reproductive illnesses (Clark et al., 2006).

For instance, in Kenya, 11% of married men were having extramarital relationships while only 2% of women reported it (Central Bureau of Statistics – Kenya et al., as cited in Population Action Council, 2008). Additionally, in Kenya and Malawi, over 80% of HIV positive individuals are married or cohabiting, and they engage in unsafe sexual relationships (Anand, Shiraishic, Bunnell, Jacobs, & Solehdinc. 2008). Research conducted in SSA has showed that women still have difficulties in accessing relevant information about SRHR issues, thus limiting their knowledge and ability to make wise decisions regarding their own health (Hawkins, 2004; Kim et al., 2001; Bessinger, Katende, & Gupta, 2004).

#### III. The Structure of Affective Attachments and Social Norms

The third structure in the Gender and Power theory illustrates the role of affective attachments and social norms in enabling women to use SRHR services (Connell, 1987). At the societal level, the structure that defines women responsibilities is characterised by the emotional and sexual connection that women have with men. At the institutional level, the structure of social norms and affective attachments is maintained by different socio-cultural norms and beliefs imposed on women, and men and define their relationship roles (Wingood

& DiClemente, 2000). Therefore, gender inequities between men and women are the result of the social and cultural norms attached to different communities (Panchanadeswaran et al., 2008). Additionally, women who easily accept those society norms and beliefs regarding their gender role will be at greater risk of adhering to unsafe health behaviours, such as not using contraceptives or not seeking medical care while in need (Wingood & DiClemente, 2000). Furthermore, the social exposures identified in the structure of social norms include: women who have older partners; women and partner interested in conceiving; extended family not supportive to the use of maternal health services; lack of trust in health providers; cultural norms, laws and religious beliefs opposed to the use of maternal health services (Connell, 1987; Wingood & DiClemente, 2000). Additionally personal risk factors defined by Connell (1987) include having limited knowledge of the SRHR burden and protective measures, negative attitudes and beliefs about condoms, and a history of depression or psychological distress (Wingood & DiClemente, 2000).

#### 1.8.3. Adaptation of theory of Gender and Power in previous health related studies

In applying the Gender and Power theory to my study, it was determined that the three structures identified by Connell (1987) would help explain and unpack individual, societal and institutional factors that inhibit women from using proper maternal health services. In previous research, the theory of Gender and Power has been instrumental in understanding the interaction between individual and societal factors. For example, studies have examined how several health behaviours such as women's individual risk of developing lung cancer are impacted by both individual genetics and social exposure (Chapman-Walsh, 1995). Other studies have examined how women's HIV-related risks are impacted by both individual risk behaviour and social exposure to risk and vulnerability (Amaro & Gornemann, as cited in Pulerwitz et al., 2002; Mbonu et al., 2010; Panchanadeswaran et al., 2008; Wingood & DiClemente., 2000). For instance, a study conducted in the USA with 69 focus groups of Latino women identified gender and power inequalities as one of main barriers contributing to HIV infection (Amaro & Gornemann, as cited in Pulerwitz et al., 2002). In these studies, several exposure and risk factors were identified under Connell's (1987) sexual division of labour, sexual division of power and cathexis structures, and all derivate from the unequal power and gender norms between men and women.

#### 1.8.4. An overview of theories used in women's health-related studies

Having said that, there are other theories that have been used to explain and understand women's health outcomes and risks (Maharaj, 1995; Wingood & DiClemente, 2000; and Mbonu, Borne, & Vries, 2010). These theories include Andersen's (1968) *Model of Health* 

Care Utilization (Azfredrick, 2016); the Health Belief Model (HBM) (Roye & Seals, 2001); the Information-Motivation Behavioural Skills (IMB) theory (Fisher & Fisher, 1992; 2000) and the Power Control Theory (Collett & Lizardo, 2009). These abovementioned theories collectively take on more of an individualistic approach in explaining individual and social factors and are limited in providing a broader understanding of contextual issues (i.e., in the case of the current study: women's maternal health context and the effect of gender inequalities on women's sexual reproductive health). The theory of Gender and Power helps articulate how gender inequalities (as a consequence of a patriarchal system) explain a variety of barriers that prevent women from using contraceptives and ANC services. Additionally, the motivational and preventive exposures defined in the abovementioned theories are also considered within the structures explained in the theory of Gender and Power. For instance, the theory of Gender and Power considered similar elements defined in the IMB model as behavioural skill factors used for HIV prevention intervention designed by Fisher and Fisher (1992). Those similar factors include: women's perceived knowledge and abilities to have access and use condoms correctly, ability to negotiate consistent condom use with her partner, ability to convince her partner to be in a monogamous relationship; ability to make decisions related to her SRHR (Fisher & Fisher, 2000). However, theoretical frameworks such as the IMB model do not consider the influence of gender power inequalities favouring men while explaining the barriers women face to access health services. For the theories mentioned above, individual and external barriers can explain women's access to maternal health services, but the effect of gender disparities between men and women are not considered in their interventions.

#### 1.8.5. Theory of Gender and Power in this study

In adapting the theory of Gender and Power in my study, I will explore the experiences of young women in Mozambique who marry early and how they understand their situation in early marriages. This includes the decisions they make with regards to their maternal health (particularly decisions about ANC and contraceptive use before and during their marriages). Thus, in adopting the Gender and Power theory, the study will unpack contextual issues associated with the early marriage phenomenon in Mozambique and its outcomes as a consequence of context (i.e., arising from each of the three structures identified by Connell). Furthermore, the theory of Gender and Power will assist in understanding different outcomes and health risk factors for young women within socio-cultural contexts, which according to Connell (1987) are anchored within patriarchal systems that enforce gender disparities between men and women. These social and institutional systems of power perpetuate the acceptance of social norms and beliefs, which increase women's risk and limits women's rights to adopting

positive health behaviours. Thus, adopting Connell's (1987) typology will help theorise the interplay between the sexual division of labour, power, and social norms. The approach will help explain through "the exposure factors" identified by Connell the real determinants that influence the effective use of health services, particularly contraceptives and ANC services during pregnancy by young women who marry early in Namaacha and will identify how social exposure to vulnerability impacts personal risks.

#### **Summary**

In summary, this section discussed the theoretical framework that guides this study and provided a brief overview of other related theories applied in health related studies. The theory of gender and power was selected to guide this study. The theory addresses women's constraints in accessing health services as the result of gender disparities between men and women. Social norms about gender in the SSA region favour men and increase barriers for women's access to health services, specifically maternal health services. The theory of gender and power identified determinants that influence women's utilisation of health services, particularly related to SRHR. The set of external and personal exposures identified by Connell (1987) and Wingood & DiClemente (2000) will be utilised to explain the experience of women who married early regarding the use of modern contraceptive methods and ANC attendance during pregnancy. The study area is still dominated by a patriarchal system, which in reality decreases girls' opportunities to freely exercise their rights. Therefore, the research team found the theory relevant to explain barriers that prevent young married adolescents from using modern contraceptive methods and ANC services in Namaacha District, Mozambique. This means a context where girls live in a difficult environment for exercising their basic human rights, such as access to education, health and shelter in Namaacha District, Mozambique.

#### 1.9. Conceptual Framework

This section presents operational concepts relevant to understand the study objectives. These includes Sexual Reproductive Health and Rights, Family planning, *reproductive health*, *sexual heath*, *reproductive rights* and *sexual rights*, contraception, modern contraceptive methods, Antenatal care, Maternal mortality and morbidity, Marriage and Early Marriage.

#### I. Sexual Reproductive Health and Rights

According to Washington & Tallis (2012), in theory, SRHR can be understood as the "right for all individuals to freely make decisions regarding their own sexual and reproductive health, while respecting the sexual and reproductive rights of other individuals or their partners" (p. 7). In addition, ICPD (1994) indicated that SRHR incorporates the right of all

couples and individuals to freely and responsibly make decisions related to their reproductive intentions and sexual practice free from discrimination, coercion, and violence. Specifically, access to SRHR ensures individuals are able to choose whether, when, and with whom to engage in sexual activity; to choose whether and when to have children; and to access the information and means to do so (UN, 1995).

Furthermore, from the SRHR concept, others sub components were considered while deconstructing the concept (UN, 1995). These include *reproductive health*, *sexual heath*, *reproductive rights* and *sexual rights*. Thus, the UN (1995) defined *reproductive health* as the "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity in all issues relating to the reproductive system and its practicality" (p. 40). Additionally, *reproductive health* means that all individuals are able to have a satisfying and safe sex life, to reproduce and to have the freedom to decide if, when, how many and how often to reproduce (UN, 1995). In other words, Shah (2007) indicates that *reproductive health* assumes that individuals have the ability to reproduce, and women in particular can have a safe pregnancy and delivery with successful health results for the mother and new-born. Moreover, it implies that individuals, particularly women can control their fertility with no risks to their health, and they can have a pleasurable and safe sex life (Shah, 2007).

Similarly, WHO (2006a) argued that *sexual health* was defined as part of reproductive health within the Programme of Action of the ICPD, 1994. Therefore, *sexual health* includes healthy sexual development and equal and responsible relationships with sexual pleasure (UN, 1995). Moreover, a broad definition of *sexual health* describes a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences (WHO, 2006a). For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled.

With regards to reproductive and sexual rights, the UN (1995) indicates that reproductive rights entail the human rights principles already recognised in national legal frameworks and other international human rights agreements. These rights acknowledge the basic rights for all couples and individuals to responsibly and freely decide in the number, spacing and timing to have children, to have information and the means to do so (UN, 1995:40). It also includes their right to make decisions regarding their reproductive health free of discrimination, coercion and violence. Moreover, similar to reproductive rights, are sexual rights, which also involve human rights that are already recognised in national laws,

international human rights documents and other consensus statements related to sexuality and sexual relationships (Mueller, Germain, Fredrick, & Bourne, 2009). According to WHO (2014a), international consensus regarding SRHR acknowledges the rights of all persons, free of coercion, discrimination and violence to: the highest attainable standard of sexual health through the access to sexual and reproductive health care services, seek, receive and share information related to sexuality and sexual education. Other sexual rights include: respect for bodily integrity; freedom to choose their partner; decide to be sexually active or not; have consensual sexual relations; consensual marriage; decide whether or not, and when, to have children; and achieve a satisfying, safe and pleasurable sexual life (WHO, 2014a).

Another relevant component for the study is *reproductive health care*, which is defined as the set of methods, techniques and services that contribute to the reproductive health and well-being of individuals and couples by applying preventative measures and solutions to reproductive health problems (UN, 1995). Additionally, WHO (2006a) describes reproductive health care in connection with "sexual health" related services, which is extended to other personal areas of individuals besides counselling and care related to reproduction and STIs. Thus, in order to facilitate individuals and couples to accomplish high standards in their SRHR, the ICPD 1994 programme of Action recognised an array of basic reproductive health care interventions. These include: family planning services; information, education, communication and services related to prenatal care; safe delivery care and post-natal care; prevention and treatment of infertility; safe abortion services; prevention and treatment of reproductive tract infections and STIs including HIV and AIDS; and promotion of healthy sexuality for all individuals (UN, 1995).

Furthermore, reaffirming the commitments made during ICPD 1994 and the United Nations Fourth World Conference on Women held in Beijing (1995), WHO developed, in 2004, "the reproductive health strategy" to accelerate progress towards attainment of international development goals and targets related to reproductive health. On that matter, WHO identified five core aspects of reproductive and sexual health for action which include: improving antenatal, perinatal, postpartum and new-born care; providing high-quality services for family planning, including infertility services; eliminating unsafe abortion; combating STIs including HIV, reproductive tract infections, cervical cancer and other gynaecological morbidities; and promoting sexual health (WHO, 2004b). Those sexual and reproductive components are interrelated, and implementation of one can have a positive impact in the others (WHO, 2004a).

#### II. Family Planning

Family planning has been defined in different ways by different scholars, but its core meaning is enabling couples and individuals to attain the desired number of children, to plan the spacing and timing to have children through the use of modern and traditional contraceptive methods and the treatment of involuntary infertility (Shah, 2010; Sing et al., 2009; WHO, 2013). WHO (2015) highlights some of the benefits of family planning programs which include:

- Preventing pregnancy-related health risks in women allowing women to space and delay
  pregnancies can reduce the risks for pregnancy complications, unsafe abortions and
  maternal mortality;
- Reducing infant mortality women who space their children and survive pregnancies have more chances of raising healthy babies;
- Helping to prevent HIV/AIDS family planning reduces the risk of unwanted pregnancies among women living with HIV, helping reduce HIV positive babies and orphans.
   Additionally, male and female condoms provide dual protection against unintended pregnancies and against STIs, including HIV;
- Reducing adolescent pregnancies through the provision of information and contraceptive methods to prevent unwanted pregnancies among teenagers;
- Slowing population growth family planning helps reduce the high fertility rates among countries and consequently limiting population growth and the negative impacts on the economy, environment and national and regional development efforts.

Moreover, Shah (2010) argued that family planning provides opportunities for women's empowerment, giving them time to pursue education and creating job opportunities. In countries with a high prevalence of contraceptive use and low fertility rates, financial resources used to treat SRHR issues can be invested in social and economic development and improving the well-being of individuals and their families (Shah, 2010). As part of the world achievements in the medicine field, the United States Centers for Disease Control and Prevention – CDC (1999) stated that "access to family planning and contraceptive services was recognised as bringing social, economic, and health benefits" (p. 241). This was visible through the increase of smaller family size and/or longer spacing between having children.

#### **II.I.** Contraceptive Methods

To materialise family planning programs, countries have been developing, updating and distributing contraception methods worldwide. According to Shah (2010), contraception is the devices or medications used for reducing the likelihood of the fertilization of an ovum by a spermatozoon. In other words, contraception prevents pregnancy by interfering with the normal process of ovulation, fertilization, and implantation (Health of Children, 2004). Thus, it is important that the needed contraceptives and family planning services are available and physically and economically accessible to couples and individuals (Committee on Economic, Social and Cultural Rights-CESCR, 2000).

Furthermore, contraceptive methods must be available to all without any type of discrimination, and it must be culturally and ethically acceptable, scientifically and medically tested and approved, and as well of good quality to use (CESCR, 2000). Moreover, the different contraceptive methods can produce different outcomes when used. Therefore, the Department of Health and Human Services, Office on Women's Health (2011) and Planned Parenthood Federation of America, Inc. (2012) identify four groups of modern contraceptive methods, namely:

- Barrier methods designed to prevent sperm from entering the uterus, and they include
  male and female condoms, contraceptive sponge and diaphragm, cervical cap, and cervical
  shield;
- Hormonal methods use hormones to regulate or stop ovulation and prevent pregnancy (oral contraceptives; the patch; shot/injection; vaginal ring and Emergency Contraceptive Pills - ECPs);
- Intrauterine methods an intrauterine device (IUD) is a small, T-shaped device that is inserted into the uterus to prevent pregnancy and include implantable rods, a *copper IUD* and a *hormonal IUD*:
- Sterilization a permanent form of birth control that either prevents a woman from getting pregnant or prevents a man from releasing sperm. It includes a nonsurgical method called sterilization implant and surgical procedures such as tubal ligation and vasectomy.

Furthermore, WHO (2006a) still acknowledges the relevance of traditional contraceptive methods even in present days. In this regard, traditional methods, which have been used for a long time, include rhythm, withdrawal, abstinence and lactational amenorrhea (WHO, 2006b; Population Reference Bureau, 2008; MISAU et al., 2013). Additionally, the duration of the effect of the contraceptive method can be divided in permanent methods, such as male and female sterilization, and temporary methods, such as abstinence during the fertile period; coitus

interruptus (withdrawal); natural infertility (e.g., during breast-feeding and postpartum amenorrhea); intrauterine devices; and barrier methods (Shah, 2010).

#### **III.** Antenatal Care

The initial provision of ANC services worldwide has been documented since the 20<sup>th</sup> century when national governments in some European countries insisted that all women should be offered regular check-ups during pregnancy as an integral part of maternity care (WHO, 2003). This came by the acknowledgement that despite the reduction of maternal related deaths during the early 20<sup>th</sup> century, pregnant women were at risk of developing health complications and so they needed to be checked early in pregnancy in order to prevent future complications during pregnancy and delivery (WHO, 2003). Thus, steps were followed and processes and guidelines created so that the care provided to pregnant women could be legally formalised and implemented. Therefore, ANC was also among the other programmatic core areas relevant in the efforts to improve women's SRHR globally (WHO, 2004a).

The UN (2012) indicates that ANC is the screening of health and socio-economic conditions in order to prevent pregnancy complications specifically provision of effective psychological services, and educating pregnant women about planning for safe birth and emergencies during pregnancy and how to deal with them. Moreover, a more detailed definition of ANC was given by the United States Agency for International Development-USAID (2004) which argued that ANC is the delivery of quality basic care for all women in a safe, simple and cost-effective manner in order to guarantee health pregnancies through the detection and treatment of early pregnancy related complications. Another relevant definition of ANC came from Klerman (1990) which argued that ANC is not an individual intervention but the application of interrelated factors including early and continuing risk assessment for women, health promotion, physical and therapeutical interventions and follow ups up to the end of pregnancy and childbirth. This implies that frequent routine visits to the health provider must be followed. Thus, women can be checked and analysed for their health risks to determine if they will experience pregnancy complications and if so, the level of care they need (USAID, 2004).

Therefore, the safe motherhood approach suggests that for a women with no signs of health issues while pregnant (75% of pregnant women), a minimum of four antenatal care visits with the assistance of a skilled health provider is ideal to guarantee a safe and healthy pregnancy and delivery. This means a first visit at 16 weeks of pregnancy, the second during

24-28 weeks of pregnancy, the third at 32 weeks and the last during the 36th week of the pregnancy (WHO, 1994; 2003). In addition, one can find cases of pregnant women with specific health conditions or risk factors that necessitate special care (25% of pregnant women) (WHO, 2003). For the assistance and treatment of pregnant women presenting health complications, health staff are advised to follow the recommended procedures established in their local clinics to deal with pregnancy related complications (WHO, 2003). Continuously, the UN (2012) identified two different measures of antenatal care prevalence, namely:

- Antenatal care coverage (at least one visit) is the percentage of women aged 15-49 with a *live birth* in a given time period that received *antenatal* care provided by *skilled health personnel* at least once during their pregnancy;
- Antenatal care coverage (at least four visits) is the percentage of women aged 15-49 with a *live birth* in a given time period that received *antenatal care* by any provider four or more times during their pregnancy.

For Mozambique, a study by Biza et al. (2015) present the elements included in each ANC visit in the context of the ANC package of the Ministry of Health as recommended by WHO. Those elements are presented in Table 1 below:

Table 1. Elements included in each ANC visit in the context of the ANC package

Elements of ANC	1st ANC	2nd	3rd ANC	4th ANC and
		ANC		following
Clinical physical	X	X	X	X
examination				
Obstetric examination	X	X	X	X
Measurement of	X		From 32	
haemoglobin level			weeks	
Accessing proteinuria	X	X	X	X
Measurement of blood	X	X	X	XX
pressure				
Performance of syphilis	X			
test and treatment				
Prevention of anaemia and	X			
deworming:				
Deworming	X	X	X	X
(mebendazole)				
Ferrous sulfate + folic acid				
Prevention of Malaria:	X	X	X	X
ITP (Sulfadoxine-	X			
pyrimethamine)				
Mosquito net				
HIV testing and	X			X
counselling				
Vaccination	X	X	X	
Complementary	X	X	X	X
intervention: Provision of				
ARV treatment				

Source: Biza et al. (2015, p. 2)

#### IV. Maternal Mortality and Morbidity

After the approval of ICPD, 1994 and other international commitments to improve women's SRHR, in 2000, countries worldwide reunited and approved the United Nations Millennium Declaration Goals as a global effort to fight poverty. Among eight proposed objectives to be reached by 2015, goal number five aimed to reduce maternal death and ultimately improve maternal health, particularly in Developing Countries (Ronsmans & Graham, 2006; Sachs & MacArthur, 2005; WHO et al., 2015). In this regard, *maternal death* is defined as the death of a woman during pregnancy or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes (Hurt & Ronsmans, 2002; WHO, 2004b; and WHO, 2014a). Although maternal death was defined as the one occurring up to 42 days after pregnancy, another classification has been proposed to include late deaths up to 1 year postpartum (Sachs & MacArthur, 2005). This alteration is the result of early evidence that showed that the risk of women's death by pregnancy related causes is increased for up to 6 months after birth (Høj, Da Silva, Hedegaard, Sandstrom, Aaby, 2003; Pradhan, West, Katz, 2002).

However, Li, Fortney, Kotelchuck, and Glover (1996) argued that the majority of maternal deaths are more likely to happen between the third trimester and the first week after the end of pregnancy. Additionally, based on its causes, maternal deaths are divided in direct and indirect maternal deaths. Thus, direct maternal deaths are the ones which result from obstetric complications during pregnancy, delivery and postpartum (deaths caused by haemorrhage or hypertensive disorders in pregnancy, or those due to complications of anaesthesia or caesarean section) (WHO et al., 2015). Moreover, the obstetric conditions that cause maternal deaths include antepartum or postpartum haemorrhage, prolonged or obstructed labour, postpartum sepsis, complications of abortion, preeclampsia/eclampsia, ectopic pregnanc, and ruptured uterus (Glasier et al., 2006; Human Rights Committee - HRC, 2010). On the other hand, indirect maternal deaths are those resulting from existent prior health conditions, or from complications that arose during pregnancy and that were aggravated by the impact of pregnancy (deaths due to aggravation of an existing cardiac or renal disease, anaemia, malaria, tuberculosis) (WHO et al., 2015). Although women of all reproductive ages are in risk of developing health complications during pregnancy, teenage girls are the ones with a higher risk of developing complications and die due to pregnancy than older women (WHO, 2014a). Furthermore, maternal morbidity is another relevant concept related to maternal health. Thus, maternal morbidity includes physical and psychological conditions that result from or are

aggravated by pregnancy and have a negative impact on women's health (CDC, 2015). On the other hand, Koblinsky, Chowdhury, Moran, and Ronsmans (2012) broaden the concept of maternal morbidity arguing that it relates to any physical and/or mental disorder or disability directly influenced by pregnancy and/or childbirth.

# V. Marriage vs Early Marriage

According to DFID (2011), The Convention on the Rights of the Child defined marriage as the legal partnership between consenting adults, all above 18 years old. The Universal Declaration of Human Rights (UDHR) approved in 1948, stipulate the right to all individuals to freely consent to marriage (UNICEF, 2005). The Mozambican family Act, approved in 2004, defines marriage as the singular and voluntary union between man and woman with the purpose of building a family through the union (Conselho de Ministros de Moçambique-CMM, 2004). Therefore, marriage is a powerful way of socialization between couples and their families in all societies, shaping sexual practices, reproductive behaviours, economic opportunities as well as providing security and social support for women (Defoe, 1997).

Although the majority of countries worldwide have agreed with the minimum of 18 years of age as the legal age of marriage (UNICEF, 2015), evidence from around the world shows the existence of marriage unions where one of the partners, specifically women, are children under 18 years old (Clark et al., 2004; Green et al., 2009; WHO, 2012). Moreover, the Universal Declaration for Human Rights (UDHR) has acknowledged a situation when one of the partners intended to be married is not mature enough to make a rational decision about marriage and its responsibilities (UNICEF, 2005) as a violation of human rights. Thus, child/early marriage is defined as the union in which one or both spouses are children (under the age of 18 years old), and may take place under civil, religious or traditional laws with or without legal certification (DFID, 2011; WHO, 2012). Those practices are harmful for the bride's health and well-being, particularly sexual and reproductive health, therefore violating their rights as children and individuals (Green et al., 2009; UNICEF, 2005).

#### 1.10. Structure of the dissertation

This dissertation consists of five chapters including:

▶ Chapter I – Introduction – This chapter provides the background of the study and includes the problem statement, objectives of the study, significance of the study, as well as the theoretical and conceptual framework of the study. Moreover, a brief description of the research design and methodology, ethical considerations and limitations of the study are provided;

- ▶ Chapter 2 Presentation of the socio-demographic characteristics of Mozambique, including the health situation of the country
- ▶ Chapter 3 –Literature review This chapter will review relevant literature related to the study topic and includes material on early marriage, modern contraceptive use and antenatal care attendance. The chapter will end with a summary of previous research results related to the research topic;
- ▶ Chapter 4 In this chapter the research design and methodology applied for this study will be discussed;
- ▶ Chapter 5 This chapter presents the results obtained from the participant interviews;
- ▶ Chapter 6 This chapter comprises the discussion of the study findings in relation to the theory of gender and power and in relation to the research literature. This chapter also presents the limitations of the study as well as implications for policy and future research;
- ▶ Chapter 7 Presents conclusions and recommendations obtained from the study.

#### **1.11. Summary**

This chapter presented the background for this study as well as described the research problem, the study's objectives and research questions, significance and motivation for the study. In addition, the chapter also presented and discussed the theoretical framework applied in this study and lastly the concepts considered relevant for the study understanding. Further to this, the next chapter will present the background of Mozambique, the study location.

#### Chapter 2: Socio-Demographic and Economic Characteristics of the Study Area

### 2.1. A Brief Background of Mozambique

Mozambique is located in the SSA region, being part of Southern African countries and also the SADC. In the north the country borders with Tanzania, in the west with Malawi, Zambia, Zimbabwe and South Africa and in the south with Swaziland and South Africa. In 2013 the population of Mozambique was estimated at 24.4 million (PRB et al., 2013). The country will conduct the next national population census in 2017. With regard to age structure, data for 2013 show that the youth population below 18 years of age represented the majority, as represented in the figure below:

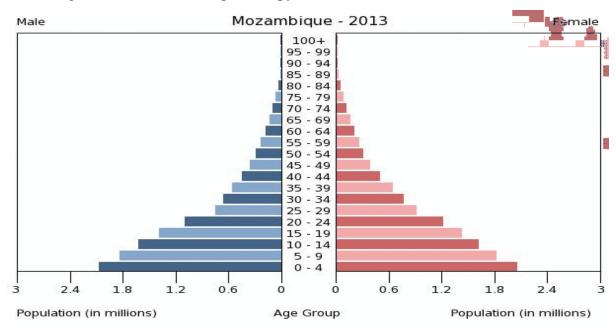


Figure 1: Mozambican Population pyramid

Source: Central Inteligence Agency (CIA) World Factbook, 2014

The population pyramid of Mozambique presented above shows that the majority of the Mozambican population is female with a slight difference compared to males. Age differentials in the country show that 45.5% of Mozambican people are below 15 years of age, 21.1% are between 15 and 24 years of age, 27% between 25-54 years of age and lower proportions are estimated at less than 5% for the group of people between 55 or more years of age. The annual population growth rate was estimated at 2.8% (Population Reference Bureau et al., 2013) and life expectancy was 52.29 years in 2013 at birth (CIA World Factbook, 2014).

With regard to the administrative division, Mozambique is divided into eleven administrative provinces and 128 districts (see map next page). The country remained almost five centuries under Portuguese colonial rule and gained independence in 1975 with the help from the guerrilla group called FRELIMO (Front for the Liberation of Mozambique), who took

control over the country after independence. After 1975, Mozambique was engaged in a civil war between FRELIMO, the guerrilla group in power, and a local guerrilla called RENAMO (National Resistance Movement), which ended in 1992. The conflict was mainly rooted in ideological, political and ethno-regional frictions (Agadjanian, as cited in Arnaldo, 2003, p. 292). With respect to geographical distribution, Mozambique has 30.7% of its people living in urban areas and 69.2% living in rural areas (World Bank-WB, 2013). The rural areas were the poorest in the country with an increase of poverty rate from 20.9% in 2003, to 22.2% in 2009. Urban areas experienced a small decrease in their rate of poverty from 19.7% in 2003 to 19.1% (WB, 2013).

Furthermore, the literacy rate in the country is considered low. In this regard, WHO (2013) estimated it at a 60% of the population, particularly in the poor rural areas of the country. Consequently, 40% of women between 15 and 49 have been educated whereas this proportion increases for men estimated at almost 70% (PRB et al., 2013). The annual economic growth rate was estimated at 8%. The GDP per capita was estimated at \$US 422.8, and between 1997 and 2003, economic growth was estimated at 9%, well above the African continent's growth rate, and it continues to grow (WHO, 2013). Data related to religion and language in Mozambique showed variations. According to the CIA World Factbook (2014) religions practiced in the country include: Catholicism, practiced by 28.4%, Protestantism, practiced by 27.7% (Zionist Christian 15.5%, Evangelical Pentecostal 10.9%, and Anglican 1.3%), Islam, practiced by 17.9%, other religions practiced by 7.2%, and 18.7% of people do not belong to any religion. For languages, data show that: 10.7 % speak Portuguese, the (official) language of the country, 25.3% speak Emakhuwa from the northern regions, 10.3% speak Xichangana in the south, and 7.5% speak Cisena in the central region of the country, followed by Echuabo spoken by 5.1%, Elomwe 7% and other languages spoken by almost 35% of the people (CIA World Factbook, 2014).

TANZANIA ZAIRE CABO DELGADO ZAMBIA NAMPULA TETE ZAMBEZIA ANICA ZIMBABWE Mozambique Channel BOTSWANA NHAMBANE Mozambique National capital Province capital SOUTH AFRICA Railroad MAPUTO SWAZILAND

Figure 2: Map of Mozambique administrative and border division

Source: USAID, 2014

# 2.2. Structural Organization of the Mozambican Health Sector

The Constitution of Mozambique enhances the rights of all citizens to medical and health care protected by law (Article 89). Additionally, the Mozambican Constitution on the articles (36 and 37) promote the rights of vulnerable people such as children and the disabled and also promote gender equality to protect women's rights, including access to health services (WHO, 2013). Mozambique operates a centralised public health care system organised along the 11 provinces and supported by multiple implementing partners. The minimum level of health care is provided at health posts in Mozambique. Following health posts, health care can be obtained

at health centres, rural hospitals, provincial hospitals, or central hospitals. Mozambique has a central hospital located in each region (Maputo, Beira and Nampula). According to WHO (2013), the National Health Service in Mozambique is funded by public and external sources provided by partner countries through a sector wide approach programme (SWAP), implemented since 2000. Data for 2011 showed that the total government expenditure in the health sector was 7.7% whereas the private sector contributed 58.3% to health expenditures (WHO, 2014b). Therefore, health services in Mozambique are provided by Government Health Institutions; Private for Profit and Non-Profit Private Sector, with the Governmental Health facilities being the main provider of these services (WHO, 2014b).

### 2.2.1. SRHR framework in Mozambique

WHO (2014b) reported that the Five-Year Government Program (2010-2014), the Action Plan for the Reduction of Poverty (PARP 2011-14) and the National Economic and Social Plan (2014) are the legal frameworks approved in the country to direct health interventions.

Additionally, within the health sector, the Strategic Plan for the Health Sector (known as PESS 2001-2005-2010) is formally approved by the CMM and became the reference document for government and partners to prioritise health funding and interventions. Other regulatory frameworks that guide the national government interventions in the health sector, particularly interventions aimed to improve women's SRHR include: the National Integrated Plan for the Achievement of Millennium Development Goals 4&5 (2009-2012); the Family Planning Strategy and Contraception 2010-2015; the National Policy on Health and Sexual and Reproductive Rights (2011); and the Health Sector Strategic Plan 2013- 2017 (UNFPA, 2013). Moreover, a recent Health Sector Strategic Plan 2014-2019 was approved after revising the previous one. Currently, sexual and reproductive health are a priority in the new Health Sector Strategic Plan 2013-2017, including community based family planning as a core intervention (UNFPA, 2012). On the other hand, the Ministry of Health has adopted the survey of the UNFPA Global Programme to enhance reproductive Health Commodity Security as a performance monitoring tool for health supply chain management (UNFPA, 2012). Therefore, it is argued that in Mozambique public local health facilities provide maternal and child health services in the following order: first priority are new-born babies followed by pregnant women, children under 5 years old and ending with the attendance of patients seeking or using modern contraceptives method (Geelhoed et al., 2013).

Furthermore, as a result of government efforts to improve the provision of health services, the country, for instance, had about 108 clinics in 2012, with expansion planned to most clinics providing Anti Retroviral - ART (Healthqual, 2012). This leads for increase in the

% of births attended by skilled health staff from 44.2% in 1997, to 54.3 in 2011 (UNICEF, 2013). This increase is a result of the increase in the proportion of skilled health providers in the country (See Table 2).

Table 2. Proportion of health personnel by levels, 1990-2010

Level	1990		2000		2004		2010			
	number	%	number	%	number	%	number	%		
Medical doctors	207	1.3	583	3.7	908	4.6	1.744	5.1		
Medium level	865	5.4	2.489	15.6	2907	14.8	6.927	20.1		
Basic	5.197	32.2	4.635	29.1	5963	30.3	10.572	30.6		
Elementary	1.660	10.3	1.679	10.5	2448	12.5	3.082	8.9		
Auxiliary (1)	8.231	50.9	5.03	31.6	6243	31.8	12.171	35.3		
Others (2)	0	0.0	1.510	9.5	1138	6.0	-	-		
Total	16.120	100	15.926	100	19657	100	100.0	100		
Source: SIP(PDRH 2004 -10) & DHR Report 2010 extracted from WHO 2013										

Source: SIP(PDRH 2004 -10) & DHR Report 2010 extracted from WHO, 2013

The table above shows proportions of health providers by category. The data show a general increase in the number of health providers during the last decades with the proportions of doctors and medium level technicians doubling and tripling respectively between 1990 and 2010. The other categories such as health providers at the basic and elementary level also showed an increase in their numbers between the two periods. However, this increase in the proportion of skilled health providers in the country cannot yet sustain the health needs of all patients. Data from 2008 indicated that Mozambique only had 1.26 health providers per 1000 of the population (MISAU, 2008) a number below the 2.5 providers per 1000 as recommended by WHO (WHO, 2013). According to Health Poverty Action (2013,p.12), in order to increase the number of skilled health providers in Mozambique, the government approved the Human Resources Plan 2012-2015 (HRP), with the goal of increasing the number of health providers from 30,000 to 45,000 by 2015, as well as retain health workers in the rural areas of the country.

### 2.2.2. Health situation in Mozambique: Highlighting SRH issues

Similar to other countries located in Less Developed Regions, morbidity and mortality in Mozambique are mainly due to malaria which accounts for 29% of total causes of illness and mortality as well as HIV, which accounts for 27% of this total (WHO, 2013). In this regard for example in 2009, the Minister of Health announced the integration of HIV and primary care to reduce stigma and assure care availability at the local level (Healthqual, 2012). In 2010, all health facilities providing ART were integrated into primary care, with decentralization of large "day hospitals" and patients referred back to primary health care centres (Healthqual, 2012).

Despite evidence from Developing Countries showing the occurrence of high rates of maternal and child mortality as well as morbidity, the country shows improvements in women's SRHR due to the implementation of a vast array of health services to target women at the reproductive age. According to Boene et al., (2013) the execution of the National Strategic Plan for the Reduction of Maternal and New Born Mortality since 2000, contributes to positive results in the availability of quality health services including ANC, family planning, and the diagnosis and treatment of obstetric complications. Thus, data from Mozambique DHS for 1997, 2003 and 2011 regarding fertility trends among women at reproductive age showed a slight decline of fertility in adolescents from 15-19 years old (MISAU et al., 2013). From 1997 to 2003, Mozambique experienced an increase of fertility among adolescents of 15-19 years old from 173 births per 1000 women to 179 births per 1000 women, with a decrease in the adolescent fertility rate from 179 births per 1000 women in 2003 to 167 births per women in 2011 (MISAU et al., 2013, p.75). In addition, data on fertility and family planning for 2013 indicate that in Mozambique, 38% of adolescent girls between 15 and 19 years old had already given birth to a child (MISAU et al., 2013). This proportion is higher in rural areas with 42% of the total of teenage mothers, while urban areas account for 31%. With regard to provincial differentials on adolescent fertility, data from the national census and DHS showed a decline in adolescent pregnancy rates between 1997 and 2011 in Provinces such as Nampula, Cabo Delgado and Sofala (UNICEF, 2015). Other Provinces such as Inhambane, Niassa and Maputo experienced an increase in adolescence pregnancy rates (UNICEF, 2015). For Maputo Province, the proportion of women between 20 and 24 who had their first child before 18 years old, between 1997, 2003 and 2011 was estimated at 52.3%, 48.7 % and 51.7 % respectively.

Linking early marriage and adolescence pregnancy, data from Mozambique DHS 1997-2011 showed a positive correlation between the two variables, where high rates of early marriage were linked with high rates of adolescent pregnancy (UNICEF, 2015). For example, while early marriage rates have decreased from 56.6% in 1997 to 48.2% in 2011, adolescence

pregnancy rates had experienced only slight decrease from 43.2% in 1997 to 40.2% in 2011 (UNICEF, 2015,p.7).

With regards to the maternal mortality ratio in Mozambique, data for 2013 showed a ratio of 480 per 100,000 live births, which was higher than Millennium Development Goal 5a with the target of 258 maternal deaths per 100,000 live births by 2015 (WHO et al., 2014b). The main causes of maternal death in Mozambique are postpartum haemorrhage (24%), indirect causes such as anaemia, malaria and heart disease (20%), infection (15%), eclampsia (12%), obstructed labour (8%), ectopic pregnancy, embolism, and anaesthesia complications (8%) and unsafe abortion (13%) (Nour, as cited in MISAU et al., 2013). It is argued that adolescents between 15 and 19 years old face twice the risk of dying during pregnancy or childbirth as compared to women more than 20 years old, while adolescents under the age of 15 face five times the risk (UN Secretary-General, as cited in UNFPA, 2013). For Mozambique, the % of women who died due to maternal causes is greater in young women and, one in every four deaths (24%) among women between 15 and 19 years is attributed to maternal causes, but this proportion drops to 16% for women aged 25 to 29 years and 8% in women aged 45 to 49 years (MISAU et al., 2013). Thus, in total, 14% of the deaths of women in procreation age are assigned to maternal causes.

With respect to regional disparities within Mozambique, data from Mozambique DHS, 2011 showed that infant mortality levels are a little higher for rural areas than in urban areas and for children whose mothers have a low level of education (MISAU et al., 2013). Thus, the infant mortality rate is 69 per thousand live births in urban areas against 72 per thousand live births in rural areas. Considering the educational level of the mother, the infant mortality rate is 56 per thousand live births for women with secondary level or more, against 70 per thousand live births among the children of mothers who did not attend or complete secondary school (MISAU et al., 2013). Data from Mozambique DHS-2011 indicated that neonatal mortality rates are higher among children born from mothers under 20 years of age, and it was estimated at 146 deaths of children under 5 years old per 1000 live births (UNICEF, 2015). These data also showed that this proportion of neonatal mortality is higher when it is associated with adolescent mothers below 18 years old having short birth intervals (below 24 months). In addition, in Mozambique restrictive laws that are often culturally bound prevent women from accessing health services for legal abortions despite, only in 2014, the Government approvingd a law that decriminalises abortions in exceptional circumstances. Therefore, WHO (2011) argued that Mozambique, similar to countries like Angola, Ethiopia, Kenya and the Democratic Republic of Congo (DRC) had the highest unsafe abortion rates, with 36 per 1,000 women between 16 and 44 years.

#### **Chapter 3: Literature Review**

#### 3.1. Introduction

This section discusses the relevant literature related to the experiences of young married women with respect to the use of contraceptives and ANC during pregnancy. The literature review has a format of citing research papers published in eligible peer-reviewed journals with the sole objective of presenting the summary of knowledge related to a specific topic from previously published material (Helewa & Walker, 2000).

This review is divided in sections with a focus on Developing Countries, particularly the SSA region, where Namaacha District in Mozambique, the study site, is located. Less attention in this review was given to developed countries because access to maternal health services such as modern contraceptive use and ANC attendance during pregnancy is considered extensive. The *United Nations, Department of Economic and Social Affairs, Population Division* (2013), indicated that in 2011 North America and Europe, for example, have reached between 60% and 70% of modern contraceptive use among married women or women in union. For ANC attendance, developed countries have reached almost 100 % coverage.

Therefore, the first section in this chapter will present a discussion about the topic of early marriage. Early marriage practices negatively influence women's SRHR. The section will discuss the trends of early marriage occurrence, including factors influencing early marriage occurrence, impact of the practice for women's health and interventions that can help reduce and end the practice. This chapter will give, therefore, the context of early marriage occurrence in Developing Countries as a way to identify the maternal health vulnerabilities women face within marriages when it comes to access, use of modern contraceptive methods, and attendance of ANC services during pregnancy. Subsequently, the second section will present a review on women's contraceptive use. This section will present data about contraceptive use by women at reproductive age worldwide, with emphasis on the proportion of contraceptive use among young married adolescents in SSA and Mozambique. The section will also review relevant material about factors that influence contraceptive use by married women and the impacts of contraceptive use in women's well-being. In the third section, literature on ANC attendance including its trends will be discussed and reviewed. The section will end with a review and discussion of literature about factors that motivate women to and prevent pregnant women from using ANC services, and the impact of those services on women's well-being.

For the search of relevant literature, the languages of choice were English and Portuguese, and several sources of data were considered. Electronic databases such as Google Scholar, PubMed, Springer, JSTOR, and WHO databases were used. Additionally, research

material provided in class and accessed from the UKZN library was considered in this review. Search for literature started in August 2015 and ended October 2016. For the electronic search several keywords were used to identify relevant literature. Those include: early marriage; impact of early marriage in women's health; SRHR; family planning methods; prevalence of contraceptives in less developed regions, with emphasis on the SSA region. Other terms included: contraceptive methods; barriers for contraceptive use; ANC; prevalence of ANC use worldwide and in the SSA region; factors affecting ANC use; maternal health, maternal mortality, maternal morbidity, pregnancy complications; gender. While searching through the key words, several electronic and printed articles were reviewed. This process was followed by using specific criteria to identify the relevant articles to the study. Those include:

- Year of publication (1987-2016);
- Location of the study (Asia, Latin America and the Caribbean, Sub-Saharan Africa)
- Objectives of the study and its similarity to this study topic.

The literature reviewed in this study pertained to both qualitative and quantitative research, as well as both study reviews and empirical studies. On the other hand, other relevant papers were identified and considered relevant for discussion in this study.

#### 3.2. Early Marriage

### 3.2.1. Introduction

The patriarchal system in most Developing Countries, particularly in the poorest regions of the world, is characterised by the unequal power between men and women. The theory of Gender and Power highlights power inequalities that favour men, to the detriment of women. These inequities derivate from gender imbalances in expectations for women and men and therefore increase the risk of women's exposure to early marriage and its negative consequences (Connell, 1987). A study review by Willaw (2013) about teenage pregnancy in South Africa argued that young girls SRHR are affected by gender norms that favour men, to the detriment of women. Those discriminatory norms perpetuate early marriage, leading to women's loss of power to decide whether to adopt behaviours that will not affect negatively their maternal health including the prevention of unplanned pregnancies (Willaw, 2013). The extension of child marriage occurrence varies for each region of the world and even within countries (UNICEF, 2005; 2015). Alarming data from the less developed regions of the world indicate that "one in every three girls in the developing world is married before completing 18 years of age and one out of every seven girls in the world's poorest countries is married before their fifteenth birthday (DFID, 2011). In addition, DFID (2011) also stated that during the last

decades, the proportion of early married girls has been declining worldwide, accompanied by an increase of the average age at first marriage.

# 3.2.2. Early marriage occurrence in Developing Countries: evidence from mid-90 and earlies 2000

Data from UNICEF (2005) indicated that in South Asia, 48% of women aged 15-24 years old were married before the age of 18, while 42% in Africa and 29% in Latin America were. In addition, they identify the 10 countries with the highest prevalence of early marriage. In this respect, data showed that in 2005, Niger was the country with the highest prevalence of early marriage occurrence, estimated at 60%, followed by Chad with a rate of child marriage estimated at 47% (UNICEF, 2005). The third country in the list was Bangladesh with the proportion of young married girls estimated at 47%, the same as Chad. Mali ranked fourth with a child marriage rate estimated at 46%. Mozambique, the country of study, was positioned at fifth with a rate estimated at 45% (UNICEF, 2005). Following Mozambique were Guinea and Nepal positioned at rank six and seven with child marriage rates estimated at 44% and 40% respectively in 2005. Finally, to complete the list, countries such as Central African Republic, India and Burkina Faso were positioned at the eighth, ninth and tenth place, with a proportion of married girls estimated at 39%, 34% and 34% respectively. On the other hand, UNICEF (2005) indicated that other countries from the SSA region (Benin, Cameroon, Ethiopia Malawi, Nigeria, Eritrea, Senegal, Tanzania, Zimbabwe, and Togo) as well as some from the Asian region (Yemen) and Latin America (Dominican Republic, Guatemala, and Nicaragua) presented early marriage rates ranging from 20% to 35%.

#### 3.2.3. Early marriage occurrence in Developing Countries: Evidence from 2011-2014

Data from 2011 showed similar trends as previous data, regarding early marriage regional trends. Thus, the South Asia region had the highest proportion of women between 20 and 24 years old married by the age 18, estimated at 46%, followed by the SSA region with 39% (DFID, 2011). Latin America and the Caribbean as well as the Middle East and North Africa's early marriage rate were estimated at 25% and 18% respectively (DFID, 2011).

For the SSA region, the proportion of early marriage occurrence was estimated at 39% (UNICEF, 2015). A study conducted in 2012 indicated that countries such as Madagascar, Mozambique, Zimbabwe and Malawi have proportions of married girls between the ages of 14 to 17 above 15% while in countries such as Kenya, Burundi and Rwanda the early marriage rate was estimated below 10% (UNFPA, 2012). For Mozambique, data from DHS 2011 indicate that 23.3% of adolescent girls between 15 and 19 years old were already married (MISAU et al., 2013). In respect to early marriage differentials between the eleven provinces

in Mozambique, this proportion range from 15% in Maputo Cidade to 62% in Nampula, the province with the highest proportion of girls married before the age of 18(see Figure 3) below.

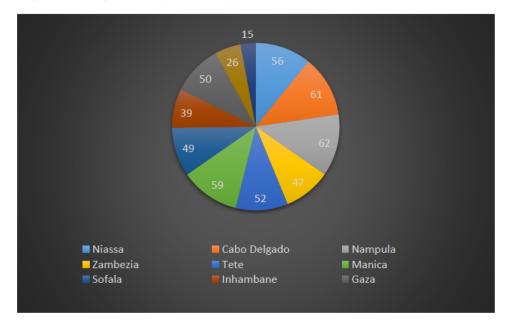


Figure 3: Proportion of married girls between 14-17 years old (%) in Mozambique, 2011

Source: Mozambique DHS (2011) extracted from MISAU et al, 2013

### 3.2.4. Factors influencing early marriage occurrence

A study by Green et al. (2009) highlighted factors influencing the occurrence of early marriage. Those include: cultural beliefs that accept and promote early marriage; the education level of the girl; girls' early sexual debut; and low status of women. With respect to women's status, the Population Council (1996) argued that conditions that favour women's status and gender equity would lead to better reproductive health and consequently fertility decline. By contrast, Pulerwitz et al. (2002) and Connell (1987) argued that the power imbalances between men and women favour men and decrease the ability of women to articulate and affirm their needs. These needs can include the freedom to consent to marry or to access health services when in need. Socio-demographic and economic factors were identified as causal factors of early marriage such as place of residence (rural/urban) and household wealth (UNICEF, 2005). Other studies have identified both demographic and socio-economic factors, which include poverty, economic instability, conflict and humanitarian crises as contributing factors to the occurrence of early marriages (DFID, 2011; Jain & Kurz, 2007; UNFPA, 2013; WHO, 2012). For Mozambique, specifically, UNICEF (2015) identified several factors influencing child marriage occurrence, namely: age of head of the household, sex of household head, girls' education level, and education level of the household head, wealth, and frequency of listening

to the radio, number of siblings, religion, and region/location. Thus, the next section will discuss in detail some of the main determinants previously discussed in the literature that influence early marriage practice.

#### 3.2.4.1. Introduction

A study by Green et al. (2009) highlighted factors influencing the occurrence of early marriage. Those include: cultural beliefs that accept and promote early marriage; the education level of the girl; girls' early sexual debut; and low status of women. With respect to women's status, the Population Council (1996) argued that conditions that favour women's status and gender equity would lead to better reproductive health and consequently fertility decline. By contrast, Pulerwitz et al. (2002) and Connell (1987) argued that the power imbalances between men and women favour men and decrease the ability of women to articulate and affirm their needs. These needs can include the freedom to consent to marry or to access health services when in need. Socio-demographic and economic factors were identified as causal factors of early marriage such as place of residence (rural/urban) and household wealth (UNICEF, 2005). Other studies have identified both demographic and socio-economic factors, which include poverty, economic instability, conflict and humanitarian crises as contributing factors to the occurrence of early marriages (DFID, 2011; Jain & Kurz, 2007; UNFPA, 2013; WHO, 201). For Mozambique, specifically, UNICEF (2015) identified several factors influencing child marriage occurrence, namely: age of head of the household, sex of household head, girls' education level, education level of the household head, wealth, frequency of listening to the radio, number of siblings, religion, and region/location. Thus, the next section will discuss in detail some of the main determinants previously discussed in the literature that influence early marriage practice.

#### 3.2.4.2. Poverty and economic constraints

Poverty is a crucial phenomenon influencing early marriage and therefore, when levels of poverty are high, families can view young women as an asset to economic gains, forcing them to marry at younger ages (Green et al., 2009). As such, lack of social and economic support for young girls may lead to the acceptance of early marriage practices perpetuating a cycle where young women are subjected to exploitation and lack of decision-making power (Clark, 2004, 2006). Women who live in urban areas and belong to the highest wealth status are more likely to marry two years later than the poorest ones living in rural areas (Green et al., 2009). Data from UNICEF (2005) also showed that rural areas present higher rates of young married girls than urban areas. For example, in Peru, the early marriage rate was estimated at

12% in urban areas, while in rural areas this proportion increased to 35%. For South Africa, data indicate that the early marriage rate was estimated at 3%, occurring mostly in rural areas with 78% of the total proportion of married girls between 15 and 19 years old (UNICEF, 2005).

Furthermore, UNICEF (2015) argued that economic distress that families face motivates the families to lead their daughters to marry at an early age though they lack the maturity and strength to be wives. A study conducted in Uganda aimed at addressing early marriage indicated that lack of economic opportunities influences the parents' decision to engage their daughters in early marriages in exchange for some economic benefit (Green et al., 2009). The same study also indicated that in situations where there are orphans and other vulnerable children, their caregivers may force them into early marriages as a way to alleviate themselves from the financial and social burden. Another example from Peru showed that with 19% of women aged 20-24 married before age 18, an estimation of 45% of that proportion is among the poorest 20% compared to 5% among the richest 20%. Similarly, another example shows that Ghana and Nigeria have the highest rate of early marriage among the poorest women and less within the wealthiest group of women (UNICEF, 2005). Data from Mozambique (DHS, 2011) indicated that the highest rates of early marriage are prevalent in the poorest Provinces of the Country, namely Nampula, Cabo Delgado, Niassa, Gaza and Manica, with rates ranging between 50% and 62% (MISAU et al., 2013). Rural areas of the country are the mostly affected by early marriage occurrence due to the high levels of poverty and lack of opportunity for women's empowerment (UNICEF, 2005). Additionally, a study conducted in Mozambique by UNICEF (2015) indicated that wealth has a negative correlation with early marriage since families positioned with higher economic status tend to give better education to their children, preventing the occurrence of early marriage. Therefore, women in higher wealth positions tend to marry at later ages compared to the women in the lowest levels of wealth (MISAU et al., 2013).

#### 3.2.4.3. Level of education

A study, which discusses the connection between early marriage and education, argued that "poor and less educated girls are more likely to enter early marriage, and populations with higher incidence of early marriage are more likely to see teenage girls dropping out of school" (Omoeva et al., 2014, p.25). Therefore, there is a negative correlation between early marriage and education, meaning the link is stonger between later age at marriage and higher education levels (DFID, 2011). UNICEF (2015) argued that the higher the level of education of individuals in the household, the higher the chances of girls marrying at a later age. Thus, it is obvious that providing education to girls increases their chances of participating in a voluntary

and consensual marriage at a later age in their lives, contributing also to delayed sexual initiation and protecting themselves from HIV and other diseases (DFID, 2011). Concerning educational attainment by gender, a study by Omoeva (2014) stated that barriers that prevent children's participation in secondary school such as school fees, long distances to schools, absence of water and sanitation facilities, or existence of family financial constraints have a negative impact mostly for girls and to a lesser extent to boys.

Data from the DHS conducted in Uganda in 2006 indicated that 37% of married women aged 25-49 who married before their 14th birthday never went to school, while 26% of those women who married later had some education (Green et al., 2009). Additionally, Green et al (2009) indicated that the majority of women married after the age of 18 had secondary education level completed and above, different from those who married at younger ages. A study conducted by UNICEF (2005) about early marriage practice indicated that among the 42 countries analysed, women between 20 and 24 years old and married at a later age were more likely to have attended primary school, whereas the proportion who married at an early age were more likely to not have attended school at all. An example from Senegal about the impact of education in early marriage occurrence showed that 20% of women who had attended primary school had been married by the age of 18, compared to 36% of those who had not attended school (UNICEF, 2005). Another study conducted in rural Bangladesh indicated that girls who marry at later ages are more likely to pursue their studies further and be literate, contrary to the girls who marry early (DFID, 2011). An example from Tanzania indicated that women with secondary education were 92% less likely to be married by the age of 18 than women who had attended primary school only (UNICEF, 2005, p.6).

Furthermore, another study cited by DFID (2011) found that in 29 countries, women who married at the age of 18 or older had more education than those who married at a younger age. Exceptionally, there is only a little evidence found in the literature about countries where women with higher education had significant rates of early marriage occurrence. For example, in countries like Cameroon, Ethiopia and Guinea more than 20% of women aged 20-24 who attended higher education were married by the age of 18 (UNICEF, 2005,p.6). In addition, the most typical country with this trend is the Central African Republic which 44% of women who attended post-secondary education were married by age 18 (UNICEF, 2005,p.6). This atypical trend of early marriage is explained through other socio-cultural and religious determinants rather than factors such as education, location or economic status.

For Mozambique, the government acknowledges the role of education in empowering women. Therefore, activities to improve the education sector have been implemented,

particularly to improve the access of girls to education. Survey results from Mozambique in 2007 show that the net enrolment rate in 1st Grade education has achieved a national coverage of 95.5% showing a significant increase compared to 2003 (69.4%) (INE, 2010). Data from DHS (2011) that show disintegrated information by province about levels of education by gender indicated that for Maputo Province, where this study will be conducted, 52.1% of girls finished primary school, while only 37.2% started secondary school (UNICEF, 2015, p.25). Furthermore, data from DHS (2011) also showed a negative correlation between early marriage and education. These data showed that Mozambican women with secondary school or more are more likely to marry two years later than women with no school or with a primary level completed (MISAU et al., 2013). In this regard, women between 18 and 24 years old and who were enrolled at the secondary level of education had 53 % less chance of marrying before 18 (UNICEF, 2015).

#### 3.2.4.4. Early sexual initiation

In developing regions early sexual debut is a social norm widely experienced by young girls and boys (AVERT, 2014; Brieger, 2001; UNAIDS, 2013). In those regions, sexual initiation also occurs within the marriage context, and it affects mostly girls as brides and to some less extension, boys, who tend to marry at later ages (Bruce, 2007; Santhya et al., 2008; WHO, 2012). In this regard, data analysed from the DHS of 31 countries in the developing region, indicated that more than 80% of girls aged 15-19 who affirmed being sexually active were in a marital union (Bruce & Clark 2003).

Young married girls are more sexually active during the first year of marriage while trying to conceive as customarily expected (Clark et al., 2006). A study conducted in Zambia indicated that a higher proportion of males than females reported having had sex in the 10-14 and 15-19-year age groups, with a median age at first intercourse being 15 years for males and 16 females (Magnany et al., 2002). Therefore, UNICEF (2005) indicate that in Zambia the proportion of women aged 20-24 married before 18 was estimated at 42%. This showed that a high number of girls in Zambia were married before reaching 18 years of age and were more likely to have initiated sexual intercourse. A study conducted in the early 90s showed that in Ghana, the median age at first intercourse for both boys and girls is 17, and by the age of 19, 85% were sexually active (Ghana Statistical Service, 1993). These results from Ghana were discussed in others' research and may validate the positive correlation between early marriage and early sexual initiation. According to UNICEF (2005), Ghana's early marriage rate was estimated at 28%, much lower than its neighbouring countries with high rates of early marriage and early sexual initiation rate among girls.

### 3.2.4.5 Cultural beliefs that influence early marriage occurrence

Early marriage occurrence is impacted by the combination of several determinants previously cited, which also include cultural and social norms that incite the phenomenon. A study by Mathur, Greene, and Malhotra, (2003) stated that majority of cultures in the globe emphasised the economic gain from the marriage process and so, these expenses are lower when the bride is still young (p.5).

Factors such as traditional and gender-discriminatory norms rooted in patriarchal values and ideologies influence early marriage practice. Findings from Gupta (2000) discussing the influence of gender inequalities in women's health indicate that "the unequal power decision between men and women relationship that favour men, is visible in the imbalanced heterosexual interaction, in which men pleasure overtakes women satisfaction and males are more likely to decide of when, where, and how sex occurs (p.3). The study by Green et al. (2009) indicated that parents interviewed during focus group discussions acknowledged the role of extended family members in the girl's personal education, including early marriage negotiation. The study further stated that ancestral practices such as *Ssenga* on which paternal aunt has the responsibility to provide sexual education to young girls, including information about marriage, encourage early marriage practice in the community.

In Mozambique, the National Strategy to Prevent and Fight Early Marriage approved in 2015, stated "norms about birth conception and puberty ceremonies influence the practice of early marriage and mark the passage for adulthood and early sexual debut (CMM, 2015, p. 9). A study by UNICEF (2015) conducted in Mozambique also highlighted the existence of social norms that motivates early marriage practice. Those traditional practices are transferred and maintained from generations, through their community leaders and elderly women who hold power in the community and are responsible for conducting the puberty ceremonies (UNICEF, 2015). In this regard, regions of the country where traditional norms encouraging early marriage are widely accepted also present a high proportion of child marriage practice. Therefore, CMM (2015) stated that Cabo Delgado, Nampula and Zambézia are the provinces located in the north and centre of Mozambique, which is believed to have strong traditional values that favour early marriage occurrence. In reality, these provinces have the highest rates of early marriage practice among all of the eleven provinces of the country (UNICEF, 2015).

However, exposure to other sources of information and knowledge related to girls' SRH and social behaviour, might threaten the sustainability of certain social norms, leading to a loss of their social value and less practice by the community (Green et al., 2009). In this matter, an example from Mozambique showed that the early marriage phenomenon declined, particularly

in provinces with the highest practices, suggesting that the traditional norms that encourage early marriages are losing their social value in the community (UNICEF, 2015). For instance, the proportion of women aged 20-24 and married before the age of 18 reduced from 82% in 1997 to 62% in 2011 (UNICEF, 2015, p.17). Moreover, for Cabo Delgado, another province with a higher proportion of young married girls, the reduction went from 78% in 1997 to 61% in 2011, while Tete, located in the centre of the country, experienced a decline from 17% in 1997 to 14% in 2011 (UNICEF, 2015, p.1). While explaining the influence of other determinants of early marriage practice in Mozambique (religion, age and gender of household head), UNICEF (2015) argued that young girls from religious families have less chance of being a child bride than girls from non-religious families. Additionally, young girls living in female-headed households have fewer chances of becoming chid brides.

# 3.2.5. Impact of early marriage for women health and well-being

Studies argued that early marriage takes away girls' freedom and isolates them from peers and extended families (Clark et al., 2006; ICRW, 2007). This scenario is aggravated by the age difference between couples. The husbands tend to be much older than the wives are and have more sexual experience (ICRW, 2007). Moreover, Lloyd (2005) indicated that early marriage practices are very unequal in terms of power decisions between the older husbands and wives within household. Therefore, Clark et al. (2006) stated that "if young women married to much older husbands have less power in the relationship, then they may have less ability to negotiate strategies to protect themselves gainst HIV or to influence their husband's behaviour" (p.84). Other studies stated that early marriage encourages the end of girls' school attendance (ICRW, 2007; UNICEF, 2015). With no education, women are unable to exercise their rights, compromising their well-being, power to negotiate in marriage and participation in political and economic activities (Population Council, 1996). A study from Bruce and Clark (2003), which analyses—among others—topics related to early marriage and educational level by age at first marriage, indicates that countries with low rates of girls' attendance at school, such as Benin, Burkina Faso, Chad, Ethiopia and Mali, also have great prevalence of child marriage. In contrast, countries such as Namibia, Philippines, South Africa, Peru and Zimbabwe that are characterised by high levels of education translate into low rates of early marriage. Data from a household survey conducted in Malawi examining the effects of marriage and childbirth on school participation over a two-year time period, indicated that only 6% of married girls between 14 and 17 years old attended school while 69% of unmarried girls attended school (Omoeva et al., 2014). This means that in Malawi, 93% of young married girls between 14-17 years old exit school between 1 to 2 years after marriage.

For Mozambique, findings provided by the World Bank from national surveys conducted between 1998 and 2008 indicated that 20% of the respondents believe that early marriage, among others, was the reason behind the low levels of girls' school attendance (UNICEF, 2015). DHS (2011) data indicate that 35.7% of girls between 15 and 24 years old finished primary school, while only 23.6% enter secondary school (UNICEF, 2015). In this matter, DFID (2011) argued that promoting girls' school attendance may increase the chances of girls in escaping early marriage, thus leading to a later consensual marriage, a greater chance of delaying sexual intercourse and living in an environment where their rights are respected and exercised freely. A study conducted by UNICEF (2015) argued that early marriage closes women's opportunities for personal growth and is extremely associated with early pregnancy and related health complications. Thus, early marriage as practiced in many Developing CB ountries is a culprit or a contributing factor in explaining the high prevalence of both child and maternal mortality (WHO, 2011).

Other research also argued that young married girls have a greater chance of experiencing intimate partner violence (ICRW, 2007). For instance, due to their submissive role within marriage, women are forbidden to refuse sex with their husbands, behaviour enforcing the threat of violence from their spouses if they do try to refuse (Clark et al., 2006). A cross-sectional study conducted in two districts in India showed evidence of mental and physical violence against married women, perpetuated by their husbands. These data indicate that in Guntur, 11% of young married women had experienced mental violence from their husbands, while in Dhar and Guna, the proportion was estimated at 18% for both districts (Santhya et al., 2008). With respect to physical violence, these data indicate that in Guntur, 34% had ever experienced this type of violence, while in Dhar and Guna, this proportion was estimated at 41%. Moreover, data from SSA indicate that in countries such as Ethiopia and Mali, respectively 43% and 64% of married girls believe that is justified to husbands to be violent with their wives when they refuse to engage in sexual intercourse (Jejeebhoy & Bott, 2003; Koenig et al., 2004). Data from DHS (2006) in Uganda indicate that nationally, three in five female respondents married before they were 18 had been physically abused by their spouses since they were 15 years old, with a national proportion estimated at 68% for women between 15-17 years old (Green et al., 2009,p.8). The study further stated that 74% of women respondents from 15-17 years old believe that it is justified to be beaten by their husbands for different reasons, including burning the food; arguing with the husband; leaving the house without the husband's consent; ignoring the couple's children; and refusing to have sexual intercourse with the spouse (Green et al., 2009, p.8). This proportion was considered higher

among women who married before the age of 18, in comparison with their counterparts who married at an age of 18 or above. Data from DHS (2011) indicated that in Mozambique, 11.2 % of married women between 15 to 19 years old believe that a husband is justified to beat his wife if she neglects her children, and 7.4% believe that violence is justified if she refuses to have sex with him (MISAU et al., 2013, p.239). The data from DHS (2011) indicate that 22.4% of girls between 15 and 19 years old had experienced some sort of violence (physical, sexual, and emotional), starting when they were 15 years old (MISAU et al., 2013, p.247). Normally, physical violence against women is visible through forced sex, which leads to reproductive health morbidity, including HIV infection (Jejeebhoy & Bott, 2003 & Koenig et al., 2004). Thus, married female adolescents have a greater chance of being infected by HIV via heterosexual sex as well as presenting a high prevalence of HIV infection (Clark et al., 2006).

## 3.2.5.1. Early marriage and the link with HIV

Other researchers, who describe early marriage's effect on women's sexual and reproductive health, highlight the greater risk of exposure to HIV and other STIs (Bruce & Clark, 2003; Clark et al., 2006). Women are more than twice as likely to contract HIV from men as the other way around due to several factors, including male sexual behaviour, physiology of the female genital tract, and multiple partnerships (UNAIDS, 2008). Moreover, the virus affects mostly youth between 15 and 19 years old with data indicating that in 2013, four million young people aged 15-24 were living with HIV, with 29% aged under 19 (UNAIDS, 2014). Additional research shows that worldwide women between 15 and 24 years of age constitute half of those living with and being infected by HIV (AVERT, 2014; Brieger, 2001; Hawkins, 2004; UNAIDS, 2004). Data for 2014 showed evidence of new infections, particularly in the SSA region, estimated at 1.4 million new HIV infections in the region (UNAIDS, 2015).

According to Bongaart (2006), marriage is a key factor in describing HIV prevalence. Thus, throughout the developing world, marriage is the central social institution that regulates and sanctions sexual behaviour. This suggests that the age at marriage and sexual behaviour before and after marriage could play a role in the spread of HIV" (Bongaart, 2006, p. 3). For instance, in Rwanda and Zambia it is estimated that over half of the new infections occur within marital unions or in cohabitating relationships (Dunkle et al., 2008). A similar study by Clark (2004) found that early marriage in Kenya and Zambia increases the frequency of sexual intercourse; decreases condom use and virtually eliminates girls' ability to abstain from sex, showing the importance of marriage in (de)regulating sexual behaviour (p.158). Therefore,

HIV prevalence rates among married men (husbands) are much higher if compared to those found among unmarried girls' partners (Clark, 2004). Despite the benefits of having few partners, girls married at an early age are at high risk of HIV infection. Other studies stated that, the high incidence of HIV among couples in the region can also be explained by the action of multiple factors. These include: lack of male circumcision; extramarital sex; low literacy; ignorance of own or partner's HIV status; limited understanding that HIV discordance can exist within couples; and the presence of other STIs (Caldwell 2000; Cameron et al., 1989; Quinn et al., 2000; Shapiro, as cited in Bongaart, 2006). Regarding the effect of extramarital sex as a risk factor, current research suggests that having multiple concurrent sexual partners plays a major role in fuelling the HIV epidemic, particularly in SSA (Halperin & Epstein, 2004). This has important implications for married couples, as married men consistently report higher numbers of extramarital partners than their wives (Population Action International 2008).

#### 3.2.6. Interventions to end early marriage

According to Svanemyr et al. (2015), interventions to prevent child marriages showed the need to consider multiple factors and approaches when applying interventions. In this matter, DFID (2011) argued that in regions with a high prevalence of child marriages, national governments and their development partners must work together in order to provide knowledge of the regulatory frameworks aimed at protecting children's rights, followed by their implementation. The study also stated that in order to promote girls' school attendance, and reduce dropout rates, national governments must inform people about the impacts of early marriage in women's well-being and enforce the role of education to prevent and end child marriages (DFID, 2011).

Bruce (2007) also highlights some strategies for delaying age at marriage and protecting married girls' rights, which include:

- Development of actions to tackle the social, cultural and economic determinants of child marriage practices;
- Advocacy programs aimed at influencing legal reform or enforcing the implementation of current laws to promote later marriages;
- Presenting evidence about young married girls' needs in order to influence the decisionmaking action in that respect; and
- Promoting the development of health, social and informative strategies to tackle the needs
  of married girls.

However, data from western Kenya for instance, indicate that despite the existence of evidence that informs about young married girls' needs and health vulnerabilities, they are not included as specific target groups in the country's policies and initiatives (Bruce, 2007). Another example from India by Dallao and Greene (2011) highlights the pressures involve in enforcing the law that prohibits marriages under 18 years of age. Those limitations include:

- The fact that the child's parents must annul the marriage to be considered illegal;
- The lack of sanction measures for government officials who do not enforce the law;
- The fact that those marriages occur in traditional settings with no formal registration requirements; and
- Poor dissemination of the law by government officials and communities.

### 3.3. Modern Contraceptive Methods for Young Married Women

#### 3.3.1. Introduction

Early marriage is a practice deeply rooted in most of the poor and traditional communities of Developing Countries. This practice prevents young married girls from receiving their basic rights such as access to education and health. Concerning health, young brides present greater risks of developing health complications related to pregnancy. This is due to their low physical and mental preparedness to bear children and reported low use of contraceptives among the group, as referred to in the previous section. The theory of Gender and Power proposed by Connell (1987) was adapted as the theoretical framework used in this study to explain the factors that influence the use of contraceptives and ANC services by married young women in Namaacha District. This theory was applied in previous studies related to women health's (e.g. studies aimed to identify the factors that influence the risk of women developing lung cancer) (Chapman-Walsh, 1995) and HIV infection (Wingood & DiClemente, 2000). Thus, in the next section, I discuss literature related to contraceptive use within marriages, as well as literature regarding the determinants influencing contraceptive use among young married women. The section will end with a discussion about the impacts of contraceptive use in women's well-being.

# 3.3.2. Global trends of contraceptive use and methods of choice among married women in Developing Countries

Several scholars have been presenting data about contraceptive method use worldwide, designed specifically to prevent pregnancy, the spacing of children or to prevent HIV and STI infections (Ahmed et al., 2012; Ayanore, Pavlova, & Groot, 2016; Darroch & Singh, 2013; Guttmacher Institute, 2015; Santhya et al., 2008; Shah, 2010). Data from Developing

Countries, extracted from DHS, Reproductive Health Surveys (RHSs), and Multiple Indicator Cluster Surveys (MICS) for the years 2003, 2008 and 2012, showed an increase of women between 15 and 49 years of age who want to avoid pregnancy. For example, for the three periods studied, from the total female respondents estimated at 1321, 1448 and 1520 respectively, 54% in 2003 and 57% in 2008/2012 reported the desire to avoid pregnancy (Darroch & Singh, 2013). Studies argued that this could be achieved through the provision of modern contraceptive methods. Worldwide, the prevalence of contraceptive use among married women at reproductive age rose from 58.4% in 1994 to 63.6% in 2012 (Speizar et al., 2013; WHO, 2011). For developed regions, data for 2008 indicated that the contraceptive prevalence rate was estimated at 75 % (Ahmed et al., 2012). However, the data for 2008 was not disaggregated by sub groups such as married women but represented the entire population. One may assume that this is because of the higher prevalence rate of contraceptive use for the entire population, and so no need to disintegrate the data. Thus, Ahmed et al. (2012) indicated that the contraceptive prevalence rate in 2008 for countries such as Croatia, Finland, Germany, Malta, Norway, Portugal, Switzerland, Sweden and United Kingdom range between 80% and 90 %. Other countries such as Belgium, Canada, Greece, Ireland, Italy, Luxembourg, Netherlands, Spain and USA that estimate for 2008 range from almost 69% to 80%.

# 3.3.3. Regional Differences in Prevalence Rate of Modern Contraceptive Use Among Married Women in Developing Regions

#### 3.3.3.1. Latin America and Caribbean

Regional data for the developing regions regarding contraceptive use present different results within countries and regions. Data from DHS conducted in Latin America and the Caribbean, for the period 1986-1990 estimated the prevalence of contraceptive use in 47.8% among married women (Bongaarts & Bruce, 1995). Furthermore, data for 2003 to 2012 showed an increase in the rate of contraceptive use among married women, from 72% in 2003 to 78% in 2012 (Darroch & Singh, 2013). Prior data for 2008 presented by the Population Reference Bureau (2008) showed a decrease in the proportion of married women between 15 and 49 years old using modern contraceptives in Latin America from 72% in 2003 to 63% in 2008, followed by an increase in 2012 to 78% as stated before. These data showed, for example, that in 2008, countries such as Brazil, Costa Rica, Colombia, Cuba, Paraguay, Jamaica, Puerto Ricco, Mexico and Nicaragua had proportions of married women using contraceptives ranging between 60% and71%, whereas other countries such Guatemala, Haiti, Trinidad and Tobago, Bolivia, Peru, and Suriname that proportion was estimated between 24% to 50% (Population Reference Bureau, 2008). However, in 2012 the countries in the Caribbean present the lowest

rate of modern contraceptive use by women (70%) whereas the South American countries have the highest prevalence of contraceptive use among married women at reproductive age above 70% (Darroch & Singh, 2013). Recent data for this region between 2012 to 2013 showed an increase in the proportion of married women using modern contraceptives to a maximum of 82% of women using modern methods of contraception (Darroch & Singh, 2013; WHO, 2013).

#### 3.3.3.2. Asia

Data collected in Asia from DHS for the period of 1986-1990 showed the proportion of 46.7% for married women using modern methods of contraceptives (Bongaarts & Bruce, 1995). However, a recent study showed improvements in the proportion of married women using modern contraceptives ranging from 75% in 2003 to 79% in 2012 (Darroch & Singh, 2013). Similar to the Latin American and the Caribbean region, in 2008, the proportion of Asian married women using modern contraceptives was estimated at 61% (Population Reference Bureau, 2008). This shows an increase in the proportion of married women using modern contraceptives by 25% in Asia, while South Asia specifically showed an increase of 43% during the period of 2003-2012 (Darroch & Singh, 2013). Regional data by the Population Reference Bureau (2008) indicated that India, located in South Asia, presented a prevalence of modern contraceptives among married women estimated at 48.5%, experiencing an increase to 55% in 2012 (WHO, 2013). Other examples from Yemen, in Western Asia, showed a low proportion of married women using modern contraceptives in 2008, estimated at 13.4% (Population Reference Bureau, 2008) and with an increase to 28% in 2012 (WHO, 2013).

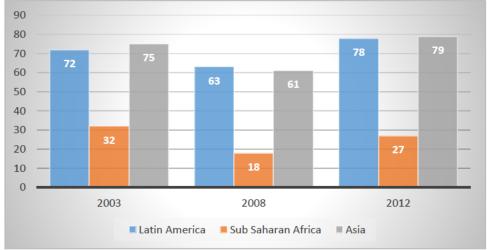
#### 3.3.3.3. Sub Saharan Africa

Data for the period of 1986-1990 regarding contraceptive use prevalence showed that SSA had a very low proportion of married women using modern contraceptives estimated at 15.8% (Bongaarts & Bruce, 1995). Moreover, data from DHS, RHS and MICS for the years 2003, 2008 and 2012 showed a decrease in the proportion of married women using modern contraceptives from 32% in 2003 (Darroch & Singh, 2013) to 18% in 2008 (Population Reference Bureau, 2008), with an increase to 27% in 2012 (WHO, 2013). In this regard, data for 2008 showed country disparities regarding contraceptive use. In Benin, for example, the proportion of married women at reproductive age using modern contraceptives was estimated at 6.1%. For Burkina Faso and Burundi, that proportion was estimated at 8.7% and 12.1% respectively. In addition, countries like Chad and DRC presented some of the lowest proportion of contraceptive use among married women in the region, estimated at 1.6% and 5.8% respectively. On the other hand, within the region, some countries present moderate to relatively high rates of contraceptive use among married women ranging from 46% in Cape

Verde, 40.7% in Mauritius, 58.4% in Zimbabwe, to 60.3% in South Africa (Population Reference Bureau, 2008).

Evidence for 2012 showed an increase in the proportion of married women using modern contraceptives in SSA. Benin for example experienced an increase from 6.1% in 2008 to 17% in 2012. In addition, Burkina Faso, Burundi and Congo experienced a substantial increase from 8.7%, 12.1% and 1.6% in 2008 to 16%, 22%, and 45% in 2012 respectively (WHO, 2013). A study conducted in Ethiopia, using a community-based comparative cross-sectional design with both quantitative and qualitative methods estimated the prevalence of modern contraceptive use among married women at reproductive age at 15% (Bogale et al., 2011).

Figure 4: Proportion (%) of married women using modern contraceptives in Developing Regions



Source: Data from DHS-2003,2008,2011 (Population Reference Bureau, 2008; Darroch & Singh, 2013; WHO, 2013)

# 3.3.3.1. Trend of modern contraceptive use by married women in Mozambique

In Mozambique, modern contraceptive methods are provided under the family planning programs aimed to control fertility rates, particularly among married or cohabited couples (Costumado, Khalema, Ndinda, and Domingos, 2015). However, the increase in the prevalence of HIV and STIs in the country are encouraging the use of contraceptives, namely as barrier methods to prevent these infections. Data from INE and MICS in 2008 indicated that the proportion of married women between 15 and 49 years old using modern contraceptive methods was estimated at 12.2%, with higher proportions in the urban areas (21.6%) against lower proportions estimated at 8% in rural areas (UNFPA, 2011). In addition, data from DHS

(2011) indicate that unmarried women in Mozambique present a high proportion of modern contraceptive use, estimated in 30% (MISAU et al., 2013), while married women present a lower proportion of modern contraceptive use, estimated at 12% in 2011 (MISAU et al., 2013; WHO, 2013).

Furthermore, data for the 11 provinces of Mozambique were also analysed and compared between 3 periods: 1997, 2003 and 2011 (see Figure 5). These data showed that from 2003 to 2011, the proportion of married women using modern contraceptive methods decreased substantially from 17% to 12% in 2012, a never-before experienced increase in this proportion between 1997 to 2003 from 6% to 17% in 2003. In addition, the highest rates of modern contraceptive use among married women were observed in Maputo Cidade and Maputo Province, while Cabo Delgado, Nampula and Zambezia province presented the lowest rates of modern contraceptive use among married women at reproductive age (MISAU et al., 2013).

Maputo Cidade Maputo Provincia Gaza Inhamabane Sofala Manica Tete Zambezia Nampula Cabo Delgado Niassa 0 10 20 30 40 50 60 ■ 2011 ■ 2003 ■ 1997

Figure 5: Proportion (%) of married women (15-49 years old) using modern contraceptives by province in Mozambique

Source: Data from census 1997, DHS-2003 & 2011 (MISAU et al., 2013)

# 3.3.4. Proportion of married women at reproductive age by type of modern method used 3.3.4.1. Introduction

Data presented in the previous section showed that the use of modern contraceptives have been increasing steadily during the last decades in Developing Countries. According to Mensch et al. (1994) the choice of contraceptive methods means availability of a variety of modern contraceptives as well as a willingness among health staff to provide information to

clients about the different contraceptive methods and its effects, so clients can be better equipped to select the method of choice and are enabled to use it effectively. According to Cleland et al. (2012) Intrauterine devices (IUD) are the modern contraceptive method mostly used worldwide, providing good health benefits and less health risks in the future. A study from O'Reilly, Kennedy, Fonner, and Sweat, (2013) indicated that interventions that provided multiple selections of contraceptive methods were more likely to increase their use by their clients, when compared to interventions that offer few options of modern contraceptives. To expand on this, the next sections will discuss literature regarding women's choice of modern contraceptive methods in developing regions, including Mozambique.

#### 3.3.4.2. Latin America & Caribbean

Latin America and the Caribbean have a greater proportion of use of different modern contraceptive methods, followed by Asia and the SSA region. However, modern contraceptive method use such as female sterilization has decreased. For example, during the period from 2003 to 2012 female sterilization use decreased by 15% in Latin America and the Caribbean (Darroch & Singh, 2013). On the other hand, other less preferable methods of choice such as barrier methods and implants have seen an increase in their use during this period. Rate differentials of contraceptive method of choice can be found within regions and countries, due to specific conditions of the study sites and the population size. Data from DHS (2007) showed that in Costa Rica, oral pills were the most used contraceptives among 25.6% of married women at reproductive age, followed by sterilization and barrier methods used by 21.4% and 10.9% of married women respectively (Population Reference Bureau, 2008). In contrast, in Peru, the contraceptive method of choice mostly used by married women at reproductive age was injection, used by 14.6% of women, followed by sterilization and barrier methods used by 10.3% and 8.4% of married women at reproductive age, respectively.

#### 3.3.4.3. Asia

Evidence from Asia showed that female sterilization was the preferred contraceptive method by married women (Darroch & Singh, 2013; Population Reference Bureau, 2008). However, for the period of 2003 to 2012 female sterilization use decreased by 9% in Asia (Darroch & Singh, 2013).

An example from India also showed that female sterilization was the preferable contraceptive method of choice, used by 37.3% of married women, followed by barrier methods and oral pills, used by 5.2% and 3.1% of married women respectively (Population Reference Bureau, 2008). Note that another study conducted by Santhya et al. (2008) in some districts of India showed the same trends in contraceptive methods of choice. Thus, in Guntur

32.3% of women at reproductive age were using mostly sterilization as the preferable contraceptive method while in Dhar and Guna, 8.9% of women were using sterilization as the first contraceptive of choice, followed by oral pills and condoms respectively (Santhya et al., 2008).

#### 3.3.4.4. Sub Saharan Africa

The SSA region, characterised by low use of contraceptives among women at reproductive age, disparities in the contraceptive method of choice were also evident. However, use of barrier methods among women at reproductive age have experienced an increase estimated at 6% between 2003 to 2012 (Darroch & Singh, 2013; Santhya et al., 2008). On the other hand, due to the low uptake of modern contraceptive methods in the region, few studies on modern contraceptive methods of choice were conducted in this part of the globe (Osakinle, Babatunde, & Alade, 2013). National data from DHS (2007) showed that in Mauritius, oral pills were the preferred method among married women, with 15.8% of the women using it, followed by condoms and injections, used by 9.1% and 3.1% of married women at reproductive age, respectively. By contrast, an example from Tanzania showed a high preference for injection as contraceptive method of choice, used by 8.3% of married women, followed by oral pills and condoms, used by 5.9% and 2% of married women, respectively. A study conducted in Ethiopia indicated that 560 women at reproductive age that corresponds to 83.7% of study participants used injections as the first contraceptive method of choice. Additionally, 77 women, corresponding to 11.5% of participants, used oral pills, followed by IUDs, used by 31 women, which correspond to 4.6% of the total study participants (Bogale et al., 2011). In contrast, data from DHS (2007) showed that in South Africa, 60.3% of married women at reproductive age were using modern contraceptive methods, with injection being the first method of choice, used by 28.4% of married women, followed by female sterilization and oral pills, used by 14.4 and 11.1% of married women respectively. Additional data from South Africa regarding modern contraceptive method of choice also showed that 350 million male condoms and 4 million female condoms were distributed by the NDOH from 2008-09 (Beksinska, Smit, & Mantel, 2012). Similarly, emergency contraception was available both in public and private health facilities (Maharaj & Rogan, 2011) and almost 64.7% of young sexually active women aged 15-19 years were using injectable contraception to prevent unwanted pregnancy (Smith & Beksinska, 2013).

# 3.3.4.4.1. Mozambique: Modern contraceptive of choice among married women at reproductive age

For Mozambique, a national estimation of modern contraceptive use in 2007 indicated that 11.7% of married women were using modern contraceptive methods, with oral pills being the preferred method, used by 4.9% of married women at reproductive age, followed by injection and condom, used by 4.8% and 1.1% respectively (Population Reference Bureau, 2008). However, data from DHS (2011) showed a slight increase in the prevalence of contraceptive use from 11.7% in 2007 to 12% in 2011, with injection being the most used modern contraceptive method by 5.1% of married women at reproductive age. In addition, 4.5% and 1.1% of married women, respectively, used oral pills and barrier methods (MISAU et al., 2013). On the other hand, age differentials regarding contraceptive use among married women showed that married women between 15 and 19 years old have the lowest rate of contraception use, estimated at 5.9% whereas married women between 25 and 29 present a higher percentage of modern contraceptive use, estimated at 14.4%. Additionally, the contraceptive method of choice of married women between 15 and 19 years old is oral pills followed by condoms and injections, with 2.5%, 1.6% and 1.5% respectively (MISAU et al., 2013). Women participants in a study by Selvester et al. 2012) conducted in Namaacha, my study area, reported that they use condoms to prevent STIs, including HIV, and oral pills to prevent unwanted pregnancy.

# 3.3.5. External and behavioural factors influencing contraceptive use among young married women

In Developing Countries, despite the provision of family planning services since the 60s, the use of modern contraceptive methods is still low, particularly in the SSA region (Darroch & Singh, 2013; Mboane & Bhatta, 2015; MISAU et al., 2013; Population Reference Bureau, 2008; Santhya et al., 2008; UNICEF, 2005). In applying the Gender and Power theory to this study, it was determined that the three structures identified by Connell (1987) would help explain and unpack individual, societal and institutional factors that inhibit women of using proper maternal health services. These factors came from the inequalities in decision power between men and women. In previous research, the theory of Gender and Power has been instrumental in understanding the interaction between individual and societal factors.

The structure of sexual labour proposed by Connell (1987) is visible in society through the unequal division of work for men and women. Gender expectations regarding women's roles within families and outside constrains their opportunity to access equal financial gains as men. Therefore, Connell (1987) and Wingood and DiClemente (2000) defined economic

exposures within societies that limit women's access and use of maternal health services. Sexual division of labour perpetuates women's exposure to barriers that will affect their use of maternal services. These include: poverty, unemployment or underemployment; limited funds to pay for transport or health services and working in a high demand—low control environment. Subsequently, they identified individual risk factors such as women's and girls' low education level; *early marriage* and girls' younger age (Connell, 1987). Other interrelated factors related to discriminatory gender norms that affect girls' ability to freely decide to use maternal health services are explained in the structure of the sexual division of power. Connell (1987) argued that men in society have more visible power than women. Therefore, women will be subjugated to great abuse and control by men in so many different ways. With this in mind, the next sections of this chapter will discuss literature conducted in Developing Countries, with a focus on the SSA region.

Social exposures and personal risk factors influencing women's use of maternal health services are perpetuated in society through the cultural norms that subjugate women's rights. Connell (1987) and Wingood and DiClemente (2000) defined the following social exposure and personal risks factors:

- Women who have older partners;
- Women and partner interested in conceive;
- Extended family not supportive to maternal health services use;
- Lack of trust in health providers; and
- Cultural norms, laws and religion beliefs opposed to the use of maternal health services.

The personal risk factors that would happen due to social exposure and defined by Connell (1987) include having limited knowledge of SRH burden and protective measures; negative attitudes and beliefs about condoms; and a history of depression or psychological distress (Wingood & DiClemente, 2000). This exercise will help validate and substantiate Connell's beliefs regarding determinants affecting women's use of health services. Evidence presented in the literature will substantiate relevance and focus our attention on individual and external determinants identified by Connell (1987) and Wingood and DiClemente (2000) to explain the current situation of young married girls SRHR, particularly concerning modern contraceptive use and ANC attendance. The exposures previously presented still greatly impact women's decision to use health services, fuelling the already damaged girl's life. Below is evidence from the literature about the relevance of multiple factors affecting women's decision to use maternal health services that were referred to by Connell (1987).

# 3.3.5.1. Socio-economic, cultural and religious factors associated with modern contraceptive use

## I. Socio-cultural norms

A systematic review by Ayanore et al. (2016) indicates that the effective use of modern contraceptive methods is influenced by socio-cultural factors in most West African countries to different degrees. Scott (2009) pointed out some of those cultural beliefs affecting the uptake of contraceptives. These include: the belief that condoms contain worms and spread HIV/AIDS; sex without condoms represents a sign of love and trust; and traditional healers who give instructions to sleep with young virgin girls to cure HIV. An example from India highlights customs related to women's menstruation that implies a regular check of their reproductive cycle, limiting the use of contraceptives (Mak, Stephenson, & Juvekar, 2008). According to Eliason et al. (2014), in Nkwanta district in Ghana, some cultural and social beliefs consider women who use modern contraceptive methods as promiscuous. Another example from Ghana and Tanzania identify customary and religious beliefs that impact the use of modern contraceptives between couples, such as the belief that it is an ancestral mandate for couples to produce children (Kabagenyi, Jennings, Reid, Nalwadda, Ntozi, & Atuyambe, 2014; Plummer, Wight, Wamoyi, Mshana, Hayes, & Ross, 2006). A study by Aransiola, Akinyemi, and Fatusi (2014) also argued that the low use of contraceptive methods is influenced by cultural factors that restrict women's SRHR, including the use of modern contraceptives and low educational attainment among women in the region.

## II. Education level

Studies have argued that women's educational level influences the decision to use modern contraceptive methods since it affects their ability to read and understand instructions regarding contraceptives and to follow up with visits to the health centre (Ayanore et al., 2016). A study from Uganda showed that women with completed primary education are 8%-10% more likely to be using any method of contraception (traditional/modern) when compared to women with no education (Bbaale & Mpuga, 2011). Women with completed secondary education are 14%-17% more likely to use modern contraceptives than their counterparts with no secondary level completed. For women with post-secondary education, this proportion may increase by 16%-20% (Bbaale & Mpuga, 2011). By contrast, women with no school attendance were less likely to use modern contraceptive methods compared with women with some formal education who have a greater chance of using modern contraceptives (Eliason et al., 2014). This can be explained by the fact that women with some education level may be better equipped with information related to contraceptives and its benefits, so they can make better decisions

regarding contraception use (Stephenson & Hennink, 2004). Another study conducted in Ethiopia using data from DHS (2011) showed that women with some education degree have better chances of using modern contraceptive methods than illiterate women (Lakew, Reda, Tamene, Benedict, & Deribe, 2013).

For Mozambique, data also showed differentials in the prevalence of contraceptive use among married women by their level of education. Thus, married women at reproductive age and with secondary education present a greater chance of using modern contraceptive methods than their peers with primary education or no education at all, or positioned in lower levels of wealth (MISAU et al., 2013). For 2011, the prevalence of contraceptive use among married women between 15 and 49 years old, with secondary education was estimated at 32% whereas for their peers with primary education or no education at all that proportion was estimated at 11.3% and 5.5%, respectively (MISAU et al., 2013). Recent data extracted from Mozambique from the Indicators of Immunization, Malaria and HIV and AIDS survey (IMASIDA) (2015) showed that the prevalence of contraceptive use has increased between 2011 to 2015, and that the proportion for married women with secondary education were estimated at 38.6% whereas for women with no education and with primary education that proportion was estimated at 21.3& (MISAU et al., 2015).

#### III. Socio-economic status

According to Aransiola et al. (2014), women's lack of power makes them vulnerable to the social and financial control of men and therefore unable to make decisions regarding the use of contraceptive methods. The study by Lakew et al. (2013) argued that wealthy women had two times higher probabilities of using modern contraceptives than poor married women. For example, data from Nigeria DHS (2008) showed that in Kaduna, located in the northern part of the country, only 18.8% of women have autonomy to freely participate in the fertility and contraceptive-related decision-making process (Aransiola et al., 2014). Women in Kaduna have limited power to use contraceptives compared with women in Ibadan in the South West side of the country (Aransiola et al., 2014). Likewise, a systematic review that presents determinants for contraceptive use across West Africa highlights the positive correlation between women's socio-economic status and modern contraceptive use (Ayanore et al., 2016).

Other studies highlight women's financial constraints as a factor preventing women's access to contraceptive use since they cannot afford to pay for transport when seeking family planning services (Ayanore et al., 2016; Ensor & Cooper, 2004). Based on time spent and travel costs incurred, the study by Elliason et al. (2014) argued that distance to health facilities influenced the use of modern contraceptive methods. They found that "women residing within

a distance of less than 5km away from health facilities that provide contraceptive methods are more likely to use contraception as opposed to the ones living 5km or more from those facilities (Elliason et al., 2014). Moreover, other examples from Developing Countries showed that transport costs were estimated at 28% of the total patient cost in Burkina Faso and 25% in northeast Brazil (Sauerborn et al., 1995; Terra de Souza et al., as cited in Ensor & Cooper, 2004). Data for Mozambique regarding the proportion of married women using modern contraceptives by level of wealth, gave estimation ranges from 29.5% at the highest level of wealth to 2.9% at the lowest level of wealth (MISAU et al., 2013).

### IV. Place of residence

A study conducted in Ethiopia showed that married women from urban areas were more likely to use modern contraceptives (estimated at 87.5%) compared to women residing in rural areas with a proportion estimated at 72.8% (Bogale et al., 2011). Another study by Lakew et al. (2013) stated that married women who lived in rural areas had a 30% lower chance of using modern contraceptives than urban married women. Similarly, an example from Mozambique extracted from data of DHS (2011) showed that 21% of married women at reproductive age and residing in urban areas are using more modern contraceptives whereas only 7.2% of married women in rural areas were using some modern contraceptive method (MISAU et al., 2013).

## V. Religion

According to Lakew et al. (2013), Muslim married women had 30% less probability of using modern contraceptive methods than Christians. Bhandari et al. (2006) stated that in Nepal the Muslim religion was less likely to promote modern contraceptive use when compared to Hinduism. In contrast, in Ghana, Catholics did not promote the use of modern contraceptives among their followers as other religions did (Machiyama & Cleland, 2013). A qualitative study from Uganda supports the previous finding by stating that the Anglican religion was more open about the use of modern contraceptives among their followers than Muslims and Catholics (Kaida, Kippi, Hessel, Lule, 2005). An example from Latin America indicated that Christian churches in Guatemala were less accepting of contraceptive use among their peers alleging that contraceptive use was linked with mortal sin (Ward et al., as cited in Wulifan et al., 2016).

### VI. Number of children

Studies have showed that the number of children women had influenced their decision to use contraceptive methods (Ayanore et al., 2016; Lakew et al., 2013; MISAU et al., 2013). Therefore, women who had at least one child presented greater chances of using modern contraceptives than women who had no children.

## 3.3.5.2. Knowledge and personal beliefs regarding modern contraceptive methods

Lack of knowledge about protective measures against pregnancy, HIV and STI infections prevent women from effectively using modern contraceptive methods (Jejeebhoy & Sebastian, 2004; Santhya & Jejeebhoy, 2007). Bongaart and Bruce (1995) stated that some women describe lack of knowledge as never having heard about the method, others, when they do not know how to use it or where to access it. Moreover, awareness programs related to SRHR, including information about knowledge of contraceptive use and its effects have been targeting mostly the unmarried population and less likely to target young married women between 15 and 19 years old (Santhya et al., 2008). However, few studies have included both married and unmarried women as a targeted population while analysing contraceptive use patterns and its determinants as showed in this section.

A study conducted in Kenya about barriers to modern contraceptive use indicates that overall, all the participants knew some modern methods of contraceptives, particularly IUD, condoms, oral pills and injectables, and could possibly describe the functions and benefits of those devices (Ochako, Mbondo, Aloo, Kaimenyi, Thompson, Temmerman, & Kays, 2015). Findings from Ethiopia showed that almost 99.4% of women respondents living in urban areas and 98.8% residing in rural areas were familiar with modern contraceptive methods and knew at least one of the methods (Bogale et al., 2011). Injectable was the method mostly cited by 86.9% of respondents in urban areas and by 95.5% in rural areas, followed by pills known by 52.1% of women residing in urban areas and by 67.2% of respondents in rural areas (Bogale et al., 2011). The study by Elliason et al. (2014) indicated that among the respondents using contraceptives and the ones not using the devices, over 90% of both groups knew at least one method of modern contraceptives. In between both groups, injectables were the most known modern method of family planning by 93.1% of participants using contraceptives and 82.6% of respondents not using them. In addition, 86.9% of respondents using contraceptives reported knowing about oral pills and 65.9% of respondents with no use of contraceptives reported that they knew about oral pills. The diaphragm was mentioned only by 3.1% of respondents using contraceptives whereas vasectomy or male sterilization was cited by 0.4% of respondents who did not use contraceptives (Elliason et al., 2014).

# 3.3.5.2.1. Knowledge of modern contraceptive methods among married women in Mozambique

Data from DHS (2011) indicate that 96% of women in Mozambique knew some modern contraceptive method while all of the men had knowledge about those methods. In addition, the women respondents show better knowledge of male condoms followed by oral pills and

injectables. With regard to married women, data indicate that 84.2% knew about oral pills, 25% about female sterilization and 33.3% knew about IUDs (see figure 6). Overall, women respondents had knowledge of 4.6 contraceptive methods while men had knowledge of 6.4 methods. Despite general knowledge of modern contraceptive methods among the total population interviewed, unmarried women in Mozambique reported having more knowledge of modern contraceptive methods than married women (MISAU et al., 2013). This report argued that unmarried women knew almost 5.6 modern contraceptive methods compared to only 4.6 by married women.

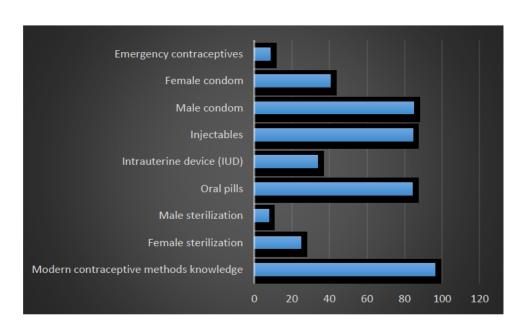


Figure 6: Knowledge of modern contraceptive methods by married women (%)

Source: Data from Mozambique DHS (2011) extracted from MISAU et al. (2013)

However, several studies showed that higher knowledge of modern contraceptives among women is inversely accompanied by low rates of modern contraceptive use due to the influence of mixed determinants (Ayanore et al., 2016; Darroch & Singh, 2013; MISAU et al., 2013; Population Reference Bureau, 2008; Santhya et al., 2008). Those determinants prevent women from accessing credible and full information related to modern contraceptive methods and its mechanisms of use, fuelling the myths surrounding it (Wulifan et al., 2016). A study by Williamson et al. (2009) argued that teenaged girls had general awareness regarding modern contraceptive methods but lacked information to effectively and regularly use them. According to Bongaart and Bruce (1995), some of the serious health effects caused by modern contraceptive use included cardiovascular complications from oral pill use, pelvic

inflammatory disease, uterine perforation, anaemia for IUD and other infections related to sterilization.

## 3.4.5.3. Myths and side effects surrounding modern contraceptive use

Studies have showed some evidence of serious health risks due to contraceptive use (Cleland et al., 2012). However, some studies, for example, showed that a disruptive menstrual cycle accompanied by continuous bleeding could result from the use of hormonal contraceptive methods and IUD (Glasier et al., 2003). In this regard, a study by Ali and Cleland (2010) argued that 30-50 % of women stopped using oral pills and injections and switched to other methods due to the side effects and fear of other health problems related to their use.

Studies reported that young women receive poor sexual education from family members and peers, as well as from formal sets such as health units and schools, fuelling the myths revolving reproductive health, particularly around modern contraceptive use (Rasch et al., 2000; Castle, 2003; Richter & Mlambo, 2005; Wood & Jewkes, 2006). A study conducted in Ghana indicates that women respondents' believe that the use of modern contraceptive methods promote promiscuity (Elliason et al., 2014). This study showed that those women are less likely to use modern contraceptives compared to the ones who do not have these negative beliefs. Bogale et al. (2011) also stated that majority of married women in Ethiopia, residing in rural areas showed little preference for the use of long-term contraceptive methods. This is due to lack of knowledge about the methods and therefore less preference for it. Other studies argued that fear of permanent infertility, death and being infected by HIV through commercial condoms are some of the beliefs related to modern contraceptive side effects (Kabagenyi et al., 2014; Mak et al., 2008; Mosha, Ruben, Kakoko, 2013; Plumer et al., 2006). Those beliefs will influence the user's decision to accept the products or not.

An example from Kenya showed that despite the high level of awareness regarding the condom's dual protection benefit, some respondents believe that this barrier method is not effective to prevent pregnancy and was not part of the modern contraceptives kit (Ochako et al., 2015). Women respondents report hearing conversations related to contraceptive use effects on women's reproductive system such as: cause of infertility, birth defects and abnormalities, or disrupting the menstrual cycle. Data from Kenya from the DHS (2009) also cited women's beliefs related to side effects from modern contraceptive use such as fear weight gain, loss of sexual pleasure, headaches and developing high blood pressure (Ochako et al., 2015). Those myths and misconceptions related to modern contraceptive methods and their side effects may lead women to make the decision to not use the methods at all, or to not using them effectively.

In a study about male and female condom use in South Africa, only 27% of a large sample with 3,914 men and women aged 15-24 years had a consistent use of the condom, 41% of men and 37% of women had ever experienced condom failure (Beksinska et al., 2012). In addition, another study indicated that among sexually experienced youth, 57% of men and 48% of women reported that they used a condom during their last sexual encounter, but the majority of both men and women reported that they did not always use a condom with their most recent sexual partner (61% versus 71% respectively) (Pettifor et al., 2005). Data from Mozambique's DHS (2011) showed discontinuation in the use of oral pills, injectables and male condoms. Additionally, 31% of oral pill users cited the will to be pregnant as the reason to stop taking the pills whereas 28% of pill users argued that they stopped using the pills due to side effects (MISAU et al., 2013).

## 3.3.5.4. Husband's and extended family's influence

Studies have argued that a husband's support of his wife's decision to use contraceptives increases the chance of them accepting the use of this contraceptive method (Shattuck et al., Kerner, Gilles, Hartmann, Ngombe, Guest, 2011; Stephenson, Vwalika, Greenberg, Ahmed, Vwalika, Chomba, 2011). The explanation is that most women in Developing Countries are still highly dependent on their husbands and therefore are unable to make personal decisions without partner consent (Bogale et al., 2011; Clark et al., 2006; Santhya et al., 2008). A study from Phiri, King, and Newell (2015) stated that "Social support to increase the use of contraceptive methods should come from male role models and other influential leaders to disseminate family planning information. These volunteer role models would be selected from the local communities with the support of residents, and would be role models from the health sector (Phiri et al., 2015). Another study by Oshako et al. (2015) indicated that husbands' influence in women's decision to use modern contraceptive methods is due to their need of control and misconceptions regarding family planning methods. Men are less likely to initiate discussions about SRH, but they are the ones that will agree with decisions made jointly with the wife or perhaps alone regarding the couple's SRH, including the number of desired children and the use or non-use of contraceptive methods by the couple (Aransiola et al., 2014). A cross-sectional study conducted in Lubaga division in Uganda highlights the importance of husbands' decision-making power in influencing the use or non-use of contraceptives by their spouses (Anguzu et al., 2014).

Therefore, communication between couples in issues related to SRH is a key factor to influence a husband's acceptance of modern contraceptive use in the family (Elliason et al., 2014; Population Council, 2008). However, violence against women can happen as an

imposition of men's sexual and reproductive demands, particularly when couples have few conversations regarding the use of contraceptives and women have higher-unmet need for contraceptives (Bawah et al., 1999; Rasch et al., 2000; Richter and Mlambo, 2005, Wood and Jewkes, 2006). On the other hand, Aransiola et al. (2014) highlight the pressure from extended family members who oppose to the use of contraceptives, using the husband to enforce their decision on behalf of the family. Likewise, other studies also showed evidence of the influence of extended family members in contraceptive use, particularly mothers-in-law (Barua and Kurz, 2001; Ochako et al., 2015; O'Connell et al., 2015; Phiri et al., 2015).

A study conducted in Kenya reported that husbands believe that modern contraceptive methods causes health complications such as infertility, birth defects and other bad behaviours such as infidelity and promiscuity (Burke and Ambasa, 2011; Wulifan et al., 2016). Husbands also believe that the use of modern contraceptive methods could cause loss of sexual pleasure by women and bringing problems to the marriage (Wambui, Eka, and Alehagen, 2009). A study by Kabagenyi et al. (2014) argued that in areas where agriculture is the main economic activity, few men accept modern contraceptive methods within relationships. In those areas, men believe that family planning methods contribute to the decrease of household income since it will help reduce the fertility levels in the area and consequently the desired family size to help with family production. They also believe that family planning methods can carry side effects for women users, adding extra expenses to the household due to the medical costs to treat health complications resulting from the use of contraceptives (Kabagenyi et al., 2014). A case study by Solo et al. (2005) conducted in Ghana argued that women in polygamous relationships are pressured to bear as many children as possible. Therefore, husbands and extended family members can violently pressure women not to use modern contraceptive methods to avoid pregnancy (Solo et al., 2005).

For Mozambique, data from DHS (2011) showed that 71.6% of women respondents made decisions regarding their health in agreement with their husbands. On the other hand, 28.4% stated the husbands as the ones who made decisions related to their wife's health, particularly in rural areas (Mboane & Bhatta, 2015). The study further stated that in a situation where the husband is the primary decision maker with respect to women's SRH, women present minimal intention to use modern contraceptives in the future.

## 3.4.5.5 Health provider attitude and quality of health services

Several scholars have pointed out attitude of health providers and availability of quality health services as determinants of modern contraceptive use among women at reproductive age (Alli, Maharaj & Vawda, 2012; Ensor & Cooper, 2004; Maharaj & Rogan, 2011). A review

paper by Wulifan et al. (2016) reported that family planning users do not trust health practitioners' medical competency to provide the services and the ability to maintain user confidentiality. Evidence also showed constraints to disseminate educational material related to family planning, which is aggravated by a lack of publication of family planning material in local languages (Wulifan et al., 2016). On the contrary, previous research has indicated that "Health provider's friendly attitude towards family planning users" (Maharaj & Rogan, 2011, p. 90), quality of services offered, affordability and accessibility of those services (Atuahene, Afari, Adjuik, & Obed, 2017; Bongaart & Bruce, 1995; Westoff & Bankole, 2000) may influence positively women's decision to use modern contraceptive methods.

Furthermore, Bruce (1990) presented six elements that can influence the use of modern contraceptive methods. These include: availability of contraceptive method of choice; information provided to family planning users; provider skills; provider interaction with users; follow up visits; and appropriate support services to make contraceptive use comfortable for couples (Wulifan et al., 2016). A study conducted by Glasier (2006) indicated that little knowledge, little access to services and inability to negotiate contraceptive use, all result in low uptake and high rates of ineffective use (Glasier, 2006). The study by Elliason et al. (2014) showed that family planning services delivered at a client's residence helped improved the accessibility of women to modern contraceptive methods, contributing to the uptake in contraceptive use in the region of Nkwanta district in Ghana.

Other structural factors affecting contraceptive use include conditions of healthcare infrastructure (capital equipment, buildings) and health staff's ability to manage and use efficient technology related to family planning methods. Provider respondents argued that limited interaction with patients due to the lack of staff, might contribute to the decrease of contraceptive use (Alli, Maharaj, & Vawda, 2012). In this study, it was also determined that the negative attitudes of providers, who were judgemental about young people attending SRH service centres could influence the woman's decision to use the methods of contraceptives. On the other hand, from the patient's side, young people choose not to visit health facilities due to the fear of being judged, asking intimate or difficult questions and being embarrassed by health providers (Alli, Maharaj, & Vawda, 2012). Other studies also mentioned unavailability of contraceptive stock, including a lack of provision of the user's method of choice as a contributing factor to the poor use of modern contraceptives among women (Bawah et al., 1999; Plummer et al., 2006; Sonalkar et al., 2013). Another study showed that the ongoing discontinuation in the use of modern contraceptives such as the pill, patch and ring by women

is due to the shortage of stock, which makes it difficult for users to access the method of choice (Stuart et al., 2013).

## 3.3.6. Impact of contraceptive use in women's well-being

Some scholars have argued that modern contraceptive use helps reduce maternal mortality by preventing high-risk pregnancies (Stover & Ross, 2010). In this respect, 90% of mortality and morbidity related to unsafe abortion in less developed countries can be prevented by using contraceptives (Cleland et al., 2006; Tripney, Kwan, Bird, 2013). Additionally, contraceptive use can bring economic benefits to the household as well as a positive impact in reducing child mortality (Cleland et al., 2006; Cleland et al., 2012). A study by Rutstien (2008) showed evidence confirming that women who space their pregnancies by two years through the use of modern contraceptive methods can prevent up to 35% of maternal mortalities, up to 13% of child mortality, and with at least three years of pregnancy spacing, 25% of infant mortalities. An example from Bangladesh showed that provision of economic and social opportunities such as work, education and other social benefits may increase the families' and community's financial conditions and therefore a continuous investment in family planning programs (Population Reference Bureau, 2009). Some studies reported that every dollar used for modern contraceptive use purposes, helped save at least \$US4. This money could be used to deal with the health burden caused by unwanted pregnancies and save up to \$US31 from the government budget to apply in areas such as health services provision, water and education system, housing and sewers (Singh et al., 2009; Speidel, Sinding, Gillespie, Maguire, & Neuse, 2009). Thus, couples who use modern contraceptive methods as part of their family planning program are more likely to have fewer but healthier children, and are financially capable of funding their education and well-being (Eliason et al., 2014).

Global data showed that the use of modern contraceptives helped avert an estimated 2.7 million infant deaths and the loss of 60 million of healthy lives a year (Darroch et al., 2008). In settings with high fertility rates, modern contraceptive methods contribute to the reduction of poverty levels and hunger, including the decrease of 32% of the total maternal deaths and almost 10% of childhood mortality (Cleland et al., 2006). Additionally, modern contraceptive use helps reduce mother-to-child transmission of HIV among women living with HIV (Reynolds et al., 2005; Sweat et al., 2004). Modern contraceptive use could also bring extended health and social benefits for all women and their children irrespective of their HIV status (O'Reilly et al., 2013; Singh et al., 2003).

## 3.4. Antenatal Care Attendance among Young Married Women

#### 3.4.1. Introduction

In this section, I discuss the literature related to ANC attendance during pregnancy by married young women in Developing Countries to provide the context for my study. A report from WHO (2012) about early marriages and adolescent pregnancies indicated that worldwide in 2008, adolescent girls between 15 and 19 years old gave birth to 16 million babies, representing 11 % of the total births in the world. Studies showed that young women who marry early are expected to bear children soon after marriage (Barua & Kurz, 2001; Senderowitz, 1999; UNICEF, 2013), a choice that might not be their own and thus contributes to an increased risk of complications in childbirth (Arnaldo et al., 2014; Mahy & Gupta, 2001; UNICEF, 2015). Recent data from 2013 also indicated that worldwide, 289,000 pregnant women died during or after childbirth, with SSA accounting for the highest proportion of maternal death, estimated at 179,000 deaths (WHO, 2014a). Therefore, ANC services are a crucial intervention to guarantee positive outcomes of pregnancy and the mother's and baby's survival.

Several other studies argued that health complications related to pregnancy and potential maternal deaths can be prevented if adequate care to pregnant women is provided (Braxter & Moodley, 2015; Gill, Pande, & Malhotra, 2007, WHO, 2012). Thus, the section starts by presenting data related to ANC prevalence worldwide, with emphasis on Developing Countries, particularly the SSA region. Literature discussing determinants for ANC attendance by pregnant women presented as well as material related to the impact of ANC attendance in women's well-being. The theory of gender and power highlight determinants based on unequal and discriminatory gender norms to explain the difficulties women face in accessing health services.

## 3.4.2. Background about Antenatal Care Attendance by Young Married Women

Provision of ANC services during pregnancy to childbirth is crucial to guarantee the health of the mother and unborn child (UN, 2012; USAID, 2004). Worldwide, the proportion of women attending ANC services during pregnancy have reached almost full coverage (more than 90 %) in the majority of developed countries, with disparities in developing countries. Thus, for the period of 1990 to 2000 ANC visits in developing countries have increased from 53% to 64% (WHO, 2003). Regional differentials show that in early 2000, Asia experienced the highest increase in the number of women using ANC services from 45% to 59%. On the other hand, the SSA region experienced a lower increase in the proportion of ANC from 68% to 71%. For Latin America and the Caribbean, data showed an increase from 77% in 1990 to 88% in 2000 (WHO, 2003). In this review, data related to ANC attendance is presented and

discussed both for women attending at least one visit; and lastly for women attending four or more visits as shown below.

# 3.4.2.1. Antenatal care attendance (at least one visit) in less developed countries: early 1990 to 2013

Proportions of pregnant women attending at least one ANC visit, provided by skilled staff have been increasing during the past decades in developing regions from 63% in 1990 to 71% in 2000, and later to 80% in 2010 (Tarekegn, Lieberman, & Giedraitis, 2014). Data from the late 1990s and for the 2000-2001 period showed that just over 70% of women worldwide had at least one or more ANC visit, attended by a skilled provider (WHO, 2003). Regional data showed that during earlier 2000 South Asia had the lowest rate of women using ANC services at least once, with a proportion estimated at 54%. This proportion for the Middle East, SSA and the Latin America/Caribbean region was estimated at 65.68% and 86%, respectively. Countries like Botswana, Uganda, South Africa and Zambia in SSA had reached more than 90% of women attendees of ANC services. In other countries such as Chad, Ethiopia, Mali and Somalia the proportion of women using ANC services once or more were slightly lower, ranging from 27 to less than 50% (WHO, 2003).

Further data by WHO (2013) for the period of 2005-2012 showed a decreasing pattern of ANC attendance in SSA. In Uganda, for example, the proportion of women having at least one ANC visit reduced from 93% in 2005 to 48% in 2012. Swaziland experienced a decrease of women attending ANC from 97% to 77%. Similarly, Senegal experienced decrease in the proportion of ANC attendance (1 visit or more) from 93% in 2005 to 50% in 2012, whereas for Rwanda that decrease was from 98% in 2005 to 35% in 2012 (WHO, 2013). Recent data from Mozambique, extracted from DHS (2011), showed that more than 90% of pregnant women had attended at least one ANC visit, with the help of skilled health staff (MISAU et al., 2013; WHO, 2013).

In the Southeast Asia region, the proportion of women visiting one or more times ANC services reduced from 76% in 2005 to 52% in 2012 (WHO, 2013). Data from Vietnam for example, showed a decrease in this proportion from 94% in 2005 to 60% in 2012. For the Philippines, that decrease was from 91% in 2005 to 78% in 2012 and for Nepal, that decrease was from 58% in 2005 to 50% in 2012. Similarly, for India, the decrease in ANC attendance (one or more times) was from 75% in 2005 to 50% in 2012 (WHO, 2013). Moreover, data from the Latin America region also showed a slight decrease in this proportion from 95% in 2005 to 86% in 2012. For example, in Peru, this proportion decreased from 95% in 2005 to 94% in 2012, whereas in Nicaragua the decrease went from 90% in 2005 to 78% in 2012 (WHO, 2013).

### **3.4.2.2.** Antenatal care attendance (four visits or more)

In order to guarantee a safe and healthy pregnancy and childbirth, WHO recommends to pregnant women a minimum of four visits to the ANC consultations, provided by skilled staff (WHO, 1994; 2002). Data for 2008 showed that low-income countries presented a lower proportion of women attending four or more ANC services, including delivery at health facilities, estimated at 38%. For developed countries, 76% of pregnant women reported using ANC services four times or more, and 93% of women delivered their babies in a health facility (Singh et al., 2009). Recent data, for the period of 2005-2012 showed that higher income countries had almost 96% of pregnant women attending ANC facilities four or more times during pregnancy (WHO, 2013).

Developed countries having almost full coverage of ANC services for their targeted group, but in Developing Countries, these services are not yet available for all. For the Southeast Asia region, the proportion of women using ANC services four or more times between 2005 and 2012 was estimated at 52% (WHO, 2013). Disaggregated findings for this region showed that in the Philippines, results from DHS (2013) indicated that 84% of women aged 15-49 years attended ANC facilities at least four times during pregnancy by any provider (UNICEF, 2016). For Vietnam, this proportion extracted from MICS-2014 was estimated at 74%. Data from DHS-2012-2013 conducted in Pakistan, and data from MICS-DHS Social Indicator Survey (LSIS)-2011-2012, conducted in Laos, estimated at 37% for both countries the proportion of women aged 15-49 years who attended at least four times ANC services during pregnancy (UNICEF, 2016). This proportion for India, from Rapid Survey on Children 2013-2014 was estimated at 45%. For Africa, data for the period 2005 to 2012 estimated at 43% the proportion of pregnant women making four or more ANC visits (WHO, 2013). Disaggregated data for the region showed that in countries such as Ghana, Kenya, Mozambique, Namibia, Nigeria, South Africa and Zimbabwe more than 60% of pregnant women had visited more than four times antenatal care services (UNICEF, 2016; WHO, 2003). On the other hand, data from 2012-2015 showed that in countries like Chad, DRC, Ethiopia, Senegal, Rwanda, Niger, this proportion ranged from 20% to less than 50% (UNICEF, 2016).

# 3.4.3. Factors influencing the use of Antenatal Care by Young Married Women

### 3.4.3.1. Introduction

This section will discuss the relevant literature about the determinants associated with the utilization of ANC services in developing countries, particularly in the SSA region. The individuals and external exposures discussed in the theory of gender and power to explain the determinants related to modern contraceptive use will guide the structure of this section. These determinants include: social and cultural factors; women's economic status; and knowledge and personal beliefs regarding the use of maternal services. Other determinants encountered within the theory of gender and power structures include health provider attitude and quality of health services and the influence of the husband and extended family (Karkee, Lee, & Pokharel, 2014; MISAU et al., 2013; Mubyazi et al., 2010; Pell et al., 2013; Singh et al., 2012, Upadhyay, Liabsuetrakul, Shrestha, & Pradhan, 2014; WHO, 2003). Thus, O'Connell et al. (2015) stated that for a full spectrum of the determinants that prevent women from using ANC services, attention should be focused on mixed-methods interventions (both qualitative and quantitative research methods). However, in this review limitations were identified while describing the research results because little evidence of qualitative studies was available, and the majority of studies were conducted at the small territorial level, different from quantitative studies (O'Connell et al., 2015). In the next section, I will describe the influence of each factor in women's decisions to use ANC services as discussed in the literature and that is in line with Connell's (1987) and Wingood and DiClemente's (2000) proposed exposures that influence women's access to health services.

# 3.4.3.2. Demographic, Socio-Economic, Cultural and Religious Factors Associated with Antenatal Care Attendance

Ensor and Cooper (2004) describe factors affecting an individual's utilization of health care at the individual, household or community level. Those factors include social and cultural norms, level of information and education, indirect consumer costs (distance cost and opportunity cost). Therefore, Ensor and Cooper (2004) further highlight some of the barriers that occur as a result of the determinants that affect the utilization of maternal health services. Those are: long distance to health facilities; unequal decision-making power between couples in the household; communities' negative views regarding ANC services; high costs of health services and long wait times to access services and so forth. Further discussion regarding those determinants follows in the next sections.

## I. Place of residence

According to WHO (2003), rates of ANC attendance also vary by place of residence. For Developing Countries, 61% of urban women attended ANC services at least four times compared with only 39% of rural women. Regional data showed that Asia presents the lowest rate of ANC attendance (at least four times) with the urban-rural differential estimated at 51% and 26%, respectively (WHO, 2003). For SSA, data indicated that 59% of urban women reported using ANC services whereas only 38% of rural women reported using the same services. By contrast, Latin America presented a higher proportion of women at reproductive

age using ANC services at least four times, estimated at 74% for urban women and 46% for rural women (WHO, 2003).

#### II. Education level

A study by Singh et al. (2012) conducted in India indicated that women with no education presented low rates of ANC attendance, estimated at 7%. For married adolescents with secondary education or more, that proportion was estimated at 83%. Additionally, they also argued that higher proportions of ANC attendance and delivery with skilled staff were visible among young married women whose husbands had attained secondary education or more (Singh et al., 2012). A qualitative study by Pell et al. (2013) stated that women's level of education influences their decision to use ANC services since the higher the education level women attain, the better prepared they will be to freely decide to use those services (Pell et al., 2013).

A study conducted in Ethiopia found that 90% of women with tertiary level education attended ANC services with the assistance of skilled staff (Tarekegn et al., 2014). In addition, 86% of women with secondary education had also attended ANC services. In contrast, only 25% of women with no education attended ANC services, increasing to 45.5% for women with primary education (Tarekegn et al., 2014). Other examples from Bangladesh (Najnin, Bennett, & Luby, 2011) and Ghana (Greenaway, Leon, & Baker, 2012) showed a positive association between both women's and husbands' higher level of education and ANC attendance. In this respect, O'Connell et al. (2015) argued that for each education level attained by women, the probability of using maternal health services provided by skilled staff also increased. For Mozambique, data from DHS (2011) showed that 86% of women with no education attended those services while for women with secondary education or more that proportion was estimated at 98% (MISAU et al., 2013).

## III. Religion and social norms

The study by Tarekegn et al. (2014) reported that the Wolaita ethnic group in Ethiopia showed lower proportions of ANC attendance in part due to social and cultural norms that are against the use of modern maternal health services by pregnant women. With respect to religion, a study by Rai (2015), conducted in Asia, reported that Muslim women in Bangladesh were less likely to attend maternity health services when compared to Muslim Women in India. Another example from India showed that only 37% of Muslim women reported using ANC services with skilled staff assistance, while for women from other religions this proportion was almost 50% (Singh et al., 2012). A study by Gymah et al. (2006) conducted in Ghana, using data from DHS (2003) showed that Christian women reported using more ANC services,

including delivering at health facilities than women from other religious beliefs. Other findings showed that 40% of Orthodox Christian women were using more ANC services provided by skilled staff when compared to women from other religions (Tarekegn et al., 2014).

#### IV. Wealth status

Several studies have pointed out that women belonging to the highest level of wealth were more likely to use ANC services with skilled staff assistance when compared to women from lower economic means (MISAU et al., 2013; O'Connell et al., 2015; Rai, 2015; Singh et al., 2012; Tarekegn et al., 2014; WHO, 2003). Gill et al. (2007) argued that when the woman is financially stable, she is able to freely decide to use maternal health services while pregnant and be able to afford it. Therefore, women who are involved in the labour market and are earning a salary are more likely to use ANC services assisted by skilled staff (Gill et al., 2007; Tarekegn et al., 2014). An example from Kenya showed that, with a scarcity of medical supplies, women were asked by health professionals to bring the item required. Another example from Ghana showed that pregnant women were required to pay for some medical products while using ANC services, and in Malawi, women were asked to buy an identification card to present during ANC visits (Pell et al., 2013). Thus, one can infer that women from low socio-economic status, when presented with these situations could be unable to understand the processes during ANC visits, and this could be a deterrent to using such facilities. Another study by Singh et al. (2012) conducted in rural India showed that only 7% of poor mothers visited ANC facilities at least four times, and for young rich mothers, this proportion was estimated at 33%. For Mozambique, the ANC attendance rate ranges from 82.6% for women belonging to the lowest level of wealth to 97.5% for women belonging to the highest level of wealth (MISAU et al., 2013).

## V. Women's age and parity

Some studies argued that young women that are pregnant with their first child are more likely to do ANC visits when compared to older women (MISAU et al., 2013; Pell et al., 2013). Older women, with high numbers of previous pregnancies (two to five previous births) were less likely to use ANC services comparing to their younger counterparts (MISAU et al., 2013; Pell et al., 2013; Rai, 2015; Tarekegn et al., 2014). For Pell et al. (2013), due to first time mothers' lack of pregnancy experience and the existence of fear of developing health complications related to pregnancy, they were more likely to seek pregnancy care at an earlier stage to avoid future complications related to pregnancy. On the other hand, older women refrain from using ANC services due to their previous pregnancy experiences and the belief

that they will not need health care assistance during pregnancy (Pell et al., 2013; Rai, 2015; Tarekegn et al., 2014).

In reality, the report by WHO (2003), using DHS data from developing regions reported lower proportions of young women who visit ANC facilities four or more times when compared to adult women. For the SSA countries, data showed lower rates of ANC attendance by young women below 20 years, estimated at 41% whereas for women between 20 to 34 years old, that proportion was 44%, decreasing to 39% among women of 35 of age or above (WHO, 2003). A study conducted in Nepal indicated that young women used ANC services later (after four months of pregnancy), which led to less than four visits and were not motivated to use those services (Upadhyay et al., 2014). Singh et al. (2012) indicated that married adolescents in rural India presented low rates of ANC utilization and delivery with the assistance of skilled staff, estimated to be between 14% and 46%. A recent study by Rai (2015) showed that in Bangladesh, estimates of ANC attendance ranged from 13% to 20%, whereas this proportion for Pakistan was estimated at 24%. For India, this rate was estimated at 31% (Rai, 2015). This may be attributed to the lack of knowledge of pregnancy symptoms and the limited decisionmaking power of the young mothers in the household, including decisions to access health services (Rai et al., 2013; Upadhyay et al., 2014). A recent study review conducted in South Africa by Baxter and Moodley (2015) showed the same pattern of ANC use by young women arguing that they are less likely to use these services at an early stage of pregnancy or are more likely of not attending at all. However, a qualitative study by Pell et al. (2013) conducted in Ghana, Kenya and Malawi showed that in the three countries, irrespective of age, women who have experienced previous pregnancy complications are generally more likely to seek ANC services during early stage of pregnancy.

### VI. Exposure to mass media and violence

Likewise, some research has indicated that the use of media sources such as radio, TV and newspapers to obtain information related to maternal health increases the chance of pregnant women using ANC services and delivery in health facilities with the assistance of skilled staff (Singh et al., 2012). Therefore, 17% of women who had access to information regarding maternal health services (ANC services) through media were more likely to use these services (Singh et al., 2012). This can happen because these women were aware of the benefits of using the services (O'Connell et al., 2015; Tarekegn et al., 2014). Findings related to women with no exposure to media, showed lower proportions of ANC attendance among the group estimated at 8%.

Low exposure to SRHR information can increase women's risk of experiencing different types of abuse perpetuated by gender discriminatory norms. A study by Gill et al. (2007) stated that evidence exists that illustrates the connection between intimate partner violence during pregnancy and increased proportion of maternal and child mortality and morbidity. A study by Pell et al. (2013) stated that due to fear of abandonment and repression from men, women in Kenya stated that they delay ANC attendance for fear of being tested for HIV, and if positive, the negative consequences for their marriage.

# 3.4.3.3. Women's knowledge, information and personal beliefs regarding the use of maternal services

According to O'Connell et al. (2015), much research has emphasised knowledge related to maternal health issues as one influential factor in women's decision to use ANC services. In this regard, educated women are probably better informed about ANC benefits and consequently are more likely to use those services (Celik & Hotchkiss, as cited in Singh et al., 2012; Ensor & Cooper, 2004; Gill et al., 2007). In contrast, women with no education were less likely to obtain information related to maternal health services and their benefits, reducing the chance of using ANC services (Addai, as cited in O'Connell, 2015). In one review from South Africa, results indicated that young women lack information and knowledge regarding pregnancy and childbirth (Baxter & Moodley, 2015). Therefore, they showed low rates of ANC attendance, which may increase the proportions of maternal mortality and morbidity resulting from pregnancy complications not detected and treated early (Baxter & Moodley, 2015). The study by Pell et al. (2013) argued that lack of knowledge regarding pregnancy symptoms was one of the reasons women delay the use of ANC services or not use them at all. In this regard, the study showed, for example, that when respondents were asked about the role of ANC services and their benefits, they could only mention the type of medical assistance provided, but could not argue about the benefits of the procedures and the reasons to use them. Women in Ghana reported having their arms "tied," but could not explain the reason for the procedure of blood pressure measurements (Pell et al., 2013). Moreover, fear of witchcraft that could jeopardise a successful gestation was cited as one of the reasons women from Malawi did not disclose pregnancy and therefore use later stage ANC services (Pell et al., 2013). O'Connell (2015) also argued that women who believe in customary myths were less likely to make ANC visits and deliver their children in health facilities.

## 3.4.3.4. Quality of antenatal care services

The study by Ensor and Cooper (2004) highlight some of the determinants from what they considered supply side (health provider and the medical package) that influence a patient's

decision to use health services. These include: shortage of skilled health staff; lack of incentives; shortage of medical supplies; inability of providers to use new treatment technologies; poor quality in the training curriculum; lack of efficient management systems; and the provider's hostile attitude towards patients. In this regard, several other studies have been discussing the impact of the provider's attitudes and preparedness as well as quality of services in women's decision to use maternal health services (Alli, Maharaj, & Vawda, 2012; Biza et al., 2015; Ensor & Cooper, 2004; Karkee et al., 2014; Pell et al., 2013). Therefore, the quality of ANC services was related to factors such as availability of proper medicine, cleanliness of the health facility and attitude of health providers (Vandmoortele et al., as cited in Hardee & Smith, 2000).

A study by Pell et al., (2013) argued that health staff members' position and attitude towards patients affect the way women perceive the information provided by the staff, and then decide to use ANC services during pregnancy. An example from Tanzania showed evidence of misconduct of health providers accused of referring pregnant women to other health professionals without any legible reason (Mubyazi et al., 2010). This increased the costs for patients trying to access those health professionals. The study also reported misconduct from the provider's side, charging patients for services such helping during delivery and abortion (Mubyazi et al., 2010). A study conducted in India showed that due to the existence of the caste system, women from the lower caste most often receive services from unskilled birth attendants since skilled health professionals prefer to attend to only women from higher caste (Saroha, Altarac, & Sibley, 2008).

Studies have shown evidence of low quality of health interventions provided during ANC visits (Karkee et al., 2014; MISAU et al., 2013; WHO, 2003). Results about the quality of ANC services, extracted from DHS for the period 1999-2001, showed that only 27% of Ethiopian women received information about the danger signs during pregnancy; in Malawi, this proportion was estimated in 71% whereas for Peru and Rwanda this rate was 75% and 6% respectively (WHO, 2003). In addition, data from Cambodia, Ethiopia, Rwanda and Zimbabwe presented rates of women taking urine samples estimated at 17%, 21%, 4% and 80% respectively (WHO, 2003). Additionally, data from Colombia, India, Malawi and Uganda showed that 92% 59%, 43% and 15% of pregnant women respectively had taken blood samples (WHO, 2003). A study conducted in Nepal reported low quality of services in birth centres and public hospitals in areas such as cleanliness, water provision and space of rooms (Karkee et al., 2014). The study pointed out other constraints to quality service found in birth centres such as

a lack of equipment and competence from health providers to provide an effective package of services for pregnant women (Karkee et al., 2014).

For Mozambique, data from DHS (2011) showed that: 40% of women received information about the danger signs of pregnancy during ANC visits; 50% of women had taken urine samples; and 85% of women had taken blood samples (MISAU et al., 2013). Another study conducted in Mozambique by Matsinhe et al. (2007) highlighted barriers for health service utilization that affect the quality of care. Those include: precarious health care infrastructure in the country; shortage of equipment and medicine supplies; and lack of skilled administrative staff. Similarly, a recent study by Biza et al. (2015) stated that constraints in the health sector such as poor storage systems, staff shortages, high workload as well as limited knowledge of ANC procedures and unwillingness to follow protocol by health providers, negatively influence the uptake of ANC services in Mozambique. In this study, women respondents stated that long waiting times and lack of privacy of the exam rooms were also barriers that prevent them from seeking ANC services (Biza et al., 2015). Participants further stated that they started visiting ANC services during the second trimester of pregnancy. They argued that the health centre could not provide pregnancy tests, so patients needed to wait for pregnancy confirmation before using ANC services (Biza et al., 2015).

## 3.4.3.5. Influence of the husband and extended family

Several studies have illustrated the influence of husbands and the extended family on women's decision to use ANC services (Chowdhury et al., 2007; O' Connell et al., 2015; Pell et al., 2013; Subramanian, Oliveras, Bowser, Okunogbe, Mehl, Jacinto, Long,& Chilundo, 2013; Upadhyay et al., 2014). The study by Upadhyay et al. (2014) indicated that both women and husbands were the main decision-makers regarding women's maternal health rather than the mother-in-law. The study stated that husbands were more influential among women adolescents and young adults in deciding to use ANC services and deliver in health facilities. On the other hand, adult women themselves would make decisions regarding their own maternal health matters (Upadhyay et al., 2014). Examples from Bangladesh, Ghana, Rwanda and Vietnam also showed that women were only allowed to travel alone to seek maternal health services with their husband's consent (O'Connell et al., 2015). The study also argued that mothers-in-law and women's paternal grandmothers played a role in women's decision to visit ANC clinics. Simkhada et al. (2010) stated that in Nepal is a customary norm an older woman to hold a power in the decision-making process of family matters. In this regard, women interviewed for the study argued that mothers-in-law prevent women from attending ANC services to focus in household chores (Simkhada et al., 2010).

An example from Mozambique showed that husbands and older women did not believe in the benefits of women delivering in health facilities (Subramanian et al., 2013). Thus, women respondents who did not deliver their babies in health facilities, blame the husbands and other extended family members such as mothers-in-law and aunts of making the decision for not using the services without their consent (Subramanian et al., 2013). However, recent data showed that socio economic conditions in urban areas increase the likelihood of nuclear families, therefore less intervention from extended families in the household health decisions (Upadhyay et al., 2014). Couples equal participation in the household health decision are more likely to happen when the husband is educated and trust modern medicine. Thus, husbands will be able to detect dangerous signs of pregnancy and help their wives to seek appropriate treatment (Chowdhury et al., 2007; Gill et al., 2007; Singh et al., 2012).

## 3.4.4. Impact of antenatal care attendance in women well-being

During the second half of the 20th century, global awareness about the burden of increased maternal mortality rates and morbidity derived from pregnancy related causes and encouraged governments with the support of other stakeholders to provide medical assistance for women during pregnancy (WHO, 2003). Thus, women could have a safe delivery with the help of skilled providers and guaranteeing child survival (WHO, 2003). A study by Singh et al. (2009) stated that full coverage of ANC services for pregnant women would cause an annual decrease in maternal and child deaths, estimated at 57% (from 356,000 to 153,000) and 42% in new-born deaths (from 3.2 million to 1.8 million). Tarekegn et al. (2014) argued that almost 74% of maternal mortality rates could be prevented if pregnant women were using health care services to treat complications related to pregnancy, including access to emergency obstetric services during delivery if needed. Therefore, interventions assisted with skilled staff should be in place during a baby's delivery, ensuring also an emergency obstetric procedure system is in place (WHO, 2009). Studies have shown that the use of ANC services increase the likelihood of women delivering at health facilities in the presence of skilled providers (Gill et al., 2007; Simkhada et al., 2010; Tarekegn et al., 2014; WHO, 2003).

With regard to the package of services offered during ANC visits, a set of general interventions were defined such as Community Education through Health Promotion on safe motherhood and Disease Prevention (WHO, 2006; USAID, 2004). This package also includes a set of preventive disease measures and the provision of medicines to improve women's nutrition, to prevent infections such as anaemia, HIV, Malaria and STIs, and to identify and treat symptoms of mental health issues and assistance for domestic abuse cases (Pell et al., 2013; UNICEF, 2016; USAID, 2004; WHO, 2006). Other conditions related to pregnancy

treated and prevented during ANC visits include: urinary tract infections; severe anaemia; vaginal bleeding; severe headache; epigastric pain; preeclampsia/eclampsia; blurred vision; abnormal foetal growth; fever; and abnormal foetal position which after 36 weeks may cause or be indicative of a life-threatening condition (Starrs, 1998; USAID, 2004; WHO, 2002; 2006). To guarantee a safe delivery, ANC services provide women with emotional support and safe delivery tips, as well as encourage social support for women through their families and communities during and after pregnancy (Pell et al., 2013; UNICEF, 2016; USAID, 2004; WHO, 2006). In this regard, in Mozambique, the Ministry of Health developed an ANC package, to be implemented between four visits as recommended by WHO (Biza et al., 2015). This ANC package includes elements and services included in the general package cited in the previous paragraphs.

## 3.5. Summary of Literature Review

To understand the topic and the current scientific discussion related to the study's objectives, this chapter presented and discussed material published by authors and institutions dealing with women's SRHR issues and early marriage practices. The chapter started by addressing early marriage practice, its trends, determinants that influence its occurrence, impact of the practice for adolescent well-being as well as a discussion about interventions to end and prevent the practice. Findings from Developing Countries showed that early marriage occurrence rates are still higher in the poorest regions of the globe. In these areas, as reported in previous studies, chances are that most of the girls under 18 years of age may be forced to become child brides. Mozambique is among the 10 countries with the highest proportion of early marriage rates globally. Different factors and contexts explain variations in the occurrence of early marriage. Therefore, disparities in the proportion of young marriage in between and within countries should be considered as well as impact of their early marriage in women's well-being. With respect to the impact of early marriage in women's well-being, particularly their health, the literature shows that early marriage practice takes away women's freedom and therefore opportunities for personal happiness and growth.

The literature also shows that child marriage practices affect girls' educational attainment. Childbearing in the context of early marriage happens soon after marriage, when the young bride's reproductive system is not physical prepared for the pregnancy. As a result, health complications related to pregnancy may occur, leading sometimes to maternal death as well as neonatal and infant death. Due to young married girls' low level of education and difficulties in accessing ANC services, the unborn babies can also be at risk of being born with low birth weight and other health complications. Evidence also showed that young married

girls are at risk of exposure to intimate partner violence, which will affect their decision to seek appropriate medical care such as the use of modern contraceptive methods or seeking ANC during pregnancy. Lack of access to basic reproductive health services such as contraceptives can increase young married girls' risk of contracting HIV and other STIs. The implications of the findings are that early age at marriage contributes to the spread of HIV and in contrast "the higher age at marriage the longer the period of premarital exposure to the risk of infection" (Bongaart, 2006). Interventions aimed at preventng and fighting child marriage have been implemented in areas where the practice occurs. Those involve supporting girls in all spheres of their lives and creating a supportive legal and social environment so they can exercise their rights. Girls' rights, particularly related to SRHR in Developing Countries, are threatened, and data regarding the proportion of contraceptive use and ANC attendance among young married girls provides evidence of this dramatic scenario.

The second section of this chapter presented and discussed data related to modern contraceptive use patterns among married women in Developing Countries, the determinants that influence women's decision to use contraceptives as well as impact of modern contraceptive methods for women's well-being. Data from the early 1990s to 2012 showed that within developing regions, Latin America and the Caribbean presented higher proportions of married women using modern contraceptive methods, followed by Asia and then SSA. Regional disparities in the proportion of married women using modern contraceptive methods were also found between regions and within regions. Overall in Developing Countries, particularly SSA, contraceptive uptake is still low, with a high unmet need for different modern contraceptive methods (Ayanore et al., 2016; Darroch & Singh, 2013; Population Reference Bureau, 2008). The primary contraceptive methods of choice include female sterilization, intrauterine devices and oral contraceptives. However, studies have showed flows in the use of these methods. For example, the number of women using less preferred contraceptive methods such as condoms (both male and female) have experienced an increase. This may be due to the impact of some factors that can influence women's decision to use the methods that can vary among regions. Age differentials in the proportion of women using contraceptive methods showed lower rates of use among young women between 15 and 19 years old and higher rates among adult women between 25 to 29 years old.

With that being said, different individuals and external exposure as defined within the three structures of the theory of gender and power (sexual division of labour, sexual division of power and the structure of affective attachments or social norms) were presented and discussed based on evidence from the literature. Therefore, guaranteeing women's access to

modern contraceptive use through the elimination of the barriers that influence its use could have a positive impact on women's well-being, particularly for their SRH. Several studies reviewed argued that contraceptive use could help reduce maternal mortality and morbidity, including child mortality. Modern contraceptive method use, especially condoms, could help prevent HIV and other STIs, and help prevent mother-to-child transmission of HIV. Use of modern contraceptive methods could improve couples' economic situation and consequently their well-being by allowing the spacing out of births and a reduction in the number of children born. Effective and consistent modern contraceptive use, allied with ANC visits during pregnancy can treat and prevent health complications related to pregnancy in order to reduce maternal and child mortality.

The third and last section of this chapter discussed the ANC attendance situation in Developing Countries, with emphasis on SSA where the study area is located. The literature showed variations in the proportion of women attending these services during pregnancy. This proportion is realistically higher worldwide, particularly among developed countries and relatively lower in Asia and the SSA region (MISAU et al., 2013; O'Connell et al., 2015; Singh et al., 2012; Tarekegn et al., 2014; WHO, 2003). The chapter further addressed determinants that influence women's decision to use these services. In this review, several factors were identified that prevent pregnant women from accessing full and effective ANC services. Sociocultural, religious and economic influences affect women's decision to use ANC services (MISAU et al., 2013; Pell et al., 2013; Rai, 2015; Tarekegn et al., 2014; Upadhyay et al., 2014). The section reported that husbands and other extended family, such as mothers-in-law, influence women's decision to seek ANC visits. In the context where women live in urban areas and are educated and financially stable, the probability of using ANC services increases. By contrast, women residing in poor regions that are less educated, with fewer financial means and low decision-making power within the household are less likely to seek ANC services during pregnancy. Other determinants identified in this review that influence ANC attendance include: religious beliefs against use of ANC services, intimate partner violence, lack of knowledge regarding ANC benefits, women's age and residency location. The majority of women below 18 years old reported low or later attendance to ANC when compared to older women above 20 years.

To finalise, the chapter discussed the possible impacts of ANC attendance for women's well-being, as addressed in much of the literature. Studies found that multiple interventions offered to women during ANC visits aim to prevent and treat health complications related to pregnancy. Thus, higher rates of maternal and child mortality and morbidity would be

prevented, contributing to the mother's and baby's well-being (Gill et al., 2007; Simkhada et al., 2010; Tarekegn et al., 2014; UNICEF, 2016; USAID, 2004; WHO, 2003; 2006).

## **Chapter 4: Study Methodology**

# 4.1. Introduction

This chapter describes the methodological framework and research design that was applied during the study planning and implementation. Due to its nature and purpose, this research is exploratory and descriptive about young married women's experiences regarding modern contraceptive use and ANC attendance during pregnancy. My motivation to conduct this study came from the dramatic evidence from Developing Countries, discussed in several studies that showed that due to the effect of multiple determinants, young married women in these regions, particularly in Asia and SSA represent low proportions of modern contraceptive method use and low rates of ANC visits during pregnancy. This led to health complications related to pregnancy and other reproductive issues, contributing to the increase in maternal mortality and morbidity as well as child mortality rates. Qualitative research methods were proposed to data collection and will be explained further. This chapter will be stratified in different subsections, namely profile and background of study area, research design, sample size and its criteria, sampling procedures and participants' selection, data collection methods, data analysis methods, including ethical considerations related to data collection and participants' well-being. The chapter ends with a table summarising the procedures followed in this research.

## 4.2. Socio-Demographic and Background of Namaacha District – Study Area

The study was conducted in the district of Namaacha, located in Maputo Province, Mozambique (see Figure 7), with a land area estimated at 2,196 km² (Instituto Nacional de Estatistica – INE, 2010). The district of Namaacha is located on the southeast side of Maputo Province, at about 76 km from Maputo, the capital of Mozambique. On the west side it borders with Swaziland and South Africa, in the north it borders with Moamba district, in the east with Boane district and in the south with Matutuine district (INE, 2010). The district of Namaacha has approximately 42,694 inhabitants, a majority of the population being youth, with more than half of the population aged below 19 (MISAU et al., 2013). Previous data from the National Census (2007) reported a total population of 41,954 of which 21,132 were female, accounting for 50.4% of total population and 20,822 male which accounted for 49.6% of total population (INE, 2010). The District of Namaacha has the highest fertility rate in the province, with approximately 5.7 children per woman. The marriage rates indicated that around 56.4% of the population is in cohabitation unions and 7.4% are married. Regarding the level of education, data from the census 2007 indicate that in the district, approximately 40% of women were illiterate, when compared to 20% of men (MISAU et al., 2013). Agriculture is the main

economic activity in the district. The district also depends economically from the trade within the borders to South Africa and Swaziland as well as activities of hunt, wood exploitation, coal production and fabrication of homemade alcoholic drinks. The predominant religion in the district is Zion but there are other religions also practiced in the area (i.e. catholic and evangelicals). With respect to language, Xichangana is the mother tongue of most residents in the district. However, it was estimated that 63% of the Namaacha residents aged 5 years or above have some knowledge of Portuguese, the official language in Mozambique (Ministério de Administração Estatal, 2005).

Furthermore, data from 2008 related to health infrastructure in Namaacha District indicated that the district had only 6 primary health centers during that period, with no facilities providing services at hospital levels. For more specialised services, patients are referred to the hospitals located in the capital of Maputo Province or the main hospital in the country located in the capital of the country, Maputo. Thus, in 2008, these facilities only had 28 beds for pregnant women on the process of delivering their babies (INE, 2010). With respect to the level of coverage of maternal and child health services, data from 2008 showed that 1,421 women attended ANC services, which constitutes 66% of the targeted population and only 46.7% delivered with assistance of skilled health provider (MISAU-Direcção de Planificação e Cooperação cited in INE, 2010).

MDAMBA

MDAMBA

PROVINCIA DE MAPUTO
DISTRITO DE NAMACHA

LEGENDA

Sedes

Vias de acesso

Limite do Postrito

Limite do Postrito

Limite do Postrito

Norte E ESCALA

Norte E ESCALA

Norte E ESCALA

Norte E ESCALA

Figure 7: Map of Namaacha District

Source: Instituto Nacional de Estatistica (INE), 2010

## 4.3. Research Design and Methodological Study Description

Studies conducted in Developing Countries, particularly in SSA showed that young married women are not fully exerting their SRHR, particularly access to modern contraceptive methods and ANC services during pregnancy. This reality perpetuates the occurrence of health complications related to pregnancy and unprotected sex. As a consequence, those poor countries will experience an increase in the proportion of maternal and child mortality, and other negative implications for their health and overall well-being. With this in mind, I intend to investigate through the voices of these women the current trend reported all over Africa regarding the inaccessibility of maternal health services for young married women, which is a constraint for their SRHR. In other words, the aim of this study is to explore the experience of married girls when they seek maternal health services such as ANC and access to contraceptive methods in Namaacha District, Mozambique. The specific objectives of the study are:

- To describe how young women who marry early talk about their experiences of early marriage, and make decisions about their SRHR (particularly contraceptive use and ANC attendance) in Namaacha, Mozambique;
- To explore barriers and facilitations to SRHR including access to modern contraceptives and ANC services as a way to offer recommendations for improvement of health service utilization and access for young women who marry early in Namaacha, Mozambique.

Qualitative research approaches were selected as the methodological framework for this study. According to Pope, Royen, & Baker (2002) qualitative research is a process that includes collection, organization and data analysis of textual material extracted from the respondents' interviews or from observing their interaction in their communities. They further stated that qualitative methods are linked with the interpretive approach within social sciences that gave praise to the experiences of the subject of interest reported by the study population, and how they view and discuss the referred subject (Pope et al., 2002). Qualitative research attempts to tap the deeper meanings of particular human experiences which are intended to generate theoretically richer observations that cannot be easily reduced to numbers (Rubin & Babbie, 2008). It is the study of those topics for which attitudes and behaviours can be best understood within their natural setting and is especially appropriate to study social processes over time (Rubin & Babbie, 2008).

To achieve the aim of this study, qualitative research methods were the preferred methods to collect data instead of quantitative ones. Qualitative research methods were applied using three different methods of data collection, namely in-depth/open-ended interviews,

observation, and written documents (Patton, 2002). For this study, in-depth/open-ended interviews were used for data collection. Giacomini and Cook (2000) referred to the importance of applying qualitative research methods in health care studies as they can help participants to share sensitive information related to their experiences in health care. On the other hand, the quantitative method was not found to be suitable for this research because the study focus was not to discuss numerical and statistical data related to maternal health use, with codified responses that limit respondents' answers to the questions. As Patton (2002) stated: "Quantitative instruments ask standardized questions that limit answers to predetermined categories, facilitating comparison and statistical aggregation of the data" (p. 227). Instead, the purpose of this study is to analyse the quality and trend of utilization of maternal health services available to young married women in Namaacha through their own understanding of the experiences while seeking those services. Therefore, a qualitative method is suitable for this study since it allows a deeper understanding of the issues experienced by a specific group (young married women), narrated by the primary source (i.e. the services' recipient).

For data collection, the study used the life grid tool, a chart that chronologically reflects changes and developments in several areas of an individual's life (Richardson et al., 2009). The life grid technique were used through in-depth interviews as a way to narrate chronologically early married women life stories about their experience of using ANC and family planning services in their communities. In addition, the researcher collected insights into personal issues faced by married girls including the identification of external and personal events in their lives that have contributed to their current knowledge and attitudes regarding the benefits of using contraceptive methods and ANC services while pregnant.

## 4.4. Study population

Babbie and Mouton (2001) stated that study participants are people who provide important information about themselves which will be used by the research team to compile the characteristics of the group those respondents are representing. Additionally, Granziano and Raulin (2000) while defining a target population argued that is "the complete specific set of cases or groups which the researcher intends to make generalisations or understand" (133). Therefore, in this study, adult women who married before reaching the age of 18 were inleuded for study population. All women participants were married with husbands with similar ethnic backgrounds. They all have been pregnant before, were Mozambican citizens and majority did not have a formal job (detailed profile description of study participants will be presented in the results chapter).

## 4.5. Sampling procedures for participants selection

According to Babbie and Mouton (2001) sampling is the process of selecting a portion of the study population. This study will use a non-probability random sampling method called Purposive/Judgmental to select the participants. It uses the judgement of an expert in selecting cases, or it selects cases with a specific purpose in mind (Kreuger & Neuman, 2006), and the idea is that one knows exactly the kind of person one wants to find out about, and so the researcher picks people exactly suited to his or her needs (Drake & Reid, 2008). Additionally, Patton (2002) argued that the logic and power of purposive sampling lies in selecting specific respondents to have in-depth understanding related issues of the study as a way to answer the research questions. Therefore, the strategies applied to select this target population included snowball or chain sampling.

According to Patton (2002) this process is initiated by asking influential people who may know the population the researcher is interested in studying so they can suggest prospective participants. At 30 of November 2017, the principal investigator personally contacted the local government office who provided information of local NGOs working in the field of women's SRHR. Further to this, the principal investigator contacted organizations, such as Tiane, working in Namaacha District, with projects within the SRH area, and asked for their support in identifying the study participants. The research team sent letters to inform both organizations about the study's objectives and asked for their assistance to identify the target population for this study. Positive response from this engagement with local organizations came soon, as hoped, and the Tiane Association made themselves available to help the research team. The Tiane organization is a local NGO, working in HIV prevention and treatment area. Their peer educators with the help of community leaders and other selected community members directed the research team to the target population. Next, the research team were given participants' contact details and were taken to some of the participants' residences, introduced to some of them in their residences or during their visits to the health centre. Through the snowball, three participants of the study presented the investigator three other women who fit the criteria to participate in the study. The researcher team contacted participants and set interview dates according to their availability. During the participants' selection process, married females from the same family or living in the same household were not selected in order to maintain confidentiality.

## 4.5.1. Sample size

In his book "Qualitative Research & Evaluation Methods, 3rd edition, Patton (2002) stated that there are no rules for sample size in qualitative research. He also argued that "sample size depends on what you want to know, the study's objectivesives, what is at stake,

information usefulness, credibility, as well as how can we use the available time and resources" (p. 246).

For this study, the research sample selection process was divided in two stages: an initial screening of 20 participants, all above 18 years old, who were married before the age of 18, to make sure they match the criteria of the study. After the initial screening, 12 participants out of the 20 were selected for interviews in a second stage. Note that due to the nature of the study, which is qualitative and using in-depth interviews through life grid methodology, I consider the number of selected participants sufficient to achieve the objectives of the study. Additionally, it is worth noting that the Mozambican Family Act, number 10/2004, considers marriage the voluntary and natural union between a man and a woman for the purpose of a family in full communion of life (Article 7). Mozambican family law also considers the religious and traditional marriage to have the same value as civil ones (Article 16). Thus, to ensure truthfulness regarding participants' marital status, the research team asked the community leader and other witnesses such as neighbors about the veracity of participants' marital status claims.

## **Criteria for respondent's selection:**

- Women residing in Namaacha District;
- Must have married early (between 15 and 17 years old);
- Had been pregnant before with at least one successful delivery;
- Had previously used ANC services during past pregnancy; and
- Volunteered to participate at the time of recruitment.

## **Exclusion Criteria**

- Young married women aged below the age of 18;
- Never attended ANC services or is attending the service for the first time;
- Did not sign the informed consent.

## 4.6. Data Collection Methods

Since this study is qualitative in nature and purpose, the data collection process was carried through the use of in-depth open-ended interviews. In-depth interviews are focused, discursive and allow the researcher and respondents to explore an issue in detail (De Vos, 2001). In this respect, during in-depth interviews the purpose was to collect information from respondents related to their life experiences as married women and how personal and external factors

influence their decisions to use contraceptives and ANC services during pregnancy. This implies a narrative description of their life events that influenced their past and present experiences of using modern contraceptive methods and ANC services during pregnancy.

## 4.6.1. Life grid methodology: A tool for qualitative data collection

Life grid approach was used during interviews to collect data in detail. A life grid is a chart with rows showing years in a participant's life and columns that show different areas in that life, for example family, work, health (Parry, Thomson, & Fowkes, 1999; Richardson, Ong, Sim, & Corbett, 2009). Life grid, also known as a retrospective data collection tool (Groenewald & Bhana, 2015) was first used in retrospective, quantitative research to collect information from respondents above 60 years of age (Wilson, Cunningham-Burley, Bancroft, Backett-Milburn, & Masters, 2007). Evidence showed that life grids have been applied in qualitative research by some scholars to narrate the experiences of participants about sensitive and emotional issues, particularly health related experiences (Abbas, Ashwin, & Mclean, 2013; Groenewald & Bhana, 2015; Harrison & Montgomery, 2001; Richardson et al., 2007; Wilson et al., 2007).

According to Holland et al. (2000) life grid is a tool that stimulates recall of important events and behaviours in the participant's life by setting temporal lines of personal and external dates and events so the participants can incorporate their recalls in those structured timelines. Edwards, Mulloli, Howel, Chadwick, Bhopal, Harrison, & Gribbin (2006) suggest that the life grid methodology helps to fasten memory development, particularly when it comes to recalling long time events in the participant's life. Additionally, Wilson et al. (2007) highlight some advantages of using the life grid approach in qualitative research that include: its visual element, which can stimulate the interaction between interviewer and respondent while reflecting in a specific participant's life event; enabling study participants to feel comfortable to answer and discuss sensitive topics with the interviewer. For example, Wilson et al. (2007) used life grid methods to explore young people's experiences with respect to their parent's drug addiction. In this study, their main interest was not to incite a linear recall of the participant's events, but to connect both parties (interviewer and respondents) instead, supporting the respondents to freely share their stories related to their parent's substance abuse. Using the life grid methodology, Wilson et al. (2007) wanted to prevent potential stress by respondents while answering questions and avoid reinforcing negative self-perceptions related to the issue discussed.

The study by Novogradec (2009) applied life grid methodology during data collection to explore living and working conditions of oesophageal cancer patients during their life. The

life grid methodology allowed interviewers to have a visual perspective of a participant's life events and connect different factors discussed during the interview that happened in different timelines. However, challenges as a result of using the life grid during the interview were identified. These include inaccurate data as result of the participant's memory distortion and participant's preference to answer less sensitive questions, avoiding the sensitive ones (Parry et al., 1999). Other studies also highlight some of the constraints from life grid methodology, namely: length of interviews, event-centred data, and the inability to identify unknown factors not registered in the questionnaire (Novogradec, 2009). Overall, limitations in qualitative interviews were also identified in other studies. For instance, Patton (2002) highlights some constraints of qualitative interviews such as errors in responses due to personal bias, anger, anxiety, politics, and perhaps emotional stress of the respondent during an interview. In this regard, the research team considered all the possible risks and limitations that can occur during study design and implementation. Measures were applied to guarantee that scientific and academic processes of conducting ethical research were followed in this study.

## 4.6.2. Life grid methodology: The design and implementation for this study

Designing a life-grid entails the identification of data required for the study, how it will be organised and what will be analysed and compared at the end (Abbas et al., 2013). Therefore, by rehearsing and understanding the data collection process applied in previous qualitative studies that have used life grid methodology in their research (Gronewald & Bhana, 2015; Novogradec, 2009; Wilson et al., 2007), I was able to structure the life grid framework for this study. In line with the life grid approach, the interviews were conducted in two distinct phases, and in Portuguese, the official language of Mozambique and Xichangaan. The interviewer used the two approaches to collect data through open-ended questions as suggested by Patton (2002). During the first life grid interview phase, the interviewer is interested in collecting general information about the study subject, with fewer details. In this first phase of interviews, I used the "general interview guide approach" proposed by Patton (2002) which outlines a set of issues to be explored with each participant before the second interview begins (See Appendix  $1-1^{\rm st}$  Questionnaire). This process was important since it helped the researcher team understand the instrument and to identify legible respondents as well as the gaps of the instrument so it could be improved for the second phase of interviews, with more detailed questions. For the second phase of interviews using the life grid approach, I used the standardised open-ended interview approach (See Appendix 2–2<sup>nd</sup>questionnaire). According to Patton (2002) the standardised open-ended interview consists of a set of questions previously worded and organised with the aim of providing each respondent with the same questions,

organised in the same manner. This approach was important during this phase of data collection since the respondents were basically answering the same questions, which facilitated the comparison of responses for each participant, reducing bias caused by interviewers' skills and facilitating organization and data analysis.

With the questionnaires set, the life grid chart was designed to help the participant answer the questions from the instrument. The material used to build the life grid tool included A3 paper, as suggested by studies that argued that the life grid begins with finding A3 paper and a suitable place to attach the paper (Parry et al., 1999; Richardson et al., 2009; Wilson et al., 2007). Then, I divided the life grid tool in several columns on which was placed a theme for discussion. The first column is a set of external events that can have significance in the participants' life or, as called by Parry et al. (1999), indirect indicators, which are listed in the rows below the column. The following columns and rows described other important themes in the respondent's life that interests the researcher, such as age of the participant, location of residence, employment status, education, family relationships, and use of health services or barriers preventing use. Under each column heading previously referred to, meaningful events such as marriages, contraceptive use, ANC attendance, pregnancy and child delivery information were noted in the grid chronologically. This enabled the interviewer to connect different answers from different questions related to the participant's personal experiences, but still with focus on the study's objectivesive and the probable answers. It also allowed the respondents to be comfortable enough to answer sensitive questions because of the informal flow and structure of the life grid methodology operation.

## 4.6.3. Characteristics and procedures for data collection in this study

As previously mentioned, this study was conducted in two phases with two different questionnaires. Two interviewers conducted the interviews (the main researcher and a research assistant). The principal investigator of the study conducted a 3-day training regime for the research assistant so she could understand the study goals and aims. The training package included the research instrument (questionnaire) and tips on using the life grid tool. The investigator felt confident in the research assistant's ability to conduct the field work since she had previous experience in qualitative research including working as a data analyst at Mozambique National Institute of Statistics. Patter (2002) recommends for data collection, "direct participant observation and in-depth interviews to gather information related to the study's objectives from the direct individuals experiencing the phenomenon" (p. 104). Thus, for this study, I use in-depth interviews to collect data related to young married women's

experience of modern contraceptive use and ANC attendance during pregnancy in Namaacha, Mozambique.

The questionnaire was designed to answer the study's objectivesive and research questions, as well as legitimate the assumptions of the theory of gender and power regarding determinants that influence the use of maternal health services. The first phase of the interview, also called the snapshot, used a questionnaire with 10 general questions related to young married women's demographic characteristics and other simple questions about their experience of using modern contraceptive methods and ANC services. This process enabled the research team to eliminate or pass the participant to the next phase of interview if it fit the criteria for participant selection. During this first interview, participants engaged with the interviewers from 20-30 minutes. The first phase of interviews started from December 5, 2016 to December 9, 2016. For the second set of interviews, the participants were selected after passing the criteria for sample selection and voluntarily consenting to participate in the study. This second stage started simultaneously with the first set of interviews since participants did not take long to accept being interviewed for the second time. An open-ended questionnaire was used and was divided into subsections representing different topics of interest for the study. The questions aimed at exploring young married women's rights within marriages and access to modern contraceptive methods and ANC attendance. Other questions were designed to understand the influence of certain determinants in young married women's decision to use maternal health services. These interviews took an estimated 45 minutes to 1 hour and 30 minutes per each of the 12 participants. The second stage of interviews previously described started from December 7 to December 16, 2016 It is important to mention that the principal investigator had conducted 6 interviews and the research assistant conducted the other 6 interviews.

Prior to the interview, participants were asked for permission to record the interview for further analysis so that the interviewer could concentrate on the notes from the grid. In addition, to guarantee the quality of data and avoid bias the research team conducted a member check, which is when researchers check their understanding of the data with the people they study by summarising, repeating or paraphrasing their words and asking about their veracity and interpretation (Lincoln & Guba, as cited in Daymon & Holloway, 2002). After the interviews the research team checked the recorder to make sure that the interview was recorded properly and no data were missing. Three participants were contacted three days after the interview to clarify a few questions. In addition, after interviews, the research team wrote notes with a summary of the main points discussed during interviews that they shared with

participants so they could confirm if the team had written the appropriate ideas provided by participants.

# 4.7. Data Analysis Methods

Qualitative data analysis attempts to preserve the textual form of the data gathered and to generate analytical categories and explanations (Pope, 2002). In this specific research, the process of data analysis started while still collecting data in the field and was an ongoing process. During consultation with my supervisor, he emphasised the need to identify the rightful theory to guide the data analysis process. Therefore, the theoretical approach used in this study for data analysis is Interpretative Phenomenological Analysis (IPA). For Smith and Osborn (2003) the IPA approach seeks to examine how respondents understand their backgrounds and attach meanings to their experience related to the study subject. According to Schwandt (2001:192) phenomenological analytical approach describes the participants' experience in a very subjective way. It means studying respondents' everyday experiences through the researcher's own perspective and interpretations. In this regard, content analysis methodology will be used to describe the findings of this study. Patton (2002) argued that content analysis implies searching data for repetitive words or themes. In this regard, the strategy used to identify the content is the inductive analysis (IA) approach. For Patton (2002), IA includes identifying patterns, themes, and categories in specific data. Thus, the main objective of using the inductive approach in research is to describe the findings that erupt from the original data, without limitations encountered in other more structural methodological frameworks (Thomas, 2003). He further proposed steps to be used while applying IA as part of thematic analysis. These include: linking the objectives of the study and the findings from raw data analysis; creating categories and developing them into a model framework; organising categories and erasing less important information provided by participants. To ensure credibility of findings the researcher should: organise an independent replication of the study, compare the results with other similar studies, compare different findings emerging from the data and solicit feedback from the study participants (Thomas, 2003).

Since the main objective of this study was to explore the experience of married girls when they seek maternal health services such as ANC services and modern contraceptive methods in Namaacha District, with the IPA approach, initial themes started emerging and were identified completely during the ongoing analysis process. After the interviews were completed, the research team checked all the life grid charts to see if they were completed and all the information was gathered in the notes. This process started by reviewing each life grid chart while the participant was present so she could provide more information if required.

During this process, all the interviews were recorded, and after completion of the 10 interviews, each was coded and manually transcribed in Portuguese and later on to English. While transcribing the data, the team ensured that all information was being transcribed verbatim. Next, the principal investigator (fluent in speaking and writing both in English and Portuguese) transcribed the interviews from Portuguese to English. Prior to that, the research assistant, who is fluent both Portuguese and Xichangaan, transcribed the 4 interviews in Xichangaan to Portuguese before giving them to the principal investigator. Next, the principal investigator reviewed all the transcripts to ensure that all the information provided by the participants was gathered and proper language was also used. Then, the transcripts were also each revisited to identify potential thematic elements for analysis and to have a sense of the women's description of their individual experiences regarding the use of maternal health services. This process was repeated three times and was conducted by the principal researcher and a research assistant with a bachelor's degree in social science.

Next, similar and different characteristics of the codes were each grouped together, where colours where assigned for similar ideas occurring in the transcripts. Therefore, codes were attributed to each interview recorded, ordered into categories and later grouped into themes. Patton (2002) stated that classifying and coding qualitative data could lead to the design of the framework to assist with the organisation and analysis of data that have been collected. Thus, the coding process during data analysis in this study proved to be fruitful. After categories and themes were defined and no new information was coming out from the initial analysis, conceptual saturation was reached. It is also important to mention that the codebook was also developed based on the questions from the interview instruments (See appendix 2) and the theory of gender and power approach. In this regard, a table showing the main themes and sub categories was developed. This table connected the research questions and objectives to the answers provided by participants. The findings from the interviews were inserted in the chart purposely to answer the questions raised from the study. After the provisional coding was completed, the research team used the computer software Atlas to organise, manage and analyse the data, while other themes were being identified.

While using the software Atlas to organise raw data and identify categories, I printed all the transcripts of the raw data gathered for each participant. This process enabled me to go through all the transcript lines and identify the direct quotations assigned to each category created to respond to the research questions of the study and ultimately find the answers to the study's objectivesives. For example, the categories associated with the women's current situation regarding use of modern contraceptive method of choice were: pattern of

contraceptive use; type of modern contraceptive used and available for women; factors influencing contraceptive use and method of choice; impact of contraceptive use in women's well-being; and overall experience/satisfaction while using and seeking maternal health services. Further to this, different analytical strategies were applied to describe and interpret the findings. Therefore, I conducted a cross-examination of data provided by each participant in this study through an inductive approach to identify the quotes associated with the study's objectivesives. The IA approach was important in determining the associations and patterns between different categories and themes as well as to explore and be familiarised with data to describe it properly. For Sandelowski and Barroso (2003), descriptions are influenced by the researcher's perceptions, feelings, understandings and responsiveness. Continuously, an effective and profound revision of transcripts allowed the researchers to identify other themes through the IA approach. For Thomas (2003) the IA approach is used to help in understanding the entirety of the raw data by identifying important themes or categories that are associated with the study's objectives, eliminating also the remaining data with no direct interest for the research. Other strategies to describe data included comparisons of findings provided by different participants to identify commonalities and patterns within the phenomena. This process was followed by the elaboration of a descriptive summary of the main findings as narrated by women themselves regarding their experience of modern contraceptive use and ANC attendance within their marriages.

For interpretation of the findings, it the phenomenology approach was applied. For Patton (2002) the phenomenological approach focus is to explore how individuals describe their own experiences related to a specific phenomenon and transform their experiences into individual and meaningful perception to be shared with others. He further stated that a methodological and organised approach is necessary while collecting and analysing people's experience of a phenomenon, which means describing how individuals perceive it, define it, their impression is about it, judge it, recall it, make sense of it and share the information with other people (Patton, 2002). For this level of analysis, I was interested in finding associations between research questions and the findings in order to achieve the study's objectives by providing a synthesis of the findings' interpretation after understanding the related experiences lived by participants. In this regard, the steps of the phenomenological approach started by applying the epoche strategy, which, according to Patton (2002,) means conducting the analysis process without pre-judgments and pre-conceived ideas of the phenomenon. Following epoche, the next step applied was bracket. According to Patton (2002), the bracketing process implies

uncovering, defining and analysing the elements and main characteristics of the phenomenon of interest for the researcher. Therefore, the bracketing steps included:

- Identifying from the data already organised into categories and themes, key phrases and statements related to the study's objectives;
- Interpreting the meanings of these phrases with a fair level of judgment;
- Describing participants' understanding of the phenomenon portrayed in these phrases;
- Cross-examining participants interpretations in order to find commonalities and develop the main features of the phenomenon; and
- Identifying and describing the main findings.

Note that the interpretation of the findings was based on pre-existing knowledge from literature related to the study's objectives and with the principles of theory of gender and power. For instance, the link between participants' reports and theory of gender and power entailed comparing the association between determinants for access of health services, described in the theory of gender and power and in the literature review chapter with the ones from the findings from a participant's interview.

The final stage of data analysis flowed very easily since previous methodological actions provided an organised file of information that facilitated the presentation of the findings. These were presented first individually, starting by describing of each participant's socio-demographic characteristics, and later on by answering each research question as reported by all individuals. Finally, a summary that synthetised the common findings provided by participants' interviews related to their experiences of modern contraceptive use and ANC attendance in Namaacha was presented.

## 4.8. Ethical Considerations

The proposal for this study was approved by the Research Ethical Committee of University of Kwazulu Natal in November 2016. Thus, the research was conducted following the basic principles and guidelines for conducting research ethically. According to Daymon & Holloway (2002) those principles include: the right of free and informed choice; protection from harm to individuals and equipment; privacy, involving guarantees of anonymity and confidentiality; autonomy, involving informed consent and debriefing opportunities; honesty, concerning issues of omission, interpretation, and plagiarism, as well as problems in covert research and issues of ownership and public access. Prior to the interviews, the consent from the Local Government in the area was taken, and all the selected participants were briefed about the study and its objectives, and their consent was also taken. The participants were informed

about the confidentiality of the data collected and the process of guaranteeing their anonymity. They were also informed that their participation was entirely voluntary, and they were allowed to refuse to answer any question and could even terminate the interview at any time they wished. Thus, in this research, to guarantee confidentiality and anonymity, pseudonyms, labels and codes were used as well. In addition, all the tape recording and notes from the charts used during the study would only be used for the purposes of the study. All in all, the participants were treated with respect, dignity and integrity.

Table 3: Descriptive summary of methodological process of this study

Study site	Study	Study	Sampling	Data	Data analysis
	research	population	procedures	collection	
	design			method	
Namaacha	qualitative	Women	Purposive/	qualitative	Interpretative
District	research	above 18	Judgemental	research	Phenomonological
Maputo	method;	years' old	sample method	method;	Analysis
Province,	in-	who were	<u></u>	<u></u>	(codes+ categories+
Mozambique	depth/open-	married	Snow ball or chain	general	themes)
	ended	before	sampling	interview	_
	interviews	completing	(community	guide	Atlas software to analyse
		18 years'	leaders; health	approach and	data
		old	providers from	in-	
			local clinics)	depth/open-	
			$\stackrel{\bigstar}{=}$	ended	
			Sample size- For	interviews	
			eligibility	using two	
			purposes,	questionnaires	
			screening of 20	<u></u>	
			women who were	Life grid chart	
			married before 18	and	
			years' old and	methodology	
			lately selection of	to collect	
			10 for the final	information	
			interview.	during	
				interview (A3	
				paper,	
				markers, tape	
				record)	
				<u></u>	
				Data collected	
				in December	
				2016 (05 of	

	De	ecember to	
	16	of of	
	De	ecember)	

**Developed by the Author** 

# **Chapter 5: Results**

## 5.1. Introduction

The purpose of this chapter is to describe and present the study's findings. These will be organised into the different themes that emerged during analysis and that seek to answer the research questions. Therefore, this chapter is organised as follows: the first section in this chapter will present the demographic and socio-economic profile of each of the participants. The second section presents results related to research question 1, namely the experiences of women who married early regarding rights within marriage, particularly rights to modern contraceptive use and ANC during pregnancy. Next, this chapter presents the results related to research question 2, which include the results regarding participants' experiences of maternal health utilisation, in this case modern contraceptives and ANC during pregnancy. The following section will present results related to research questions 3 and 4 related to the determinants that influence women's decision to use these services as well as their general knowledge about maternal health care. Each of these sections will bring individual stories as narrated by each of the 10 participants to paint a bigger picture of the experiences of women who married early, are residing in Namaacha District and who shared a similar socio-economic background. Lastly, the chapter ends with a summary of the main findings after crossingexamining all the findings relevant for this study.

# 5.2. Participants' demographics and socio-economic characteristics

The study sample consisted of 10 black women, all residing in Namaacha District, located in Mozambique. Participants' ages ranged from 18 to 48 years, with the mean age being 31 years. Education level presented variations: four women did not complete primary level, four women completed primary level, one women did not complete secondary level and one women completed basic secondary level (10<sup>th</sup> grade) but never finished secondary level of education (12 grade). Employment status also differed: four women were unemployed; five women were working in the informal sector in small businesses, including the practice of small scale agriculture; and one woman was working in the formal sector in the administrative sector of the local Education Department. With regards to the number of children per woman, there were variations: all women interviewed were mothers and had one to eight children, ranging in age from one year to 29 years of age. Religious affiliations showed little variation: one woman was Catholic, eight women were Zion, and one woman did not declare a religion, as illustrated in Table 4 below.

Table 4: Participants demographic and socio-economic characteristics

Pseudony	Age	Age of	Employment	Education	Religion	Participants
m		marriage	Status	level		Parity
Ana	46	16	Small business	4a	catholic	8
Antonia	48	17	Unemployed	6a	none	4
Francisca	37	16	Small business	4a	Zione	5
Claudia	25	17	Small business	4a	Zione	3
Joana	29	16	Unemployed	2a	Zione	3
Fatima	25	17	School admin and	10a	Zione	2
			HIV activist			
Lucia	26	16	Unemployed	7a	Zione	3
Maria	18	17	Unemployed	8a	Zione	1
Tomasia	38	16	Small business	3a	Zione	6
			and farm			
Paula	22	15	Small farmer	7a	zione	3

# **Developed by the study Research Assistant**

From participants' demographic and socio-economic description presented above, it was reported that in relation to marital status, all participants were married before reaching 18 years and the majority of participants reported that their husbands were older at the time of marriage. These women shared experiences of the exercise of their SRHR as well as individual challenges as a result of their marriage. This section will present a brief individual profile for each of the women interviewed. The order in which the participant's individual profile is organised is to help the reader visualise the participant's individual personas in relation to their age group during interviews. Thus, description of participants' profiles will start with the elder participants and will end with the young participants.

#### Antonia

Antonia was born in Namaacha District, and she was 48 years old at the time of interview. Due to financial constraints, she only completed 6<sup>th</sup> grade and never went back to school. Antonia indicated that she got married and started having children when she was 17 years old. She shared that her husband was older than her and they met when she was in school. Antonia also added that she got pregnant during her first sexual experience, and the pregnancy

terrified her so much. Currently, she has three children, and one daughter passed on. During the interview, Antonia was unemployed, and to survive, she depended on her husband salary as a miner in South Africa and payment from odd jobs that her two sons did around Namaacha District. Antonia had no religious affiliation.

#### Ana

Ana was born in Namaacha District, located in Maputo Province in the south of Mozambique, and she was 46 years old at the time of the interview. She only completed the 4<sup>th</sup> grade and never went back to school, due to financial constraints. She started having sex when she was 15 years old and soon became pregnant with her first child with her husband. Ana was 17 years old when she got married and the husband was eight years older than her. Together with her husband they have now eight children and 13 granchildren. Ana and her family's religious affiliation is Catholic. Ana shared that during the interview she was working as a "mukherista", a term that in the mozambican local language "Xichangana" means "cross border (small) business woman", helping businesses transporting and delivering goods from Swaziland's border to the Mozambican border located in Namaacha District. She also added that the money that her husband earns helps pay for her big family expenses, although it is not enough.

#### **Tomasia**

Tomasia was born in Moamba district, also located in Maputo Province, and she was 38 years old during the interview. Tomasia shared that she only completed 3<sup>rd</sup> grade, and due to marriage and motherhood responsibilities, she never went back to school. Tomasia indicated that she gave birth to her first child when she was 14 years old and currently she has six children. She also added that she was 16 years old when got married while being a mother of two. Tomasia's religious affiliation is Zion. Tomasia mentioned that to provide for her family she has a small business, selling crops from her family farm, and her husband earns a salary working in the construction sector and doing other odd jobs.

# Francisca

Francisca was born in Namaacha District, and she was 37 years old at the time of the interview. Francisca indicated that she only completed 4<sup>th</sup> grade. She explained that due to finacial limitations to pay for transport and other school expenses, she never went back to school. She also added that soon after her pregnancy when she was 16 years old, she moved out from her parents' house and started living with her husband. Together, the couple have five children. Francisca and her family's religious affiliation is also Zion. Similar to Ana, during

the interview, Francisca was working as a "mukherista" between the Swaziland and Mozambican border, located in Namaacha District.

#### Joana

Joana was born in Namaacha District and she was 29 years old at the time of the interview. She mentioned that she only completed 2<sup>nd</sup> grade, and due to financial constraints she never went back to school. She also added that got married when she was 16 years old and had her first child at 17 years old. Currently, Joana has three children and is unemployed. Joana also indicated that she and her family only depend on her husband's salary from his job in South Africa. Joana and her family's religious affiliation is Zion.

#### Lucia

Lucia was born in Maputo, the capital of Mozambique, and she was 26 years old at the time of the interview. She was residing in Malelane village, located within Namaacha District. She also stated that she only completed 7<sup>th</sup>. Lucia added that she never went back to school due to marriage and motherhood responsibilities, as reported by Tomasia. Lucia mentioned that she married when she was 16 years old after her first pregnancy, and her husband was 19 years old at the time. During the interview Lucia was unemployed, and the family survived on her husband's salary as a carpenter. Lucia and her family's religious affiliation is Zion.

#### Claudia

Claudia was born in Zambezia Province, at the centre part of Mozambique, and she was 25 years old at the time of interview. She started her education in Zambezia, and due to financial constraints only completed 4<sup>th</sup> grade. Claudia could not read and write. She could not even write her own full name. Claudia shared that she started having sex when she was 12 years old and at 15 she became pregnant. She added that when she was 17 years old, she moved from her parents' house to live at her husband's house. Claudia mentioned that the couple moved four years ago to Namaacha District. Currently the couple have three children together. At the time of interview Claudia was working selling small farm products, fruits and water at the Goba border that delineates Mozambique and Swaziland. Claudia also indicated that the family depends on her husband's salary as a private security guard in Namaacha District. Claudia and her family's religious affiliation is Zion.

#### **Fatima**

Similar to Lucia, Fatima was born in Maputo, and she was 25 years old at the time of the interview. She indicated that she completed the 10th grade of basic education and hoped to further her studies in the near future. Fatima added that she works as a secretary at a primary school located in Maulane in Namaacha District and she volunteers as an HIV and AIDS

activist in a local organisation working in the area of HIV prevention and care. Fatima mentioned that she got married when she was 17 years old after the birth of her first child. Currently, she and her husband have two children together, and she hopes to have at least one or two more. Claudia and her family's religious affiliation is Zion.

#### **Paula**

Paula was born in Namaacha District. She was 22 years old at the time of the interview, and her husband was 32 years old. She mentioned that she only completed the 7<sup>th</sup> grade and due to her marriage and motherhood responsibilities never went back to school. She got married when she was 15 years old and had her first child when she was 16 years old. Currently, Paula has three children, and she is a small farmer. From her farmer crop, Paula can feed her family and sell the remaining produce in local markets. Paula indicated that she and family also depend on her husband's salary as a security guard in Boane district. Paula and her family's religious affiliation is Zion.

#### Maria

Maria was born in Malelane, a village located within Namaacha District limits and she was 18 years old at the time of interview. Currently, Maria was living with her 21 year old husband at his parents' house. Maria indicated that she only completed 8<sup>th</sup> grade, and due to her marriage and motherhood responsibilities, never went back to school. Maria added that she plans to go back to school in the near future. Maria got married and had her first child when she was 17 years old. Currently, Maria only has one child and is unemployed. The family survives from her husband's salary; he works at a farming company that produces bananas and other fruits in Namaacha District. Maria and her family's religious affiliation is Zion.

# **5.3.** Descriptive findings

Each participant shared her experience of modern contraceptive use and ANC attendance during pregnancy. They also shared thoughts about the exercise of their individual rights within marriages up until this point in their lives. Each woman interviewed brought a unique touch to these stories as a reminder each individual case deserves a special treatment. However, similarities between the participants stories were identified, which indicated common issues, lived by different women who attached similar means to their different stories. Six broad themes emerged from the analysis of experiences related to the maternal health of women who married early. These included: the understanding of women who marry young of their rights within traditional marriages; women's current experiences of using modern contraceptive methods; barriers and facilitators that influence women's use of modern contraceptive methods; women's current experiences regarding ANC attendance during

pregnancy; barriers and facilitators that influence women's use of ANC services during pregnancy; recommendations to improve the current use of modern contraceptive methods and ANC services. Bear in mind that women interviewed provide some suggestions for improvement of maternal health. These suggestions made by participants are presented in this section and are complemented with the general study recommendations presented later in the conclusion chapter

# **5.3.1.** Marriage and SRHR

Different questions were asked during the interviews to understand the rights within the marriages of women who married early and how marriages have been shaping their lives. Firstly, participants were asked about the exercise of their rights to consensual marriage and the reasons to accept a marriage proposal. Other questions aimed at understanding their satisfaction with their marriages, including their responsibilities within the household. In addition, participants were asked about the exercise of their SRHR within marriage as well as the impact of their marriage on their personal well-being.

# **5.3.1.1.** Rights to Marriage Acceptance

The majority of participants indicated that they were the ones who made the decision to get married, whereas four women reported that their parents, including families, were the ones who made the decision on their behalf. Antonia, Francisca, Claudia, Joana, Fatima and Lucia reported being the ones who made the decision to marry early. For Antonia, her pregnancy and the fact that her husband at the time was working in South Africa influenced her decision to accept the marriage and made her parents respect her decision:

my husband came to my house and ask my parents for permission to marry me when he found out I was pregnant. My parents didn't refuse because they knew he was working in South Africa and it was a big prestige to be working in South Africa at the time.

For Claudia and Ana, the sense of responsibility and respect for their community traditions such as the acceptance of teenager pregnancy within marriages, influenced their decision to accept the marriages. Claudia stated:

I accepted to marry my husband because I liked him, and because we had a son together. In my community the elders oblige the man to take the girl to his house when he impregnated her.

Further to this, Joana, Fatima and Lucia indicated that being in love with their husbands was the main reason to accept the marriage. For Fatima, the determination to be with her husband forced her to defy their family wishes:

I met my husband when I was 15 years old and soon got pregnant. My husband family forced me to abort the baby and I refused...in the meantime, my family didn't want me to get married and so against their will I went to live with my husband.

In Joana's case, the marriage proposal came even before she started dating her husband:

my husband used to see me in the neighborhood, and once he came to my house with his uncles and asked my parents for permission to marry me. My parents then asked me if I wanted to marry and I said yes because I liked him too.

On the other hand, Maria, Paula and Tomasia clearly indicated that they were forced by their parents and other extended family to accept marriage at an early stage of their lives, even though they did not feel ready for the commitment. Thus, Maria added:

I moved into my husband's parents' house when I got pregnant because my parents did not want me to live with them anymore.

Similarly, Tomasia shared the same experience as Maria:

When I got pregnant of my first child I was living with my parents. When my baby was born my husband used to come and visit us. Then, my father started saying that I should move and live with my husband. Then, my husband paid lobolo (the custom involving the provision of marriage payments in cattle or cash, from the groom's family to the parents of the bride-Posel and Rudwick, 2011, p.1) and I moved in with him when I was 16 years old.

For Paula, her story was more dramatic and influenced by her difficult childhood due to HIV and AIDS:

I am an orphan due to the death of my parents from AIDS. I used to live with my uncles and my husband was my neighbor. He used to chase me, I got pregnant and my uncles decide to send me to live with my husband at his parents' house.

The statements showed how at an initial stage of their marriages women could lose their ability to freely exercise their individual rights. The majority of participants did not get married while mature and were living under the total care of their husbands and extended family members. Therefore, women might have had to comply with their responsibilities as expected, limiting their personal achievements and their overall satisfaction with marriage. This is reported in the next section.

# **5.3.1.2.** The right for marital satisfaction and responsibilities

When asked about the satisfaction with their marriages, the majority of participants reported feeling happy with their marriages. Overall, all participants shared a common understanding that, despite feeling happy with their marriages, they were not immune to challenges in their marriages. The majority of participants stated that they were assigned specific responsibilities within marriage, which proved to be a challenge for some who were not ready for the commitment or were living with an authoritarian husband and also had to follow their in-laws' orders. They all shared that they had the primary responsibility of raising children and taking care of household duties. Most women felt responsible for motivating their children to pursue their education and to be independent, except one who truly believed that following the traditions, girls should get married after menstruation starts.

Ana and Antonia, the eldest participants, described feeling happy with their marriages, despite having to deal with some difficulties. In this regard, Ana stated:

I am happy with my marriage, but we have our own problems. Show me a marriage without a problem? My husband is a good man and he likes to be the leader, and because

I know him, there are things I rather not say to him to make him angry.

Antonia showed signs of compliance to marriage norms and so she shared her understanding of happiness in marriage with those words:

my marriage is good. There's good and bad moments. However, when we choose to get married, one needs to hold on for the sake of the family.

When Antonia was asked if she would advise her daughters to get married early, she showed mix feelings in that regard :

Depends. If she finds a good man who takes care of her, the family and is not violent yes. But, I also want my daughters to study and find good jobs. Life is difficult and women need to help their husbands.

In constrast, Ana showed disappointment with her role as mother because she felt she has not positively influenced her daughters:

I feel women should be the ones making decisions about their lives and be independent. Unfortunately my daughters had babies early. They are like me, I have eight children and 13 grandchildren. I did not study, I am poor and I don't have any money, they followed my example.

For Francisca, she feels happy in her marriage because her husband is a reasonable man, and they discuss together all the matters related to the relationship and their family. Similar to Ana and Francisca, Claudia also considers her marriage happy, despite the couple's problems:

(laughing) I am happy with my marriage. If women follow her man leads, she won't have problems. So, because now I know my husband I know how to not irritate him.

For Joana her marriage is happy, despite the difficulties she faced at the beginning because of her lack knowledge about her responsibilities within marriage:

I didn't know anything about marriage. My husband and my mother-in-law taught me a lot of things including how to cook and how to take care of my husband and my children.

For Joana, she would advise her daughter to marry at an early age because it is a norm in her community:

In our community is tradition that when a girl starts menstruation she can get married. There are good candidates here for husbands, men who work in South Africa and they always have money to pay for lobolo.

Similar to Antonia, Lucia also showed signs of compliance with her marriage status, despite her personal insecurities:

Marriage those days is not easy. Nowadays men have several other girlfriends outside the marriage and they can bring diseases into the family. Thank God is not my case, but

I know couples who hide pills from partners because they didn't disclose their disease.

She also added that it is her responsibility to motivate her children to pursue their studies so they can have better job opportunities:

I stopped going to school because I can't afford, and I have so many responsibilities. I would love to go back to school because I know how important education is.

For Tomasia, her marriage had survived bad storms and is now peaceful:

Now that we are married for a long time things are better. My husband is calm and less violent. I think he is afraid of my children because when he shouts at me they protect me.

Tomasia also described the difficult times at an early stage of her marriage with these words:

I had to do everything they asked me to do. I could not be tired and if one of my children cried, my mother-in-law would shout at me. I was sad, but understood that I had to respect my husband and his family.

Similarly, Paula shared that her marriage had improved, and she felt happy:

Things are getting better. My husband now buy things for me and my children. Once I told him I would leave and he stopped yelling at me. My uncles and cousins also spoke with him.

In addition, Paula also mentioned enduring bad treatment from her husband and his family:

my mother-in-law always complained that I was lazy. That I did not know how to do household chores right. When my husband was angry and used to beat me they never reprehended him. They used to say that he was educating me. I was so defenseless.

From these statements it is evident that the majority of women had less decision-making power than their husbands and so they had to comply with their husband's and other extended family members' orders. With the challenges participants endured during marriage and as described throughout their interviews, one can conclude that their access to information related to SRH was limited, and this might have affected their general knowledge about SRHR and ultimately their ability to effectively protect their SRHR. This is described and presented in the next section.

## 5.3.1.3. The Understanding and knowledge of SRHR

When asked about their understanding of SRHR, most of the participants were not aware about the term SRHR. The interviewer started the conversation by disaggregating the concept into four different themes (sexual + reproductive + health + rights) to help the women understand and discuss the concept of SRHR through their own personal life experiences. From the interview, it was evident that the majority of participants lacked a support system that would help them exercise their SRHR at an early stage of their marriages, particularly accessing information and sexual and reproductive health services of quality. Women felt that they were caught in the midst of the situation with no options available to take control of their own sexual and reproductive matters. The majority of elder participants described a sense of regret for not having the knowledge and maternal health options available today during their early teens. In Ana's words:

Women should be informed about SRH issues so they can make good decision to themselves....When I got married did not know anything about sex, pregnancy and children. I had to learn on my marriage while I was mother. My mother-in-law and sister-in-law taught me how to take care of my body and children. It was hard (sad expression).

Most women described experiencing adversities in their lives that contributed to their present situation. In general, five participants, namely Francisca, Claudia, Joana, Lucia and Paula, believed that women need to be informed about sexuality and the reproductive system to make good decisions regarding their own health. For these participants, good decisions related to their SRH mean having information to prevent unwanted pregnancy and HIV and other STIs. None of the participants knew that women's SRHR were protected by law through national and international agreements signed by the Mozambican Government. None of the woman

knew about women's SRHR as stipulated in some international and national legal frameworks approved to protect women's rights. These include: the rights to decide the number of children, when and what mechanism to use to do so; the right to decide when and with whom to have sex (without coercion); the right to have a pleasurable sex life as part of their universal rights as individuals. Despite participants lack of knowledge regarding their individual rights, particularly the ones related to SRH, their experiences as married women gave them the tools to identify the challenges in their own SRH lives, and share their perceptions about an ideal environment that could protect women's health. In contrast, Ana, Fatima, Maria and Tomasia believed women should have the right to protect and use their body free of coercion, acquire knowledge to do it, to have sex with a partner of their choice, and to decide the desired number of children. Despite lacking knowledge of the concept of SRHR, they shared their understanding through their own experiences. These women have been enduring difficulties for so long to protect their SRHR and so, implicitly they are aware of the challenges and the mostly likely interventions to improve their SRHR. However, they lack the means to do so and are consequently obliged to accept their reality and the negative consequences of it, discussed in the next section.

# 5.3.1.4. Right to Female Well-Being in Early Marriage

For the majority of participants, early marriage negatively affects women's well-being, particularly their health, and ultimately the exercise of their SRHR. Thus, unanimously, participants shared that early marriage can limit girls' school attendance; increase maternal mortality, morbidity and early pregnancy; can take girl's freedom and opportunity for personal growth as well as can perpetuate intimate partner violence (IPV). Fatima expressed a sense of disapproval and frustration because of the negative effect of early marriage in girl's life:

when a girl gets married early, she will be pressured to become pregnant, and she might face health complications due to her small body; Sometimes they will find husbands who don't respect them, abuse them and bring diseases to the house; some jealous husbands won't allow their wives to study.

For Ana, when asked why she would not advise her daughters to marry at an early age, she stated:

I wanted my children to be independent and financial stable...if a girl gets married on her teens, she has to stop her studies to take care of her family; she won't go back to school and will have those small jobs like mine, or in a farmer or as a domestic worker.

A similar question for Francisca gave a glimpse of her current perception of the impact of early marriage on girl's life:

I want my daughters to be educated and independent women; I want them to know how to protect themselves because diseases and pregnancies happens in early ages and can destroy a girl's future.

For Claudia, early marriage negatively impacts girls' healthy development, and she associates it with teenage pregnancy:

Be married as a child you suffer (laughing)...Pregnancy is not easy and you can die. It is better to study and later on find a husband.

Antonia, the eldest participant, shared a progressive opinion in a perspective of women's empowerment with a more active role in the marriage:

I want my daughters to study and find job. Life is very difficult...women nowadays have to help the husband.

Similarly, Lucia shared the importance of education in girl's development, and how it can be interrupted by early marriage:

I want my daughters to have a good education so they can get good jobs. I stopped going to school because of financial difficulties and my responsibilities...one day I want to go back because I know how important school is.

Although Maria was the youngest participant interviewed, she was very articulate and well-opinionated about the negative effects of early marriage for girls' personal growth:

I won't advise my daughter to marry at younger age...never!!! It is difficult to go back to school when you're married with a child. There is no secondary school here in Malelane (interview location), and because of my child I cannot study far away. I stopped going to school because I could not afford and my marriage responsibilities.

For Tomasia, early marriage brings loss of life enjoyment:

I would not advise girls or my daughters to marry while young...you lose your innocence and stop enjoying life because of your family. Girls have to study and enjoy life later.

Paula also shared a negative view of early marriage's impact on women's well-being:

When you marry at an early age you became submissive to your husband and family desires...they want you to do everything, and if you refuse they can beat you up.

The results presented above and validated through participants' statements confirmed the negative impact of early marriage for women's well-being, particularly for their SRH. Participants described experiencing multiple privations that can affect their ability to protect their SRHR, including accessing and using modern contraceptive methods when needed. In

this regard, participants' descriptions regarding their experience of modern contraceptive use will be presented in the next section of this chapter.

# 5.3.2. Female experience of modern contraceptive use

Participants in this study were asked about their experiences regarding the use of modern contraceptive methods of choice (if any) during the course of their marriage. This section will give an account of study participants' description of the preferred contraceptive methods that they use, duration of use and reasons they prefer those methods. In addition, the section describes the determinants that influence modern contraceptive use among women who married early.

# **5.3.2.1.** Modern Contraceptive Method of Choice

To understand women's experience regarding use of modern contraceptive methods, respondents were asked primarily about the contraceptive method they have used or are still using. This was assuming all the participants in this study have stated to have used modern contraceptive methods in some period of their lives. Respondents' answers included one or some of the available modern contraceptive methods. The majority of participants mentioned that pills and injections were the most preferred method.

Despite condom's dual function by preventing both pregnancies and HIV infections and other STIs, only three participants indicated using condoms with their husbands. For Fatima, the experience of using modern contraceptive methods has been both umpleasant and positive. She has been using modern contraceptive methods for eight years and started after the birth of her first daughter. Fatima has been switching between injections and pills, combined with condoms once in a while:

when I forget to take my pills, my husband knows that he needs to use condom when we are having sex.

Lucia mentioned that she started using pills after her second pregnancy, and while she is breastfeeding her husband uses condoms during sex. Maria, the youngest participant seemed to have an active role in protecting her SRH, and mentioned that just recently after her daughter birth started using injection to prevent pregnancy. In addition, she indicated that her husband uses condom to prevent STI infections:

I use both modern contraceptive methods in order to guarantee that if one method fails, the other one can help prevent unwanted pregnancy. I am also protecting myself from STIs.

None of the participants mentioned being exposed to or having knowledge of permanent contraceptive methods such as female or male sterilisation or having heard about emergency contraceptives (EC). Most women indicated that they started using modern contraceptive methods to prevent pregnancy so they could reduce the number of children. Participants seem to understand the benefits of family planning for their own well-being and of their family's. However, few participants described using condoms with their husbands, implying that the majority of participants present greater risk of contracting STIs and the HIV infection, assuming husbands are not faithful to wives. On the other hand, none of the participants described using modern contraceptive methods prior to their marriages.

With regard to the women's ages, it was found that the elder participants were more likely to start using modern contraceptive methods late in marriage whilst young women were more likely to start using the devices early in their marriage. Ana stated that after her last pregnancy, and with information she received from the health centres and from local Community Based Organizations (CBOs) about family planning, she decided to use pills and then switch to injections three years ago:

When I got married I did not know anything about family planning, after my last pregnancy I started family planning that is why I do not have any more child.

Antonia and Paula mentioned that they have been using pills for three and two years respectively. When asked to share her story of contraceptive use, Antonia stated:

During my two pregnancies I never took pills because my husband was living in South Africa. He would come and get me pregnant and go back to South Africa...After he returned, I would stop breastfeeding my baby and use pills.

Different from the other participants, Francisca was the only one who mentioned that besides using pills and condom, she had used an IUD to prevent pregnancy. Francisca seemed emotional and regretful for not having information and access to family planning methods earlier in her life:

I understand the benefits of using modern contraceptives and if I had the information before I would not be pregnant early...I would prevent and I said that to my children. After my first pregnancy, I had IUD inserted to prevent pregnancy... I was not comfortable with it and decided to switch to pills.

Claudia, a young married women in her mid twenties, seemed to take an active role in her SRH care by challenging her husband's wishes and started using modern contraceptives without his consent:

After my first pregnancy I started using pills and later switch to injection, without my husband consent and knowledge. I heard about family planning at the health center and

here in our community...I know that the benefits of these modern contraceptive methods is to help women not to have many children.

Similar to Claudia, Joana also shared that her preferred contraceptive methods were pills and injections:

During my two pregnancies I was using injection because I did not have regular sex with my husband... and it was the best option for me. A few months later, I started bleeding non stop and the nurses advise me to try pills, and i am using it for three years now.

Similar to Claudia, Tomasia started using modern contraceptives without her husband's consent and knowledge:

after my fourth pregnancy, I started using pills without my husband knowledge because I did not want more children ... I did not want my husband to find my pills and so I switched to injections. See table below with descriptive summary of types of family planning methods used by married women in Namaacha District and the duration of use.

Table 5: Contraceptives of choice by participant and lenght of use

Participant	Contraceptive method of choice	Duration of use
Ana	Injection and pills	7 years
Antonia	Pills	3 years
Francisca	Pills, IUD	17 years
Claudia	Pills and injection	6 years
Joana	Pills and injection	8 years
Fatima	Pills, condom and injection	8 years
Lucia	Pills and condoms	3 years
Maria	Injections and condoms	1 year
Tomasia	Pills and injection	15
Paula	Injection and pills	2 years

Developed by the Author

The previous section described the modern contraceptives used by women who married early residing in Namaacha District. The section also provided information regarding the duration of contraceptive use by participant. It was also evident from previous section that women started using modern contraceptives while in marriage and in different stages of their lives, both the

younger ones and the elders women interviewed. The majority of participants described how the information about the benefits of family planning methods that they have accessed, whether at the health centers, media or in community gatherings, motivate them to seek and use modern contraceptives. Therefore, the majority of participants believed that women themselves should have the right to decide whether or not to use modern contraceptive methods.

All participants reported using modern contraceptives and the preferred contraceptive methods included pills, injection and lastly condoms. They mentioned using modern contraceptives first to prevent unwanted pregnancy and a few indicated doing it to prevent STIs and HIV infections. Participants also reported having started to use modern contraceptives in different stages of their marriages with differences between age groups. Elder participants reported starting to use modern contraceptives later in marriage whereas participants between 18 and 30 years old reported starting early in marriage. This shows that the exercise of rights to modern contraceptive use is experienced differently for each group of women, as described in the next section.

# 5.3.2.2. Female Perceptions Regarding Rights to Modern Contraceptives use

Women interviewed shared an understanding of individul rights that places women themselves as an active agents regarding the exercise of their rights to access and use modern contraceptive methods. Therefore, this section provides an understanding of women perception regarding rights to use modern contraceptives methods.

Antonia explained that women carry the main responsibility within the household to care for the children and so she should be allowed to access family planning methods when in need:

I believe every woman should make the decision to start family planning because it is her responsibility to care for the children and she will not have time to go to school or looking for jobs if she has many children to care for.

Similarly, Joana believed that all women should make their own decision to use family planning because they are the ones who are going to care for the children after birth and not the husbands. For Francisca, with the information they accessed, women can make rational decisions including deciding to start family planning.

Lucia also believed that women as individuals should decide whether or not to use modern contraceptives:

because women are the only ones who can be pregnant, they must be allowed to use modern contraceptives, and choose the appropriate method for her.

Similarly, Maria shared that women should decide to use family planning methods because they are the only ones who can carry the baby during pregnancy and can suffer the consequences of it. On the other hand, Tomasia believed that if the woman is married, the decision to start family planning should be made with the involvement of the husband. At the other extreme, Paula believed that the decision of involving the husband should be made after women select the contraceptive method. For Paula, it is the woman's body and so she should decide whether or not to use modern contraceptive methods irrespective of her husband's involvement or approval. Women in this study seemed to understand the benefits of family planning methods and so, some took an active approach to guaranteeing that their rights to access family planning were fulfilled, despite the challenges to access and use these modern contraceptives, as explained in the next section.

# 5.3.2.3. Self-reported determinants that influence modern contraceptive use

During the interviews, women shared their experience of struggle to protect their SRHR, including accessing modern contraceptives. Women explained that, despite their knowledge of the benefits of family planning and their desire to use it regularly and effectively, several factors affect their decision to seek and use modern contraceptive when in need. These are explained below through the different determinants that emerged from participants' interviews.

#### **5.3.2.3.1.** Fear of side effects

The majority of participants described feeling discomfort and unpleased with some of the modern contraceptives they have used. However, Most women felt happy with their decision of using modern contraceptives. That joyful time for some was cut short due to the side- effects of some of the methods that affected their bodies. An mentioned that discomfort in these terms:

every time I use pills I felt sick, weak and with nauseas.

For her, this might be one of the reasons some women are afraid to start family planning:

women are afraid of the side-effects of some of these contraceptives. They listen other women talking about their experience of contraceptives use and they forget that every women reacts differently when taking these methods.

For Francisca, using pills also brought her negative health effects:

When I heard about modern contraceptive methods, I spoke with my husband and he allowed me to use. Then, I started using pills and got high blood pressure, I switched to IUD which I felt discomfort, and switch again to injection.

Antonia, who used pills to prevent pregnancy, shared that she never had problems with the pill's side effects and is happy with it. However, she believed for some women modern contraceptives can have negative side effects:

some women argued that pills make them sick, make them bleed. Some women say injections make them gain weight and stop menstruation for a long time...some women believe that they won't get pregnant later if takes injections. Some believe sex with condoms are not pleasurable.

For Claudia, the experience of using modern contraceptive methods was mortifying and brought pain to her life:

every time I used pills I felt sick, weak and bleed almost every day. I asked myself if it was worth it the daily pain...I switch to injection, but nothing changed. I had pains in my back, I could not seat properly....Then I decided to stop and started using traditional methods provided by a sangoma (traditional healer) here.

Similarly, Tomasia described feeling discomfort and pain by using pills, but amused with the results:

every time I use pills I bleed like I was having abortion, all my body hurt...even with the bleedings I noticed I delayed my pregnancies.

For Lucia, Maria and Paula, despite not having experienced side effects due to the use of modern contraceptive methods they believed that some women decide not to use modern contraceptives due to the fear of side effects. However, they acknowledge that the local family planning clinics offer women different options of modern contraceptives. Thus, when women struggle with health complications derived from using specific modern contraceptive methods, they have a choice to switch to a less harmful method. However, that decision can be affected by economic constraints that can prevent women from accessing and using modern contraceptives as described in the next section.

# **5.3.2.3.2.** Socio-economic conditions and proximity to health facilities

Three of the women interviewed stressed the importance of having financial stability to be able to access quality health services, including modern contraceptive methods. For these women, financial resource constraints and the non-existence of quality primary health services (i.e. availability of all types of modern contraceptive methods in their proximity), prevented them from accessing family planning programs when in need. For Francisca, financial resources play a pivotal role in enabling women to use modern contraceptives:

Not all modern contraceptives methods suit well to every women. Sometimes the local health center do not have all the different contraceptives of choice...I had to go to

Maputo (capital of Mozambique) to implant IUD and not everyone can afford to pay for transport.

Joana believed that most women want to be on family planning because they understand its benefits. However, for her, some women live far from the hospital and can't afford to pay for transport or do not have time due to household duties. Similarly, Maria added:

some women are not doing family planning because they live far from the hospital and cannot afford to pay for transport.

On the other hand, the majority of participants had a low level of education that linited their opportunities to find good professions that would enable them to afford costs of using family planning services. Additionally, their low level of education may have prevented them from being exposed to information about family planning and its benefits, including easy access to the services when in need. Most of women could not read and write at a level that allowed them to gain information about family planning. They were comfortable communicating in Shangaan rather than Portuguese. This could pose a difficulty for them to understand the formal messages disseminated about family planning. These participants all lived most of their lives in rural areas, characterised by low quality of life due to the poor availability of basic services and low economic development.

From the narration above, it is clear that financial resources is not a *sine qua non* condition for women accessing modern contraceptives, but it influence its use. Although family planning is offered free of charge, health infrastructure in Namaacha cannot yet cover the needs of the entire population. Thus, it is understandable that some women may lack financial means and logistical capabilities to access these devices. This is aggravated by the fact that the majority of participants had low paying jobs and were struggling financially. The women interviewed for this study have similar socio-economic backgrounds, access to similar health services and facilities, and the majority mentioned their community is supportive of women using modern contraceptives, as explained in the next section.

# 5.3.2.3.3. Community Views Regarding Family Planning Methods

The majority of participants described having support from their community and peers to use modern contraceptive methods. Most women felt that their community, including traditional leaders, has a positive outlook of modern contraceptive methods, and they motivate women to make use of family planning methods. Tomasia felt that the taboo revolving around modern contraceptive methods in Namaacha are disappearing, and people are more accepting of these methods:

people in our community speaks openly about family planning and women motivate each other to make use of it. They understand that cost of living is high and having many children will have an impact in the family future.

Claudia also believes that the community position regarding modern contraceptive methods is positive:

Our community leaders, including women who are members of the Mozambican Women Organization (MWO) accepts family planning and they encourage women to use it by speaking about its benefits for women and family well being.

# Similarly, Lucia added:

People in our community shared a positive view about modern contraceptive methods because they understand that life is expensive to have many children and these devices protect women's health. ...During church services, the pastors and other church members speak about family planning.

Furthermore, some participants believe that communities are supportive of women using modern contraceptive methods because of the continuous absence of men in the district, who migrate to South Africa seeking job opportunities. This scenario has disrupted the normal family structure, increasing the burden for women as the primary caregiver in the family, as explained by Maria:

in this area some of men work in South Africa, and they leave their wives with the responsibility to care for the children and other family members. This is bad because these fathers are absentees. Therefore, it is important to use family planning methods to reduce the number of children in the families and ultimately reduce the burden for women.

Fatima, an activist in an HIV prevention and care project, feels that the community, both men and women, are starting to open up about SRH issues, including family planning services, although there is still a preference for a high number of children, particularly among men. Similarly, Paula believes men are feeling the pressure to allow their wives to use modern contraceptive methods:

as i said we have workshops in our community to discuss issues related to family planning, and people respond positively to this. Men feel embarrassed if they portrait having a negative view about family planning since modern contraceptive methods is widely accepted by the community and many couples are using family planning methods. Women also speak openly and we motivate each other to start using modern contraceptive methods.

On the other hand, Joana seems not to be aware of her community's views regarding family planning methods. However, she believes that it is not the community's place to interfere in a couple's decision whether or not to adhere to family planning methods. Similarly, Antonia shared that she was not aware about community views regarding family planning methods. For Antonia, the woman should be the one deciding about the use of modern contraceptive methods without the influence of outsiders.

In summary, the majority of participants reported living in a community with positive views about family planning methods. They indicated that different structures and institutions in their community encourage women to use modern contraceptives. Thus, participants acknowledged that, even with a favourable community environment that motivates women to access formal SRH services, women's own individual beliefs and behaviours may influence their decision to effectively use modern contraceptive methods, as described in the next section.

# 5.3.2.3.4. Female perceptions and beliefs regarding modern contraceptive methods

Women's personal beliefs and behaviours were found to be important factors in influencing women's decision to use modern contraceptive methods. Women nowadays have better access to information regarding the benefits of using multiple family planning methods available, and they also have fewer limitations in accessing these methods when in need. Therefore, some participants believed that although they are living in a better environment to exercise their SRHR, some women are not interested in using modern contraceptive methods due to their negative beliefs and views about it.

While reflecting on the barriers that influence women to use modern contraceptive methods, Ana and Francisca shared that some women have no interest in using the devices, even with information about the different contraceptive methods and their benefits provided at health centre and also during communities gatherings. Similarly, Claudia shared:

some women make personal decisions not to use modern contraceptive methods, and they come up with all kinds of justifications not to do it. Women have access to information regarding the benefits of using family planning methods, but they decided not to use it.

Fatima indicated that some women do not trust modern medicine and so they decide not to use these methods:

Some women do not trust the hospitals. I have a friend who had two children and instead of using modern contraceptives as family planning, she used traditional methods. When her baby was six months old she got pregnant again. She was so upset.

Additionally, Paula believed that even with a favourable environment that allows women to have access to family planning methods, some choose not to use the devices:

some women here in Namaacha believes that there are no benefits for using modern contraceptive methods, and they choose not to use it, even if the husband authorise them to do so.

Overall, participants believed that some of the reasons for women deciding against the use of modern contraceptives effectively include the desire to have children; the belief that sex without condoms is more pleasurable; and the trust with and loyalty they have to their partners. Thus, women who hold these beliefs choose to be submissive to their husband's desires, and most likely prevent the effective use of modern contraceptives within the relationship.

# 5.3.2.3.5. Female perceptions of husband's and family's role

While reflecting on the barriers that prevent women from effectively accessing modern contraceptive methods, six participants mentioned that the minimum support from their husband and other extended family members in motivating them to use these methods, can negatively influence a woman's decision to start using or effectively using modern contraceptive methods. From participants' responses, women mentioned that violence and other forms of abuse perpetuated by their partners and sometimes other family members was a significant barrier that created fear and prevented them from using modern contraceptive methods, particularly condom negotiation and its use. Thus, respondents from this study reported feeling helpless while trying to negotiate condom use with their husbands. In this regard, Ana shared:

I also believe that some women don't use modern contraceptive methods for fear of their husbands who are violent and don't accept their wives to use contraceptives, including condoms.

Antonia described an environment where women are submissive to their husband's control limiting their decision-making power to start using modern contraceptive methods:

I believe that majority of women want to use family planning methods because they know the benefits. However, some women are not allowed by their husbands who are against these modern devices.

Similarly, Joana believed that husbands who are against the use of modern contraceptive methods by their wives might lead these women to make the decision to not use the modern devices. For Claudia, despite the wide acceptance of family planning methods, her husband did not support her use of modern contraceptives, and so she had to hide it from him. She also believed that deep in rural areas, things are bit harsh for women:

I am aware that in some of the poor rural areas, the elders do not yet accept those methods because they believe women should have many children, and the ones who use these devices were seem as weak. These elders speak with the husbands to pressure their wives to impregnate and if these women are using contraceptives they stop to obey to husband and family wishes.

In addition, Tomasia believed that family traditions such as polygamy might influence women's decision to use family planning methods, as she explained:

my husband family is polygamist and they feel proud to have many children. Women are not allowed to use modern contraceptive methods to prevent pregnancy.

Tomasia also believed that some women decide not to use family planning methods because they are not allowed by their husbands and they fear violence if they decide to use them without their consent. She also added that some husbands feel embarassment when their wives delay pregnancies. Similarly, Paula indicated:

some women feel the pressure from husband and mothers-in-law to have children and so they decide not to use modern contraceptive methods, fearing to be kicked out from the family house.

However, when Paula was asked if she had support from her husband and other extended family members to use modern contraceptives, Paula showed signs of defiance of her husband's and family's wishes:

My husband doesn't like this family planning thing...but he allowed me to use pills because of my insistence. My mother-in-law also don't like it and is always pressuring me to get pregnant, but I don't care anymore about her opinion.

# **5.3.3.** Female Experience of Antenatal Care

To understand women's experience of ANC attendance in Namaacha District, respondents were asked several questions. In this section, I present the findings related to women's experience of ANC attendance in Namaacha District. The section starts by describing the current situation of ANC attendance by women who married early who reside in Namaacha, including the period of gestation when ANC visits started, reasons to use ANC services as well as the services offered during ANC visits. The section also presents findings about the determinants that influence women's decision to attend ANC services.

# **5.3.3.1.** Timing and Reasons for Attendance

To guarantee a mother's and child's survival as well as good health outcomes, the WHO ANC model proposed four visits for ANC during normal pregnancies (WHO, 2002). To understand if women in Namaacha District are using ANC services in accordance with the

ANC model proposed by WHO (2002), women were first asked when they initiated visiting ANC facilities. All participants reported having attended ANC in some or all pregnancies. However, no participant reported having attended four or more ANC consultations during normal pregnancies. Women mentioned that their first ANC visit started between their second and sixth month of pregnancies. Women also shared similar reasons for deciding to attend ANC during pregnancy. The majority of women stated that they decided to attend ANC in order to check their health and that of their unborn baby.

Ana shared that she had eight pregnancies and only in the third month of last two pregnancies did she start seeking ANC. She also added that she delivered six babies at home with the help of her aunties, mother and local midwives, except the two last ones that she delivered at the local maternity ward with the assistance of a professional nurse:

when I was pregnant with my six children never went to ANC, only during my two last pregnancies I attended ANC to check my health and of my baby".

Despite Ana mentioned that she never had any complications during her pregnancies, she felt regretful for not having a chance to attend ANC during her first six pregnancies:

I was so happy with the new information about ANC...I wish I could know when I was young. I was so lucky because I did not have any complications, only God protected me.

Similarly, Antonia, the eldest participant who had four pregnancies, indicated that she started attending ANC in the sixth month of her last pregnancy, and this culminates in her giving birth at the local maternity ward with the assistance of professional nurses. She described feeling uncertain about being pregnant, which motivated her to attend ANC:

I started attending ANC to check my baby health and make sure I was really pregnant...you know!!! Sometimes women can have big belly and think that they are pregnant, but they are not and might be sick.

On the other hand, Francisca mentioned that she sought ANC during all her pregnancies and started in the fourth month of her pregnancies to check her babies' health. The majority of participants indicated that they were positive about the pregnancy, even before starting ANC, except Antonia, who among other reasons, started attending ANC to confirm pregnancy. Claudia mentioned that she attended ANC during all her three pregnancies:

I attended ANC during the third month of my first two pregnancies and at the fifth month of my last pregnancy. I had to be sure that I was pregnant before starting ANC. I attended these services to ensure that my health and of my baby was okay.

Similarly, Joana and Fatima indicated that they attended ANC during all their pregnancies, starting at the fifth and fourth month of the pregnancies, respectively. They added that they started attending ANC to check the babies' health. Maria, the youngest participant in the group, indicated that she attended ANC in the fourth month of her pregnancy to check her health and the baby. She added that she always followed the recommendations provided by the nurses during ANC visits, which led her delivering her baby in the Malelane maternity ward. Tomasia also described attending later ANC, only during the fifth month of her third pregnancy. She also added that for the next pregnancies she started during the fourth month of gestation and did not attend all the appointments as recommended by the nurses. Despite initiating late visits to ANC services, Paula seemed aware of the benefits of ANC during pregnancy, and she mentioned using ANC services during all her pregnancies. She shared that during her first three pregnancies, she started visiting ANC services in her fifth, second and fifth month of gestation respectively. See Table 6 below for descriptive summary:

**Table 6: Participants ANC visitations calendar** 

	Number of	Month of gestation that initiate	Reasons to visit ANC
Pseudony	pregnancie	ANC	
m	s		
Ana	7	Third month of her two last	To check her health and of
		pregnancies	the unborn baby
Antonia	4	Sixth month of her last pregnancy	To confirm pregnancy and
			check baby health
Francisca	5	Fourth month of her two last	To check her health and of
		pregnancies	the unborn baby
Claudia	3	Third and fifth month of her three	To check her health and of
		pregnancies respectively	the unborn baby
Joana	3	Fifth month of all her pregnancies	To check unborn baby health
Fatima	2	Fourth month of all her pregnancies	To check her health and of
			unborn baby
Lucia	3	Third month of her last two	To check unborn baby health
		pregnancies	
Maria	1	Fourth month of pregnancy	To check her health and of
			the unborn baby

Tomasia	6	Fifth month of her third pregnancy	To check her health and of
		and fourth month for her fourth, fifth	the unborn baby
		and sixth pregnancies respectively	
Paula	3	Fifth, second and fifth month of all	To check her health and of
		pregnancies respectively	the unborn baby

Developed by the Author

In summary, all participants reported attending ANC, not in all, but in some pregnancies. Elder participants such as Ana, Antonia and Tomasia seem to have started attending ANC late in marriage and late in pregnancy. These participants have been married for decades, and their children were born in a time of poor provision of maternal health services in Mozambique. On the other hand, the young participants seemed to have started attending ANC early in marriage and during their first pregnancies. All participants reported starting to attend ANC to check their health and that of the unborn baby. Participants such as Maria reported that the support she had from her mother was a determinant for her to start attending these services during her pregnancy. Young participants started motherhood in a period when the country has seen improvements in the provision of basic maternal health services such as family planning and ANC, so they had easy access to these services.

# 5.3.3.2. Services provided to pregnant women

The women could not describe clearly and technically all the procedures and services they were offered during their ANC consultations. However, women recalled some of the interventions they were offered as well as the benefits they experienced by attending ANC. Women in this study described having accessed information regarding the benefits of ANC attendance during pregnancy. For Ana, the workshops organised in her community by health community workers informed women about the health risks in pregnancy and the benefits of attending ANC during pregnancy. Tomasia also shared that women should attend ANC while pregnant because information about its benefits is available through radio, TV, at the health centres and during community gatherings, so women can be motivated to go. Joana also added:

women should decide to attend ANC during pregnancy once they are the ones who carry the pregnancy, so they can detect health problems that can affect the baby.

On the other hand, despite Antonia mentioned that she started late in her pregnancy visiting ANC services, she did it to confirm pregnancy since health professionals can conduct tests to confirm pregnancy. In addition, Ana stated:

during my ANC appointments, the health staff used to measure the size of my belly; provided test of HIV and malaria; provided Ferrous sulfate + folic acid and mosquito net...I was so impressed...(Uff!!!) Then I remembered my other children who did not have the privilege of being checked when they were in my belly...they survived thanks to God hands.

Francisca recalled some of the services offered during ANC which included: the measurement of blood pressure, provision of different pills; blood and urine tests and weight measurement. Similar to Ana, Claudia and Lucia shared that they were offered the same services during ANC visits such as the measurement of the size of belly; HIV and malaria tests; ferrous sulfate with folic acid and a mosquito net. Participants added that because of having attended ANC consultations, they were advised about the risks of not delivering the babies at the health centre, which motivated them to deliver their babies at the health centre with the help of professional nurses.

Joana described being offered not only medical attention during ANC visits but also other social interventions:

we were taught how to behave during child delivery, how to feed the baby, hygiene to mother and baby, how to dress the baby and how mothers should present themselves during their appointments with medical personnel.

For Paula and Tomasia, the anaemia condition they faced while pregnant was discovered during ANC visits, and the nurses advised them to eat healthy food and provided them cereals high in protein free of charge. These participants also recalled being tested for HIV and malaria, being provided with ferrous sulfate with folic acid and a mosquito net as the rest of the women reported. Maria added physical examination of the baby's heart beating as one of the ANC interventions she benefited from. The majority of participants described also being given a patient card with information about their pregnancy, provisional dates for labour, next appointments and other medical information. They were also provided information about the risks of not delivering with proper care, meaning the presence of skilled health staff during delivery.

Furthermore, the majority of participants indicated that while pregnant, ANC consultations were a priority for them and so they always found time to attend their appointments. Antonia and Francisca shared that it is rare that women decide not to attend ANC because they understand the benefits for their health and that of the baby of checking the pregnancy. Fatima also shared:

when you attend ANC they will give you a patient card. In this card they write down the next appointment date. If I was busy I would stop everything and reschedule my other appointments so I could go to my next ANC appointment...particularly because I had a complicated pregnancy.

# Similarly, Lucia shared:

I never missed any of my ANC appointments because I knew was important to go check my health and of the baby. After I had an abortion, I was very conscious about the importance of ANC.

For Lucia, the health complications she had suffered made her aware of the importance of visiting the health clinics for regular check-ups during pregnancy, as further explained in the next section.

# 5.3.3.3. Self-reported determinants that influence women attendance of ANC in Namaacha District

The previous section presented the findings related to the current trend of women's ANC attendance, including stage in pregnancy that they started using ANC, the services package accessed during ANC visits, the reasons to start attending as well as the benefits of ANC attendance. Women seemed to understand and assimilate the message about the importance of attending ANC during pregnancy. Thus, they reported to have made it a priority to seek formal health care during their pregnancies. However, their attendance was not regular and mostly happened late in pregnancy. Therefore, this study identified relevant external and individual barriers that prevent women from effectively attending ANC as recommended by the WHO ANC model. These elements are explained below:

# 5.3.3.1. Socio Economic Conditions and Proximity to Health Center

The majority of participants understood the benefits of attending ANC during pregnancy to guarantee mothers' and babies' health. These women believed that attending ANC could allow them to protect their health and that of the baby by delivering at the health centres with the assistance of skilled health professionals. However, some participants mentioned that financial constraints and poverty might prevent women from attending ANC regularly. Antonia shared that women living far from the health clinics and in low economic conditions cannot afford to pay for transport to attend ANC. She added that in some of the remote areas, there is no public transportation, which makes it difficult for women to walk to the hospital for their regular pregnancy check-ups. In those cases, women choose not to attend ANC and delivery at the formal health clinics. Similarly, Joana shared:

sometimes, women low economic conditions can prevent them from attending ANC since they cannot pay for transport, deciding thus not to visit the hospital.

Fatima also described how poverty and difficulties to reach health centers can undermine women's desire to use ANC services:

some women decide not to attend ANC because they live far from the hospitals and they feel weak to walk....There are no chapas (taxis) here, few families have cars and majority are poor.

Furthermore, Tomasia and Paula believed that the long distance between women's residences and health centres prevent them from attending ANC. Tomasia shared that some women feel unconfortable to walk long distances during pregnancy. Paula also added:

distance to health centers prevent women from going to ANC regularly because they have to walk long hours.

For Paula, women responsibilities within the household can also prevent them from accessing ANC:

some women decided not to attend ANC because they have to take care of their children, cooking and fetch water to the family.

Women in this study acknowledged struggling with daily responsibilities within the household. The majority of participants described always had prioritised their ANC appointments during pregnancy because they knew the benefits of it. However, they also acknowledge that in some situations, the health complications they faced during pregnancy, may have motivated them to seek ANC. On the other hand, some of the discomforts women experienced during pregnancy might have also prevented them from seeking medical health, as explained in the next section.

# **5.3.3.2.** Morbidities during Pregnancy

While reflecting on their experience of ANC attendance, seven participants described having experienced health complications, whether physical or emotional, during pregnancy, and that motivated them to seek modern health services to treat these issues. Francisca shared:

in my first four pregnancies I never had problems. During my last pregnancy because I was always stressed I had high blood pressure.

Claudia mentioned that during her first two pregnancies nothing alarming happened. However, she described feeling stressed and with anxieties while pregnant with her third child. Similarly, Joana described feeling depressed and weak during her last pregnancy.

For Fatima, the complications she had during her last pregnancy motivated her to visit the maternal and infant health services at the local health centre to make sure that her baby was healthy:

in my second pregnancy I had several health complications such as severe bleedings, high blood pressure and depression. I was transferred to different hospitals to treat the pregnancy complications.

By contrast, Lucia felt regretful for not treating the complications she had during one of her pregnancies, which ultimately caused her abortion:

I had an abortion when I was six months pregnant and I was so depressed...now I understand that the fact of not have visited ANC services during my pregnancy, contributed to my abortion...I ignored for a long time the signs and the pains I felt below my belly.

Similarly, Paula shared that she started attending early ANC at the second month of pregnancy to treat her anemic condition and weakness that made her fall in her house:

my second pregnancy was so complicated because I had anemia. I did not eat well, I was always weak and thrown up so many times.

When Paula was asked if she always attended her ANC appointments, she responded:

I didn't attend all my ANC appointments because I always had difficult to detect my pregnancy at an early stage. Sometimes I did not go to my appointments because I was tired or my legs were swollen.

Tomasia also shared experiencing complications during one of her pregnancies that was aggravated by inaccessibility of formal care:

shortly after my second baby was born, I was pregnant again and I did want to have an abortion. My mum gave me some herbs and I was feeling so sick for three weeks, bleeding and in pain...I swear never to have an abortion again without proper care from the hospital.

These women acknowledge that the health complications during pregnancy could have been prevented if they had received proper care while pregnant. From Tomasia's story, one can argue that the non-existence of trust of modern medicine and a strong belief in traditional medicine can have impact in women's understanding of ANC attendance during pregnancy. The next section will describe individual behaviours and beliefs that may influence women's decision to attend ANC.

## 5.3.3.3. Beliefs and Behaviours as Barriers to Accessing ANC

Although women acknowledge the existence of multiple external barriers that may prevent women from attending ANC, they also described individual behaviours that may influence women's decision to attend ANC during pregnancy. Ana and Claudia mentioned that

some women have no interest in attending ANC, despite knowing about the benefits and being aware that the services offered are available free of charge. Thus, Ana shared:

Some women ignore nurse recommendations to go back to checkups because they feel there is nothing wrong with them and they can feel the baby heart beating. These women can go once to ANC and just go back to deliver the child at the health center. They know they will not pay nothing.

For Antonia the stigma around teenage pregnancy prevents women from going to ANC consultations early in pregnancy:

girls even in rural areas those days do not want to get pregnant early. They know people will call them names and they might have to stop going to school to care for the children. Similarly, Joana added:

young women sometimes hide the pregnancies for fear or because they lack financial and social support from the partner. Sometimes, girls became aware of the pregnancy late and so they start attending ANC late in pregnancy.

Tomasia, shared her own story of embarrassment during her third pregnancy as the reason not to attend all her ANC appointments:

I always had a small body and so sometimes I missed my appointments because I was ashamed of myself. I would meet people that I know at the hospital and they would look to me with pity because I was tiny girl with big belly.

For Fatima, some women decide to postpone their visits to ANC or not going at all because they feel uncomfortable to undress in front of health providers or be touched by them. Contrary, Lucia shared:

some women have no interest to attend ANC because they don't see the benefits of it. These women trust more the elderly women in the community who knows powerful herbs to make women strong during pregnancy, so they can deliver their babies with no problems.

Maria, the youngest participant, also shared a similar opinion as Fatima and Lucia. For her, some women do not like to be naked in front of strangers and so they decide not to go for checkups. She also added:

fortunately majority of health providers working at maternal and infant services department are women so pregnant women started to trust more these professionals.

However, participants in this study, also acknowledged existence of barriers from the health provider's side that influence their decision to attend early in pregnancy ANC as explained in the next section.

#### 5.3.3.4. Quality of ANC Services and Attitude of Health Providers

Some participants in this study indicated that their experience of ANC was not pleasant because of the long waiting period before seeing the health professionals. Ana stated:

ANC consultations sometimes can take long hours of the day and the health providers want women to come back few more times. This can make women lazy and with no interest to go back again.

Similarly, Claudia shared that a shortage of medical personnel would cause a crowd with queues waiting long hours to see the health providers during:

sometimes you go to the ANC visits just to find only two nurses are working to assist many pregnant women. Its worse when it's hot, you're hungry and tired. That is why some women decide not to visit again ANC, but rather going back only to deliver the baby.

Some women also complain about the poor treatment they received while receiving ANC or that they saw other women being reprimanded by health workers during ANC consultations. And described hearing stories of women who experienced poor treatment by health providers during ANC:

during my ANC appointments I was well treated by health providers. However, during my delivery, I noticed that some of the health professionals were rude to the women during labour. Sometimes, they would shout at the agitated women, or they should ignore the mother's cries....Anyway, perhaps this is the nature of their job.

Francisca described that the limitation of health facilities in their community and lack of motivation and professionalism of some health providers may contribute to the low attendance of ANC during pregnancy:

this maternity ward here (pointing to a small building in the other side of the street) is the only one to the entire community...sometimes women walk long distance to get here and they find the maternity building close. This is because the nurses are in their residences which are located close to the maternity ward and so the patients or their families need to go there and beg to be attended.

Tomasia also indicated having experienced poor treatment from health providers during delivery:

in my first pregnancy i did not attend ANC. My mum and grandmother used to give me traditional medicines to protect my pregnancy from witchcraft. When I was ready to deliver, they took me to the maternity ward and the local nurses started yelling at me because I was very small and did not have the card to prove that I have attended ANC.

Although Fatima described experiencing good interaction with health providers during her ANC appointments, including during the delivery of her two babies, she was aware of cases of negligence by health providers during ANC and during delivery:

there is a story here in Malelane where a woman pregnant with twins never attended ANC and during delivery, she was refused to give birth at the local maternity ward. She had to deliver at her house. When she went back to the maternity ward with her babies, the nurse refused to attend them and the babies died. This happened because the mother did not have a card to prove that she attended ANC.

#### 5.3.3.5. Female Perception of Husband's and Family's Role

From the women's narrations, it was evident that some participants still value their husband's and community's opinions with respect to exercising their SRHR as women. The majority of participants mentioned that their husbands and other family members supported their decision to attend ANC services during pregnancy. Maria, the youngest participant, mentioned that she had support from her husband and family during her pregnancy and that her mother was the one that motivated her to start attending ANC. For Tomasia, despite her husband not motivating her to attend ANC, she indicated that he felt happy when she went for checkups:

my husband is happy when I attend ANC during pregnancy to check my and the baby's health. He never insists me to go to my checkups or remind me about the dates. I have to do myself.

She also added that, differently from her husband, she felt motivated by her extended family:

My mum always insisted me to attend ANC during pregnancy and asked if the baby was okay...every time I met my sisters-in-law they would ask me about the baby health and if I went for my checkups. Then, I felt the need to go for my appointments.

When asked if she agreed that women should decide on their own whether or not to attend ANC during pregnancy, Francisca believed women should be given the authority to decide on their own. However, for her, if the woman is still young and lacks experience about pregnancy care, the family should intervene:

in my first pregnancy I was very young and did not know about pregnancy care. Then, my mum took me to hospital to start ANC. In my second pregnancy I had knowledge of ANC and I made the decision myself to attend the services.

#### Similarly, Fatima shared:

I believe every woman should decide on her own to attend ANC. When she is young, the husband and family can support her by reminding her about her appointments. Not

every girl understand the benefits of regular pregnancy checkups or they are ashamed to attend ANC.

In constrast, Ana indicated that her husband and extended family never motivated her or insisted that she attend ANC during her pregnancies. She also added that with the information she acquired later in her marriage about the importance of ANC, she decided to start attending the services on her own. Similarly, Claudia mentioned that her husband had a passive role in influencing her decision to attend ANC:

when I am pregnant my husband doesn't get involved in my decision to start attending ANC. This is women's business. He let me decide if I want to go or not to ANC consultations. Only I have to do is to tell him prior so he can give me money.

#### 5.3.3.3.6. Community Views Regarding Formal ANC Services

Women who married early residing in Namaacha District seem to have started taking the leading role in decisions related to their own SRH, including ANC services during pregnancy. The majority of participants in this study mentioned that the social environment they are living in are becoming favourable in enabling them to access maternal health services when in need. Participants acknowledged that they have accessed information from different sources regarding the benefits of attending ANC during pregnancy, which enabled them to make rational decisions regarding their health and that of the family's. The majority of participants added that health services offered at ANC visitations are free of charge, which ultimately motivated them to decide to attend ANC during pregnancy.

Nine out of ten participants believe that their community, including the elders, traditional leaders and religious groups are supportive of the formal health services provided for pregnant women in Namaacha District. Antonia described this positive outlook of ANC services by her community in these words:

the community doesn't interfere in women's decision to access ANC services during pregnancy because they are informed about the benefits of ANC through workshops in the community and at the local health center.

Fatima, an activist in a HIV and AIDS prevention and care project, described her opinion about community views of ANC by recalling her interaction with other community members during her field work:

the way I see it and hear it, the community, including the elders motivate women to attend ANC because they understand the benefits of it and know that is free of charge.

For Lucia and Maria, the community, including the church, has a positive view of ANC services provided by the government and other partners. Tomasia described the support her community provides for women during pregnancy in these terms:

the community motivates women to go to hospital during pregnancy instead of staying at home. Women motivates each other to attend ANC, and they ask each other about their appointment dates, the provisional dates for delivery. If you don't answer those questions, they will know that you're missing your ANC appointments and they will persuade you to go.

Francisca described mix feelings and opinions from her community regarding the acceptance of formal ANC services provided by the local government in the district:

here in this community, some people still trust the traditional medicine to treat any health issue and they depend on the elder's opinions to do so. These elders do not want to change. The women those days are informed about ANC benefits and the elders have no choice, but accept the modern ways.

For Fatima, the community has a clear understanding of the benefits of pregnant women attending ANC, as she stated:

the community here motivates women to attend ANC so the baby can be born without any deficiency or disability. In this community sometimes we have difficulties to eat well. Thus, pregnant women know that at hospital they will get ferrous sulphate + folic acid to treat anaemia. Sometimes for the unhealthy pregnant women, the hospital gives porridge and other cereals so they can eat.

#### **5.4. Summary of Findings**

## 5.4.1. Women's rights within marriages

In summary, the majority of participants stated that they were the ones who made the decision to get married at an early age. These participants have described living in an environment that supports and accepts early marriages, which impelled them to accept the marriage proposals. In line with the narrations above, these women mentioned being asked by their parents if they accepted the marriage proposal. These women believed that because they were given the option to accept or refuse the marriage proposal, they had decision-making power at the time. None of the women seemed to understand that because of the wide acceptance of early marriage practices in their community and the region's poor economic conditions, their parents felt obliged to marry then at an early age. On the other hand, Fatima described that she made the decision herself to marry at an early age, although she had a good support system in her family to protect her from marrying at an early age. By constrast, four

participants indicated that they were forced by their family to get married, which highlights the vulnerability of girls when it comes to making their own decision regarding marriage acceptance. This scenario is even worse in circumstances where levels of poverty are high, and no structures are in place to protect girls when they face those dilemmas.

Furthermore, the majority of participants described feeling happy with their marriage, despite experiencing some marital issues. These included verbal abuse from the husband and family, the husband's authority, financial resource difficulties and pressure from in-laws and other extended family members. Participants also stated that being married at an early age proved difficult to them because they did not have enough knowledge about marriage's responsibilities, so they had to learn at an early age. A few participants indicated that their husbands were supportive and that they participated in all decisions related to family affairs. For others, compliance with marriage traditions led them to accept their reality and fulfill their duties as wives (i.e. bear children, carry out household chores, take care of the children and the husband's desires even if they feel overwhelmed). For some of these participants, being married at an early age was an expectation that could prove beneficial. Men, particularly the ones working in South Africa could afford to pay lobolo, gaining sympathy and approval of elders who would benefit from their daughter's marriage.

Participants were not aware about the legal frameworks, including international agreements, to protect their SRHR. Women could not clearly explain the concept of SRHR. However, through their own experiences, they share views related to the exercise of their SRHR. The majority of women interviewed believed that women need to be informed about SRHR to make good decisions and prevent unwanted pregnancy along with HIV and other STIs. They also mentioned that women should have the right to protect and use their bodies freely, to have sex with a partner of their choice, and to decide about the desired number of children. The majority of participants agreed that early marriage negatively affects women's well-being and ultimately the exercise of their individual rights as a woman. Most women indicated that early marriage limits girls' school attendance; increases maternal mortality, morbidity and early pregnancy; perpetuates IPV as well as takes girls' freedom and opportunity for personal growth.

#### 5.4.2. Findings about participants' experiences of modern contraceptive use

Regarding their experiences of modern contraceptive use, all participants mentioned knowing about family planning and could name some of the modern contraceptive methods currently available. However, the majority of participants were familiar only with pills, injections and condoms, and only one spoke about IUDs. None of the participants mentioned

knowing or hearing about sterilisation and EC. They also described have used one or more modern contraceptives within their marriages. The elder participants started using modern contraceptive methods later in their lives. The younger ones seemed to be well informed about the benefits of the devices, had better access to contraceptives and started using them early in their marriages. The current socio-economic conditions of the country have improved and along with it, the provision of adequate health services, including modern contraceptive methods for women at reproductive age. A few differences were found, in terms of contraceptive use by women's level of education. However, women with primary education level completed and with secondary attendance were more likely to have started using contraceptive methods early in marriage while women with no primary education completed were less likely to start using family planning methods early in their marriage. Most women understood the benefits of using family planning methods, namely: helping them plan the number of children they desire; improving their financial security; preventing unwanted pregnancy and ultimately maintaining the mothers' and babies' health; and preventing HIV and other STIs.

All the women described feeling uncertain about their future and of their family because of the financial struggles they face, and so, family planning methods are an important tool to help them plan their future properly. Participants in this study, particularly the young ones, mentioned having the desire to use family planning methods effectively. However, as hey continued to narrate their stories, participants shared experiences of challenges that prevented them from accessing and using modern contraceptives. Participants in this study described multiple determinants that influence women's decision to use modern contraceptives effectively and regularly. One determinant described as preventing them from using methods such as pills and injections effectively and regularly was the fear of side effects. In this regard, some participants argued that these methods cause discomfort and sickness and might be one of the reasons for women deciding to stop or not use them at all.

Some women also described that financial difficulties can prevent women from accessing and using contraceptive methods of choice. For these participants, the local health facilities might not have a full stock of family planning methods or could be located at a distance from women's residences. This means women needed to pay for transportation and other travel costs to access family planning methods. When asked to reflect on the community's views regarding family planning, participants in this study believed that the community in Namaacha District have responded positively to family planning methods. Most participants believe that their communities are supportive to women using modern contraceptive methods,

and women support and motivate each other to adhere to family planning methods. Women in this study believe that the high costs of life, the absence of men in the families and increased responsibilities of women as primary caregivers of their families, influenced the community to have a positive outlook of family planning methods. Participants shared that communities, including local leaders and religious institutions understood the benefits of family planning methods for women's and families' well-being, so they motivate women in the community to make use of the devices. However, two women indicated not knowing about the community's view regarding modern contraceptive methods since they believe it is the couple's, and particularly the woman's decision whether or not to use family planning methods without the interference of external actors.

Although women in this study believed that their community is supportive of women using family planning methods, the majority of participants agreed that husband and other extended family members such as mothers-in-law can negatively influence women's decision to use modern contraceptive methods. The women interviewed believed that some husbands and other family members have control over women's bodies and so they are the ones who might dictate whether or not they use these modern devices. Participants in this study also shared that fear of violence and of being kicked out from the family might lead women not to use family planning methods in compliance with the husband's and family's desires. Finally, women in this study shared that family traditions such as polygamy can pose difficulties to women since it is expected that they will bear as many children as possible. Thus, use of modern contraceptive methods may be limited.

Although modern contraceptives and information packages regarding its benefits are free and available through government and NGO channels, five women believed that some women individually make the decision not to use the devices. These participants mentioned that women are informed about the benefits of the different family planning methods and have easy access to the devices. However, they choose not to use those modern contraceptive methods due to their negative personal beliefs about it. These women give different justifications for their decision of not using family planning methods. Thus, they become their own barriers when it comes to exercise their SRH, including the effective and regular use of modern contraceptive methods.

#### 5.4.3. Findings about participants' experience of ANC attendance

With respect to their experience of ANC attendance, all participants described starting o attend ANC during the second and sixth month of gestation. Differences were encountered between the elder and younger participants regarding the period of initiation of ANC

attendance. Elder participants seemed not to have attended ANC in all their pregnancies, and they all started at a later stage of their pregnancies. The younger participants seemed to have attended ANC during all pregnancies and started early in pregnancy (see Table 5). Participants in this study described some of the service packages offered during their ANC appointments to prevent and treat some of the health complications derived from pregnancy. None of the participants described having attended four ANC appointments during normal pregnancies as recommended by the WHO ANC model. Women also mentioned being offered social and other support in preparation for delivery and baby care. Thus, women in this study believed that ANC attendance was the pass they needed to ensure delivering their babies in the local maternity ward with the assistance of skilled medical professionals. The majority of women indicated that they always followed the health professionals' recommendations provided during ANC, which led them to deliver their babies in the maternity ward.

Despite acknowledging improvements in the provision of care for pregnant women, women also mentioned determinants that influenced their decision to start attending ANC early. In this regard, some participants described experiencing health complications during their pregnancies. These participants mentioned that they ignored some of the signs and never seek medical help, which in the case of Lucia caused an abortion. These participants understood that if they had sought medical care during pregnancy, some of the health complications could have been prevented and treated. For other participants such as Fatima, Paula and Tomasia, the health complications occurred during their pregnancies motivated them to use ANC services. Additionally, participants mentioned that women's low socio-economic status may prevent them from accessing ANC services. Women indicated that the low availability of health centres in the district allied with their lack of financial means can make it difficult for them to access these services when in need. Participants also indicated that the shortage of skilled health professionals and long waiting periods to be seen by a health professional might have influenced women's decision not to regularly attend ANC.

On the other hand, participants mentioned that women's personal beliefs may influence their decision to start attending ANC. For some, their strong connection with the traditions, fear of embarrassment, stigma around teenage pregnancy and no trust of modern medicine may prevent them from attending ANC. These women indicated that their community, including husbands and other extended family members do not interfere with women's decision to attend ANC, and ultimately women are the ones who made the decision. However, they acknowledge the importance of husband and others' involvement in motivating women to attend ANC, particularly the younger ones with no experience regarding pregnancy care. Thus, the

husband's and community's positive outlook about ANC may positively influence women's decision to attend ANC.

The description of participant's narration in this section provided information regarding the exercise of their individual rights, including use of modern contraceptive methods and ANC attendance during pregnancy. This information will be discussed in the next section in relation to the literature as well as the theory of gender and power, so the context in which women experience can be related to different other realities as discussed by different scholars.

#### **Chapter 6: Discussion**

#### 6.1. Introduction

The present study contributes to the understanding of the current situation of the exercise of rights by women who married early, with an emphasis on SRHR, and particularly their experience of modern contraceptive use and ANC attendance in Namaacha District, Mozambique. Thus, this study will add to the limited research of literature about the phenomenon of early marriage in Mozambique and its impact on women's well-being. Inaccessibility and unavailability of modern contraceptives can expose women to unwanted pregnancies, and in case that pregnancy occurs, lack of prenatal care can lead to health complications derived from pregnancy and ultimately the death of both mother and child. So, access and availability of modern contraceptives for women at reproductive age as well as the availability of ANC services during pregnancy are crucial in guaranteeing women's SRHR, and ultimately their well-being. Therefore, this chapter discusses and summarises the major findings of this thesis described in the previous chapter (results). This chapter will discuss the findings from the women's interviews regarding their experience of modern contraceptive use and ANC attendance during pregnancy. However, before becoming immersed in data interpretation of the main topic of this thesis, the discussion of the experiences of women who married early regarding modern contraceptive use and ANC attendance, about participants' rights within marriages will be presented. This will give the context of women exercising their individual rights and how it impacts their SRHR, which also includes rights to modern contraceptive methods and ANC attendance during pregnancy. By listening to individual stories of women who married early and reside in Namaacha, as well as by considering their socio-economic and cultural background, this study will be able to give an account of the current situation of the maternal health experiences of these women, particularly with regards to the use of family planning methods and ANC attendance during pregnancy.

For data collection, in-depth/open-ended interviews were conducted for 10 participants using the life grid methodology. Interpretation of findings in this study was guided by the Interpretative Phenomenological Analysis (IPA) methodological framework. The previous chapter of this study described the findings from participants' interviews, based on their own understanding and views of the phenomena they were experiencing. Further to this, this section will focus on four areas discussed during participants' interviews and presented in the previous results chapter. These areas are: marriage and rights, including SRHR; participants' experiences of modern contraceptive use, including barriers and facilitators for the effective

and regular use of these devices; participants' experiences of ANC attendance during pregnancy as well as barriers to and facilitators for the effective use of ANC during pregnancy.

The discussion of each of these main topics that arose from the data will be presented in relation to the findings from the available literature on similar topics related to women's use of modern contraceptives and ANC attendance. Using the IPA approach as the analysis framework in the discussion chapter is important to link the themes that emerged from the analysis with the relevant literature (Pietkiewicz & Smith, 2012). It is important to mention that the studies cited in this chapter and mostly discussed in the literature review chapter used both qualitative and quantitative methodologies. In addition, the discussion of these topics will be done by relating the findings with the main concepts discussed in the theory of gender and power, on which this study was based, to understand the barriers that impact women's use of and access to contraceptives and ANC attendance. Moreover, from the data I was able to identify from participants' perspectives, recommendations to improve women's access and effective use of modern contraceptive methods and ANC attendance in Namaacha District. Those will be presented and discussed in relation to research in the area and the recommended action plans available designed to improve women's SRHR. Additionally, as Pietkiewicz and Smith (2012) stated "thoughts about the study's relevance, implications of the research, study limitations as well as reflections for future research can be done in the discussion chapter" (p, 9). Therefore, limitations of this study are discussed and presented in this chapter. Finally, suggestions of topic guidelines for future research regarding access and use of maternal health services by women who married early will be presented.

#### 6.2. Discussion in Relation to the Theory of Gender and Power

In applying the Gender and Power theory to guide this study, it was determined that the three structures identified by Connell (1987) would help explain and unpack individual, societal, and institutional factors that inhibit women from using proper maternal health services. For the purposes of this study, my interest was specific to individual factors hindering the use and utilisation of modern contraceptives and ANC during pregnancy, among women who married early. These factors arose from the inequalities in decision-making power between men and women. However, the influence of external factors was also considered, discussed through participants' perspectives and aligned with the theory of gender and power considerations.

Findings from this study found evidence in Namaacha District of a patriarchal system that limits women's exercise of their rights. The majority of women were living in an environment not favourable to the exercise of their rights to education, health, including sexual

and reproductive health, employment, consensual and legal marriage. This scenario was aggravated by the acceptance and practice of early marriage in Namaacha District which is recognised as limiting their freedoms and rights as a child, increasing the risk of health complications and personal satisfaction. The structure of sexual labour proposed by Connell (1987) is visible in society through the unequal division of work between men and women. Thus, Connell (1987) and Wingood and DiClemente (2000) defined economic exposure within societies that limits women's access to and use of maternal health services. This exposure is derived from gender expectations regarding women's role within families and outside that constrains their opportunity to access equal financial gains as men. These include: poverty, unemployment or underemployment; limited funds to pay for transport or health services and working in a high demand-low control environment. Findings from this study identified some of the elements identified by Connell (1987) in the structure of Sexual Labour. Findings from this study showed that men in Namaacha District have the main responsibility to provide for their families, including caring for the wife. These men are expected to be involved in some rewarded activity so they can pay the lobolo and be married. Thus, women are expected to follow the norms and be able to fulfil marriage responsibilities, which mostly include care for household duties and children.

On the other hand, findings from this study corroborate the theory of gender and Power by identifying women's socio-economic conditions as one of the determinants that influence the access and utilisation of modern contraceptives and ANC during gestation. The majority of participants had low levels of education, were working in the informal sector or were unemployed as well as describing themselves as struggling with their finances. These participants reported, as previously mentioned, experiencing difficulties while seeking health services such as family planning and ANC. This is consistent with Connell (1987) who argued that women's position as family care taker is their first role in the communities. Therefore, women will find themselves with less time for their payable work, consequently lowering their financial situation and making them more dependent on their husbands (Connell, 1987; Wingood & DiClemente, 2000). On the other hand, Connell (1987) identified individual risk factors such as women's and girls' low education level; early marriage and girls' younger age as influencing women's utilisation of maternal health services (Connell, 1987). This substantiates findings from this study, which found that all participants reported having low education levels and marrying at an early age, resulting in the women's limited decisionmaking power to use modern contraceptives effectively and regularly, and o some extent, attend ANC during pregnancy.

Other interrelated factors related to discriminatory gender norms that affect girls' ability to freely decide to use maternal health services are explained in the structure of the sexual division of power. Connell (1987) argued that men in society have more visible power than women. Therefore, women will be subjugated to greater abuse and control by men in many different ways. Physical exposure and behavioural risk factors that affect women's use of health services were then proposed by Wingood and DiClemente (2000) and all derive from inequalities in decision-making power between women and men. These include: being sexually abused, physically abused, drug abuse, having multiple partners; being exposed to sexually explicit media; lacking or having limited access to condoms or drug treatment; and having stressful workload. Other behavioural risk factors include use of alcohol or drugs and lack of negotiation skills (Wingood & DiClemente, 2000). This study did identify some or similar factors to the physical exposures and behavioural risk factors proposed by Connell (1987). Findings from this study indicated that a fear of physical and verbal abuse perpetuated by husbands and inability to negotiate the use of maternal health services were factors influencing women's use of modern contraceptives. On the other hand, as participants reported, these tasks that women are expected to conduct during pregnancy can prevent some from attending ANC due to exhaustion from the physical activities they performed. This is in line with Connell's (1987) behavioural risk factors identified in the structure of sexual division, and was also reported in a study conducted in Nepal (Simkhada et al., 2010) that found that the lack of ANC use by pregnant women was due to their heavy and long house duties.

Furthermore, this study identified some or similar elements developed by Connell (1987) as part of the structure of affective attachments and social norms. Social exposure and personal risk factors influencing women's use of maternal health services are perpetuated in society through the cultural norms that subjugates women's rights. Connell (1987) and Wingood and DiClemente (2000) defined the following social exposures: women who have older partners; women and partners who are interested in conceiving; extended family not supportive to maternal health services use; lack of trust in health providers; and cultural norms, laws and religious beliefs opposed to the use of maternal health services. This study identified and examined some of the social exposures proposed by Connell (1987). Thus, this study substantiates findings from the theory of gender and power that shows an association between the support of husbands and extended families; trust of health providers, cultural and religious norms; and the likehood of using modern contraceptives and ANC during pregnancy. This was also corroborated by findings from previous studies that showed evidence of the influence of some of the social exposures identified by Connell (1987) in women's decision to use maternal

health services. Therefore, one might say that the theory of Gender and Power proposed by Connell (1987) and which based its convictions on the gender disparities perpetuated by a patriarchal system was relevant in guiding this study. The different elements proposed by Connell (1987) in the three structures and applied in several other studies (Chapman-Walsh, 1995; Wingood & DiClemente, 2000) were identified as significant in influencing the decision to use maternal health services by women who married early and reside in Namaacha, with emphasis on modern contraceptives and ANC during pregnancy. Additionally, previous studies discussed in this study have reported evidence of the impact of these determinants in women's decision to use these services. These will be discussed in the next section in relation to the study's findings.

#### 6.3. Discussion of themes in relation to research of literature

## **6.3.1.** Marriage and SRHR

Child/early marriage is defined as the union in which one or both spouses are children (under the age of 18 years old), and may take place under civil, religious or traditional laws with or without legal certification (DFID, 2011; Nour, 2006; WHO, 2012). Research findings from around the world, particularly from Developing Countries shows the existence of marriage unions where one of the partners, specifically women are children under 18 years old (Clark et al., 2004; Green et al., 2009; & WHO, 2012). Some studies have pointed out factors that influence women's decision to accept marriage proposal at an early age. Green et al. (2009) suggests that poverty can influence early marriage occurrence by inciting families to force young girls to marry at younger ages for economic gain. In addition, early marriage practice is more prevalent in rural areas with high levels of poverty and where families are experiencing economic difficulties to survive (Green et al., 2009; UNICEF, 2005; 2015).

The District of Namaacha, the study area, is located in Maputo Province (see Figure 7 in methodology chapter). The district is located in close proximity to the Swaziland and South Africa borders (INE, 2010). According to the Ministério de Administração Estatal (MAE) (Ministry of State Administration) (2005) agriculture is the main economic activity in the district. The district also depends economically from the trade within the borders to South Africa and Swaziland as well as activities of hunting, wood exploitation, coal production and the fabrication of homemade alcoholic drinks (MAE, 2005). Namaacha has been affected by the recent economic crisis the country has experienced, as some of the women interviewed and working in the proximity of the border to South Africa Indicated. Antonia and Ana, who work with facilitating goods import from South Africa border to Mozambique, stated that since the economic crisis affected the country and increased the value of South African rand while

depreciating the national Mozambican currency (metical), business has been hard. They claim that business traffic has reduced because local Mozambican business people cannot afford to buy their goods in South Africa and sell them in Mozambique at a profitable price. The current study agrees with the findings from research literature previously cited on Namaacha's profile. The majority of participants were involved in small trade and low paid jobs due to their low level of education and limited economic opportunities in the district. In other cases, they were domestic, caring for the household, children, their husband and others. These women have always lived in deprivation of their basic needs as children, which included education, shelter, food and quality health care. Thus, they were always exposed to early marriage, and as customarily expected, men had to carry the economic burden to make it a reality.

Facing difficulties to find jobs locally to provide for their families, men in Namaacha have a long tradition of finding alternatives ways to survive. With the current economic bad wave the country has been hit with, migration, particularly to South Africa seems to be an ideal alternative to active work for men, inciting the continuation of early marriage practice. In this study, Antonia and Joana reported that their husbands were working in South Africa at the time of the interview. This in in line with the findings from the briefing note on HIV and Labour Migration in Mozambique published by the IOM (2007) that argued that in the Southern part of Mozambique, during 19th century, labourers were attracted by the job opportunities in the mining sector to the detriment of low production small-scale agriculture (p.2). On the other hand, findings from this study validates findings from the study by Adepoju (2000) that discuss the determinants of migration in the SADC region that indicated that the socio-economic inequalities, high rates of poverty and unemployment in some rural areas of the SADC region, have exploded migration from those problematic countries to South Africa and other more socio-economic stable nations.

Despite Maputo Province being one of the regions of the countries with the lowest prevalence of early marriage practice, estimated at 26% by MISAU et al. (2013), the district of Namaacha, located within its limits seems to be deeply affected by the practice. This can be explained by the higher marriage rates in the district, with population in cohabitation unions estimated at around 56.4% and 7.4% of its population are married. On the other hand, the district of Namaacha has approximately 42,694 inhabitants, a majority of youth population, with more than half of the population aged below 19 years of age (MISAU et al., 2013). Regarding the level of education, data from the census 2007 indicate that in the district, approximately 40% of women were illiterate, when compared to 20% of men (MISAU et al.,

2013). Similar findings to the research literature regarding Namaacha socio-economic and demographic profile were found in this study.

Moreover, the current study findings validated findings from the literature both international and from the Mozambican context regarding the impact of poverty and socioeconomic deprivations in early marriage occurrence. Antonia indicated that the fact the husband was working in South Africa, influenced her parent's decision to allow her to marry at an early age. This is consistent with findings from the study by (Turrell, 1987 cited in Wentzel, 2003) who argued that labour wages provided by their work in South Africa improve the men's status in their kinship and provide them with resources to pay lobola and money to buy goods. Thus, due to its geographical position and low economic development, the district of Namaacha possesses favourable conditions for early marriage occurrence as described in literature. Although six participants, namely; Antonia, Francisca, Claudia, Joana, Fatima and Lucia mentioned they were the ones who made the decision to accept the marriage proposal, they all seemed not to understand the effect of poverty and their low socio-economic status in influencing their degree of rationalisation regarding the negative consequences of their decision to accept marriage at an early stage in their lives. These participants were all living in rural Namaacha and under poor conditions. Scarcity of employment opportunities and other basic services motivate parents and guardians (who were all poor) to allow their children to marry at an early age. The literature showed that households belonging to higher wealth status are less likely to incite their young daughters to marry at an early age. Instead, they motivate their daughters to pursue their education (MISAU et al., 2013; UNICEF, 2005; 2015).

For Mozambique specifically, UNICEF (2015) identified several factors influencing child marriage occurrence, namely: age of head of the household, sex of household head, girls' education, education of the household head, wealth, frequency of listening to radio, number of siblings, religion, and region/location (UNICEF, 2015). This study did not seek to investigate the relevance of each of these factors mentioned, or the existence of further research about the matter. However, during analysis, some of the factors identified by UNICEF as influencing early marriage occurrence were also identified in this study. For example, the majority of women interviewed came from families from low wealth status. They all came from large families and had lived for a long time with extended family members, including during marriage time. The majority of participants in this study indicated that their parents did not go to school as so the majority of community members in the area. Their parents always faced difficulties to find good jobs and so life was unbearable sometimes. Similar to Antonia, Joana who only attended second grade at the primary level of education, mentioned that her poor

family did not decline her husband proposal because he was working in South Africa and could afford to pay lobolo. These two examples from Antonia and Joana validated evidence from literature regarding the effect of poverty in early marriage practice.

On the other hand, three participants namely Maria, Paula and Tomasia clearly indicated that they were forced by their parents and others extended family to accept marriage at an early stage of their lives, limiting the exercise of their individual right to consent to the marriage. These three participants' narrations corroborate research findings about the forceful practice of early marriage. Moreover, Green et al. (2009) indicated that in situations where we have orphans and other vulnerable children, their caregivers may force them into early marriages as a way to be alleviated from the financial and social burden. This was also noted in this study's findings from Paula narration who was an orphan due to her parent's death by HIV and AIDS, and was forced by her uncles to marry her husband without her consent.

Women low education level can also influence her decision to accept marriage at an early age as their higher level of education can prevent women from marrying at an early age (DFID, 2011; Omoeva et al., 2014; and UNICEF, 2015). Data from Mozambique DHS (2011) also showed a negative correlation between early marriage and low education levels. This data showed that Mozambican women with secondary school or more are more likely to marry two years later than women with no school or with a primary level completed (MISAU et al., 2013). In addition, populations with higher incidence of early marriage are more likely to see teenage girls dropping out of school (Omoeva et al., 2014). Similarly, DFID (2011) reported that in rural Bangladesh girls who marry at later ages are more likely to pursue their studies further and be literate, contrary to the girls who marry early (DFID, 2011). Education contributes for a delay in the age of marriage, particularly for girls; as well as it improves a girl's confidence and their awareness of their own strength to act while dealing with personal life issues such as marriage and motherhood (DFID, 2011). The current study findings showed that five women did not complete primary school at the time of marriage, with exception of Antonia, Fatima, Lucia and Maria. The other five did not finish their secondary level of education, with the exception to Ana who finished 10<sup>th</sup> grade. This finding is consistent with the DFID (2011) argument that early marriage deprives girls from pursuing their education further as well as limits their level of confidence and the skills necessary to prevent being a child bride. Participant narrations showed that the majority had the desire to go back to school. However, after the marriage they never had the opportunity to do it. Thus, their right to education was blocked due to marriage responsibilities. The fact that all participants did not complete secondary school, and five did not finish primary school supports findings from literature that argues that girls' low level of education increases their probability to marry at an early age.

Social and cultural norms were also noted as influencing the occurrence of early marriage and are described in literature (Green et al., 200; Mathus et al., 2003). This is associated by the weak enforcement of the Mozambican Family Law from 2004 that protects girls/women rights and considers illegal all marriages under 18 years old. In Mozambique, the National Strategy to Prevent and Fight Early Marriage approved in 2015, stated "norms about birth conception and puberty ceremonies influence the practice of early marriage and mark the passage for adulthood and early sexual debut" (CM, 2015: 9). Thus, Young married girls are more sexually active during the first year of marriage while trying to conceive as is customarily expected (Clark et al., 2006). A study by UNICEF (2015) conducted in Mozambique also highlighted social norms such as "the Generational acceptance of early age for marriage" that motivates early marriage practice. The current study showed similar patterns of social and cultural norms influences on early marriage occurrence. For instance, Ana and Claudia indicated that the sense of responsibility and respect for their community traditions such as the acceptance of teenager pregnancy within marriages influenced their decision to accept the marriages. On the other hand, UNICEF (2015) argued that young girls from religious families have fewer chances of being a child bride than girls from non-religious families. Findings from this study validate research that identified the Zion religion as the most practiced in Namaacha District. Although majority participants reported belonging to Zion church, this study did not find any association between child marriage and religion.

Studies of early marriage and its implications to girls' well-being indicated that early marriage takes away girls' freedoms and isolates them from peers and extended families (Clark et al., 2006; ICRW, 2007). In this study, when asked if they were happy with their marriages, participants described being happy with their marriages, despite the challenges that came with it. The majority of participants were younger than their husbands and were financially dependent on them. These women reported complying with their role as wives and in most cases this means obeying the husband's demands who was viewed as the leader of the family. This is in line with findings from Lloyd (2005) that argued that early marriage practice is very unequal in terms of power decision making between older husbands and younger wives within the household. They all shared that they had the primary responsibility of raising children and care for household duties. Participants in this study indicated that in the early years of their marriages they did not have knowledge about marriage responsibilities, including ability to protect their SRH. Joana, Paula and Tomasia mentioned not knowing anything about marriage

responsibilities and so they had to endure bad treatment from their husbands and mothers-inlaw. These women believed that early marriage takes time for women to achieve personal goals such as education or other types of professional training. Participants in this study such as Ana, Antonia, Claudia and Lucia indicated that the amount of responsibilities that were expected from them within marriage made it easy for them to comply with the rules. These rules were enforced by husbands and other family members. None of these women went back to school after marriages, despite the desire to do so. This substantiates the findings from literature (Baxter & Moodley, 2015; Durojaye, 2011; UNICEF, 2015; WHO, 2011; and WHO, 2015) that indicates that early marriage takes away girls' freedom to exercise their rights such as education and other pursuits. With no education, women are unable to exercise their rights, compromising their well-being; power to negotiate in marriage; and participation in political and economic activities (Population Council, 1996, p.5). In this current study, participants have low education levels, which translate into low paid jobs the majority of them were associated with. The majority of women interviewed felt regret for not having the opportunity to study further. These women understand the power of education in moulding their future and so also understand that the lack of it prevented them from acquiring greater opportunities in life. Thus, participants in this study are willing to motivate their children to pursue further education and so preventing them from marrying at an early age.

The negative effects of early marriage for girls' health as described in literature (WHO, 2009), was also found in this study. Participants such as Claudia, Francisca and Fatima had mentioned that pregnancies at early stages of marriages may cause dysfunctions in women SRH. Lucia mentioned having one abortion that could have been prevented if she had been informed properly about pregnancy care and had easy access to maternal health services with quality. Lucia narration substantiate the study by UNICEF (2015) that argued that early marriage closes female opportunities for personal growing and is closely associated with early pregnancy and related health complications. This is likely to happen since it is expected that these women get pregnant soon after marriage while they are not physically ready for childbearing and have limited access to quality maternal health services (Arnaldo et al., 2014; Bearinger, Sieving, Ferguson, & Sharma, 2007; Bongaart, 2006; Glasier et al., 2006; Lewis, 2011). Those practices are harmful for the bride's health and well-being, particularly sexual and reproductive health; therefore violating their rights as children and individuals (Green et al., 2009; UNICEF, 2005). Like Fatima, young married girls can also be exposed to STI, including HIV, infections due to the women's low power of negotiation. A cross-sectional study conducted in two districts in India showed evidence of mental and physical violence

against young married women, perpetuated by their husbands (Santhya et al., 2008). Other research also argued that young married girls have greater chance of experiencing intimate partner violence from their husbands and extended family members (Clark et al., 2006; Green et al., 2009; ICRW, 2007; MISAU et al., 2013; Santhya et al., 2008;). The findings from this study substantiate the literature with regards to young married women being exposed to both physical and verbal violence perpetuated by husbands or extended family members. Tomasia and Paula recalled enduring lengthy periods of physical and verbal abuse from their husbands and mothers-in-law. Ana also recalled experiencing emotional abuse from her husband at some point of their marriage. Similarly, Francisca recalled experiencing physical violence perpetuated by her husband at some point of their marriage. Other participants such as Fatima and Lucia recalled hearing about other married women who were abused or not allowed to go to school or accessing specific medical treatment for fear of their husbands. Claudia for example, had to take contraceptives without her husband consent, and she had to hide them for fear of his reaction as discussed in the next section of this chapter.

# **6.3.2.** Female Experience of Modern Contraceptive Use

Research studies have indicated that modern contraceptive methods were designed specifically to prevent pregnancy, help space out when children are conceived or to prevent STIs, including HIV (Ahmed et al., 2012; Ayanore et al., 2016; Guttmacher Institute, 2015; Population Council, 2008; Shah, 2010; WHO, 2015). Bear in mind that these devices are and integral part of family planning programs and their broad objectives. According to WHO (2006), the modern methods include female and male sterilisation, intrauterine devices (IUDs), hormonal methods (oral pills, injectables, and hormone-releasing implants, skin patches and vaginal rings), condoms and vaginal barrier methods (diaphragm, cervical cap and spermicidal foams, jellies, creams and sponges). Therefore, the provision of family planning services and other maternal health services are an integral part of international and national governments' efforts to improve women's SRHR. According to MISAU (2010), family planning interventions in Mozambique were initiated in 1977 to protect the health of both mothers and their children. Thus, in line with its poverty reduction strategies and population policies aimed at tackling the constraints of the continuous growth of the population, Mozambique has been implementing a significant number of programs aimed at improving women's SRHR and reducing higher levels of fertility and HIV infections and STIs in the country. In this regard, the regulatory frameworks that guided the national government interventions in the health sector, particularly interventions aimed at improving women's SRHR included: National Integrated Plan for the Achievement of Millennium Development Goals 4&5 (2009-2012);

Family Planning Strategy and Contraception 2010-2015; National Policy on Health and Sexual and Reproductive Rights (2011); and the Health Sector Strategic Plan 2013-2017 (UNFPA, 2013). These and other legal frameworks guide the country interventions in areas aimed to improve girls' rights, particularly access and use of modern contraceptives.

Findings from this study showed that all participants interviewed have used in different periods of their marriages one or more modern contraceptive methods. Thus, this finding is consistent with findings from the study by Cau (2014), conducted in Mozambique, that examined the influence of cultural factors in women's contraceptive use by analysing the contraceptive use pattern of married women at reproductive age (15 to 49 years old). In this regard, similar to findings from Cau (2014), this study found no difference in terms of use of modern contraceptives reported by married young participants 18 to 22 years of age such as Maria and Paula to the married women between 25 and 29 years of age such Fatima, Joana and Lucia. On the other hand, findings from this study corroborate findings from the Mozambique-Indicators of immunisation, malaria and HIV and AIDS survey – IMASIDA (2015) that found a great prevalence of contraceptive use (at least one method) among married women between 20 and 34 years of age, with the highest report of use among women between 30 and 34 years of age.

This study also validates findings from the study by Cau (2014) that found higher levels of modern contraceptive use among women with higher parity. Participants interviewed, such as Ana, Antonia, Francisca and Tomasia, reported being mothers of anywhere from 4 to 8 children and also reported great use of modern contraceptives.

The majority of participants described accessing and using mostly oral pills, followed by injectables, condoms and lastly IUDs. This finding is consistent with those of other studies conducted in the SSA region that showed variations in terms of types of modern contraceptives used by married women (Beksinska et al., 2012; Smith & Beksinska, 2013; Bogale et al., 2011; Darroch & Singh, 2013; Maharaj and Rogan, 2011; MISAU et al., 2013; 2015; Population Reference Bureau, 2008; WHO, 2013; Chersich et al., 2017). Overall, despite variations among countries in the region regarding the prevalence of modern contraceptive use, findings from these studies showed a low prevalence of modern contraceptive use in the SSA region. These findings also indicated women had more knowledge and were using primarily injectables, followed by oral pills and a few reports of condoms and IUDs. Conveniently, findings from South Africa (Chersich et al., 2017; Maharaj & Rogan, 2011; Smith & Beksinska, 2013) showed some similarities and disparities with this study. Firstly, these studies identified injections and oral pills as the first two modern contraceptives used by women at reproductive

age and reported low knowledge and use of IUDs, emergency contraceptives and barrier methods such as condoms. Luckily, South Africa has a strong national family planning program available that has so far reached almost half of women's need for modern contraceptives (Chersich et al., 2017). This has translated into a reduction in fertility levels in South Africa and a reduction in maternal health and morbidities (Chersich et al., 2017). Secondly, despite similarities between studies in the first two contraceptive methods of choice (injection and oral pills), findings from this study are different from the findings of Beksinska et al. (2012), Maharaj and Rogan (2011), Smith and Beksinska (2013) and Chersich et al. (2017) that reported that women at reproductive age in South Africa were accessing and using at a better rate the extensive variation of modern contraceptives available, which also included female sterilisation, IUD barrier methods as well as emergency contraceptives.

For Mozambique, previous research data also showed similar findings to this study in terms of modern contraceptives used by married women at reproductive age. Data from DHS (2011) showed a slight increase in the prevalence of contraceptive use from 11.7% in 2007 to 12% in 2011, with injections being the most used modern contraceptive method by 5.1% of married women at reproductive age. In addition, 4.5 and 1.1% of married women, respectively, used oral pills and barrier methods (MISAU et al., 2013). Current data from IMASIDA (2015) showed an increase in the national rate of contraceptive use among married women at reproductive age (MISAU et al., 2016). These data show an increase of women using at least one method of modern contraceptives from 12% in 2011 to 25% in 2015. This study corroborates findings from research (MISAU et al., 2013; 2016) that shows an improvement in the provision of family planning services in Mozambique, visible through the evidence of the increase of women accessing and using the multiple contraceptives available through government channels and other stakeholders. Thus, these disparities in the preference contraceptive methods may be due to women's easy access to and trust of oral pills to the detriment of other methods such as injections, condoms and IUDs, which raise more doubts about their efficacy among married women in Namaacha. On the other hand, the disparities between the study's findings that identified oral pills as the most used method and the literature that identified injection as the most used modern contraceptives by married women in Mozambique, can be explained due to the fact that the study population sample was relatively small (10) and was selected through a snowball process, so it was more likely to have found and therefore interviewed women who reported oral pills as the first method of contraception compared to other methods. However, to validate my findings, injections ranked as the second preferred method of contraceptive by six of the women interviewed.

Additionally, this study found that women's unmet need of contraceptives may be high in the Namaacha District, evidenced by the lack of knowledge of some participants about long term methods of contraceptives such as female and male sterilisation. This confirms findings from MISAU et al. (2016) that reported that nationally, only 54% of women's need for modern contraceptives was met. These data also showed disparities between regions where the urban areas in which 64% of women with the need for contraceptives were satisfied whereas that proportion for rural areas (as the study area) were met at only 49%. Thus, a considerable number of married women at reproductive age still have a higher unmet need for modern contraceptives, particularly the ones residing in the rural areas of Mozambique, as in the case of Namaacha District.

The study by Mensch et al. (1994) argued that choice of contraceptive methods means the availability of a variety of modern contraceptives as well as the willingness of health staff to provide information to clients about the different contraceptive methods and their effects, so clients can be better equipped to select the method of choice and are enabled to use it effectively. Findings from this study seem to corroborate the argument of Mensch et al. (1994) cited above. Participants in this study did not know about all the modern contraceptives available worldwide and could only mention the modern contraceptives available to them in the local health clinics of Namaacha District such as pills, injectables and condoms, and only one participant mentioned knowing about IUDs. Surprisingly, Francisca, the only participant who mentioned using IUD at one point of her marriage, had to travel to Maputo, the capital city of Mozambique to implant the IUD at the main public hospital due to the unavailability at the local clinic in Namaacha District. This finding substantiated the findings from Bogale et al. (2011) about the use of modern contraceptives among married women in Ethiopia that reported that most of married women interviewed had little knowledge about long term and permanent methods such as female and male sterilisation as well as IUDs due to less utilisation and availability of these devices in the local health clinics. On the other hand, findings from this study are also similar to findings from the Mozambican DHS (2011) that reported few married women have knowledge about female sterilisation, IUDs and emergency contraceptives.

Although the women interviewed in this study reported poor knowledge about long term and permanent methods of contraceptives, all participants reported using one or more modern contraceptive methods at some point in their marriages, as previously stated. These modern contraceptive devices were mostly accessed by these women free of charge, at local health clinics and through NGO channels working in the provision of family planning services. When asked about the reasons to start using modern contraceptive methods, nine women stated

primarily that the prevention of pregnancy was the main reason to start using family planning methods. This also included Fatima and Lucia, who, besides using both injection and pills, also used condoms to prevent pregnancy. In contrast, Maria, the youngest participant who uses injectables and condoms, was the only one who stated that besides using modern contraceptives to prevent unwanted pregnancy, she also uses them to prevent STIs, including HIV. These findings indicated that the women interviewed had some knowledge about the benefits of using modern contraceptives and agreed with findings from previous research such as that by Bogale et al. (2011) that indicated that rural women in Ethiopia had higher knowledge about family planning methods and particularly temporary ones, such as oral pills, injections and condoms.

None of the participants mentioned spacing out conceiving children as one of the reason to start using modern contraceptives, although this is one of the benefits of family planning methods (Ahmed et al., 2012; Ayanore et al., 2016; Darroch & Singh, 2013; Guttmacher Institute, 2015; Shah, 2010; Shantya et al., 2008; WHO, 2015). None of the participants mentioned being exposed to or having knowledge of permanent contraceptive methods such as female or male sterilisation or having heard about emergency contraceptives. Although the women interviewed in this study displayed general knowledge about the benefits of family planning methods, particularly condoms, which has the dual protection function of preventing both pregnancy and HIV infections and STIs, its use was low, inconsistent and not effective. This is in line with findings from a recent study on contraceptive use conducted in rural Kwazulu Natal, South Africa (Ndinda et al., 2017) that suggested that the availability of condoms and information about their dual protection function did not necessarily mean that their use would be effective and consistent (p.11). In addition, findings from this study are also similar to findings from Bogale et al. (2011) that mentioned that despite 88% of the 1008 married women interviewed in both rural and urban areas of Ethiopia having great knowledge of the benefits of family planning methods, the prevalence of contraceptive use was considered low, estimated at 15%. Data from Mozambique DHS (2011) showed higher levels of knowledge of modern contraceptives among married women. These data show that Mozambican married women have better knowledge of oral pills followed by injections and condoms, estimated at above 80%. Few women knew about female sterilisation, IUDs and emergency contraceptives, estimated at 25%, 33.3% and 8.6%, respectively. However, higher levels of knowledge about modern contraceptives among women is inversely accompanied by low rates of modern contraceptive use (Ayanore et al., 2016; Darroch & Singh, 2013, MISAU et al., 2013; Population Reference Bureau, 2008; Santhya et al., 2008). Thus, the women interviewed in this study, despite having knowledge about the different modern contraceptive

methods and their benefits, reported low and inconsistent use of some of these methods available to them. These women described multiple factors that influenced their ability to decide to use the devices effectively and consistently. These are discussed in the next section.

# 6.3.2.1. Self-reported elements affecting consistent and effective use of modern contraceptive methods

Research literature on contraceptives showed a low uptake of modern contraceptives among women at reproductive age in the SSA region, particularly among married women (Cau, 2014; Darroch & Singh, 2013, Mboane & Bhatta, 2015; MISAU et al., 2013, 2015; Population Reference Bureau, 2008; Santhya et al., 2008; UNICEF, 2005). Multiple factors were identified by scholars to explain the situation. Studies have identified cultural beliefs and other community elements that influence women's decision to seek and consistently use modern contraceptives (Aransiola et al., 2014; Ayanore et al., 2016; Cau, 2014; Cau, 2016; Eliason et al., 2014; Kabageny et al., 2014; Mak et al., 2008; Ward et al., 1992).

In line with findings from the literature above cited, the majority of participants in this study argued that the community in Namaacha has a positive outlook of modern contraceptive methods because they understand the benefits for women's and families' well-being, among other reasons. Thus, findings from this study are in line with findings from Cau (2014) that used data from Mozambique DHS (2011) and reported that women experiencing a community environment that embrace and disseminate information about modern contraceptives and their benefits are more likely to use some kind of method of modern contraceptives compared to those who were not exposed to family planning information in their communities. However, the women interviewed, like Claudia, believed that deep in rural Namaacha negative perceptions about modern contraceptives still persist and influence women's decision to use the devices. Some of these negative beliefs cited by participants included sex without condoms being more pleasurable and being a sign of trust and loyalty to their husbands; additionally, there is the practice of polygamy that incites women to bear as many children possible. On the other hand, Lucia mentioned that the negative belief that modern contraceptives can cause infertility may influence women's decision to use them. She believed these negative beliefs are enforced in the community by people who still do not trust these modern devices. Therefore, women that hold and follow those beliefs are more likely not to use modern contraceptives in compliance with the customary norms. Similar to my findings, studies by Plumer et al. (2006) and Kabageny et al. (2014) argued that in Ghana and Tanzania it is an ancestral duty for couples to produce children, thus limiting the use of modern contraceptives. Scott's (2009) study about socio-cultural factors that affect sexual behaviour in Africa, among other negative beliefs about contraceptives, pointed out the belief that sex without condoms represents sign of love and trust between couples. Other studies argued that fear of permanent infertility, death and being infected by HIV through commercial condoms are some of the beliefs related to the side effects of modern contraceptives (Kabagenyi et al., 2014; Mak et al., 2008; Mosha et al., 2013; Plumer et al., 2006). Those beliefs will influence women's decision to use modern contraceptives.

On the other hand, this study's findings seem to corroborate the findings from other studies (Kaida et al., 2005; Lakew et al., 2013; Machiyama & Cleland, 2013; Ndinda et al., 2017) which indicate that religious beliefs can also influence women's decision to use modern contraceptives. In addition, findings from the study by Agadjanian (2010) conducted in Mozambique that argued that religious women are more likely to use modern contraceptives than non-religious women are similar to findings from my study. The findings from the study by Agadjanian (2010) with data collected in 2008, in Chibuto district, located in the south region of Mozambique near my study area, found that 20% of women interviewed and who reported being affiliated to a religion were using some method of modern contraceptives. Similarly, findings from this study showed that majority of participants belong to the Zion church and also reported using modern contraceptives as well as acceptance of modern contraceptives among their church peers. For example, Lucia who is Zion indicated that her church, including pastors and other church members motivate women to use family planning services. In constrast, Ana, who reported being Catholic, started using late modern contraceptives. This finding may corroborate findings from a study conducted in Uganda by Kaida et al. (2005) and a study conducted in Ghana by Machiyama and Cleland (2013) that found that Catholics were not tolerant about the use of modern contraceptives and did not promote their use. One may argue that these religious institutions such Catholicism use knowledge from the Bible to guide their members and so may not be interested in supporting women's decision to access those modern devices as would challenge the word of God about women's reproductive duty. However, one may acknowledge that behind the unsupportive position of most religions in promoting openly modern contraceptives among their congregants, church members, particularly women, are more likely to gather before or after services and talk about family planning and motivate each other. This is in line with findings from Kohler (1997 and Rutenberg and Watkins (1997, as cited in Agadjanian, 2010) that argued that church members can educate each other in more effective ways about modern contraceptives during informal gatherings.

Participants in this study all reported a low level of education and the majority did not finish primary school, with the exception of Fatima who finished basic secondary level. This corroborates the findings from the study by Ayanore et al. (2016) that mentioned that women's educational level influences their decision to use modern contraceptive methods since it affects their ability to read and understand instructions regarding contraceptives and adhere to followup visits to the health centre. All participants did not complete secondary education and reported inconsistent and irregular use of modern contraceptives. The findings from this study are consistent also with findings from Bbaale and Mpuga (2011) that argued that women who complete secondary education are 14%-17% more likely to use modern contraceptives than their counterparts with no secondary level completed. Similarly, findings from this study seem to substantiate findings from Lakew et al. (2013) and Elliason et al. (2014) and from data from Mozambique DHS (2011) that showed that women with no school attendance were less likely to use modern contraceptive methods compared with women with some formal education. Mozambican data from DHS (2011) and IMASIDA (2015) showed that the proportion of married women using modern contraceptives were higher among women with secondary education when compared to their peers with primary education or none. This finding is consistent with findings from this study that shows Fatima with basic secondary education starting to use modern contraceptives early in the marriage, using it regularly and consistently. On the other hand, her peers like Ana, Antonia and Tomasia with no primary education completed have reported starting to use modern contraceptives late in the marriage, showing the association between women's education level and patterns of modern contraceptive use.

Further to this, participants in this study also pointed out a fear of side effects and of other health related issues caused by modern contraceptive use as one of the factors that prevent women from regularly and effectively using modern contraceptives. For example, the study by Glasier et al. (2003) showed that a disruptive menstrual cycle accompanied by continuous bleeding could result from the use of hormonal contraceptive methods and IUDs. Participants such as Ana, Claudia and Tomasia, who experienced discomfort and sickness due to the use of modern contraceptives, believed that some women decide to stop using or do not consistently use modern contraceptives due to potential side effects. This finding is similar to findings from the literature and validates previous studies on the issue. A study by Ali and Cleland (2010), for example, argued that 30%-50 % of women stopped using oral pills and injections and switched to other methods due to side effects and a fear of other health problems related to their use. Another study by the Guttmacher Institute (2008) indicated that women who are not happy with their contraceptive method of choice are more likely to not use it regularly or consistently. Other examples showed a trend of low consistency and high rates of discontinuation of injectable contraceptive use, breaks in use and method switching (Smith &

Beksinska, 2013). Data from Kenya DHS (2009) showed discontinuation in the use of modern methods by 36% of women users during the first 12 months due to side effects, and 16% of married women were not using contraceptives due to a fear of side effects (Ochako et al., 2015). Those examples corroborate findings from this study that reported a discontinuation in contraceptive use or switching of method due to side effects. For example, due to the fact that oral pills made her sick, Francisca switched to IUD and later on to injections. Claudia started by using pills, which caused sickness, then switched to injectable, which had side effects and later on she stopped using modern contraceptives and switched to traditional methods.

Furthermore, studies have argued that the husband's support in women deciding to use contraceptives increases the chance of them accepting to use the contraceptive method of choice (Shattuck et al., 2011; Stephenson et al., 2011; Wablembo, Notzi, Kwagala, 2011). Men are less likely to initiate discussions about SRH, but they are the ones that will agree with decisions made jointly with the wife or perhaps alone regarding the couple's SRH, including the number of desired children and the use or non-use of contraceptive methods by the couple (Aransiola et al., 2014). Therefore, communication between couples on issues related to SRH is a key factor that influences the husband's acceptance of modern contraceptive use in the family (Elliason et al., 2014; Population Council, 2008). Likewise, other studies also showed evidence of the influence of extended family members in contraceptive use, particularly mothers-in-law (Barua & Kurz, 2001; Ochako et al., 2015; O'Connell et al., 2015; Phiri et al., 2015; Santhya et al., as cited in Santhya et al., 2008).

While reflecting on the barriers that prevent women from effectively accessing modern contraceptive methods, six participants mentioned that they did not have support from their husbands and other family members to use modern contraceptives. Thus, "the less support from husband and other extended family members in motivating women to use family planning methods, the fewer the chances for women to start using effectively modern contraceptive methods." . In this regard, participants in this study indicated that the control and authority husbands exert over their wives prevent them from using modern contraceptives. Ana, mother of eight, one of the eldest participants in this study (46 years old) and who started using modern contraceptives very late in her marriage, shared an experience of having difficulty communicating with her husband since her early stages of marriage. She explained that it was taboo to talk about family planning during that time, and for her it was more difficult because of her lack of information about it.

For Antonia and Joana, husbands with negative beliefs about modern contraceptives can prevent their wives from using the methods. This finding is consistent with previous studies

that discuss the husband's influence in women's decision to use modern contraceptives. For example, a study conducted in Kenya reported that husbands believe that modern contraceptive methods causes health complications such as infertility, birth defects and other bad behaviours such as infidelity and promiscuity (Burke & Ambasa, 2011; Wulifan et al., 2016). Husbands also believe that the use of modern contraceptive methods could cause a loss of sexual pleasure by women and bring problems to the marriage (Wambui et al., 2009). These studies showed that these husbands with negative beliefs about modern contraceptives are less likely to allow their spouses to use the devices as mentioned by Antonia and Joana. Interesting in my study is the fact that the majority of young participants such as Maria, Fatima and Lucia mentioned having support from their husbands to use contraceptives, and they started using them early in their marriages. By contrast, Ana and Antonia, the eldest participants who mentioned not having support from their husbands to use contraceptives, started using such devices late in their marriages. Thus, this study agrees with the finding of the studies by Shattuck et al. (2011) and Stephenson et al. (2011) that argued that husbands' support of women's decision to use contraceptives increases the chance of them accepting the use of contraceptive methods.

A case study conducted in Ghana argued that women in polygamous relationships are pressured to bear as many children as possible. Therefore, husbands and extended family members can violently pressure women not to use modern contraceptive methods to avoid pregnancy (Solo et al., 2005). Findings from the study by Solo et al. (2005) substantiate Tomasia's argument that family traditions such as polygamy might influence women's decision not to use family planning methods. Tomasia indicated that her husband came from a polygamist family and so women are not allowed to use modern contraceptives. The majority of participants in this study indicated that defiance to the husband's and family members' wishes to not use modern contraceptives can expose women to both physical and verbal violence. This is in line with previous studies that argued that violence against women can happen as an imposition of men's sexual and reproductive demands, particularly when couples have few conversations regarding the use of contraceptives and women have a higher unmet need for contraceptives (Bawaa et al., 1999; Rasch et al., 2000; Richter & Mlambo, 2005, Wood & Jewkes, 2006). On the other hand, Aransiola et al. (2014) highlight the pressure from extended family members who oppose the use of contraceptives, using the husband to enforce their decision on behalf of the family. Paula for example, shared the pressure she felt from her husband and mother-in-law to get pregnant and stop using modern contraceptives. However, she decided to defy her husband and mother-in-law's wishes and started using it after discussing the matter with her husband.

Many times, husbands in these relationships have financial power within the household and so may limit women's decision-making power in general household issues or in SRH matters. For example, Aransiola et al. (2014) argued that women's lack of power makes them vulnerable to the social and financial control of men and therefore unable to make decisions regarding the use of contraceptive methods. The study by Lakew et al. (2013:5) argued that wealthy women had two times the probability of using modern contraceptives compared to poor married women. Thus, a systematic review that presents determinants for contraceptive use across West Africa highlights the positive correlation between women's socio-economic status and the use of modern contraceptive use (Ayanore et al., 2016). Findings from my study corroborate evidence from the literature regarding the positive association between women's economic conditions and the use of modern contraceptive use. My findings showed a low rate of contraceptive use among the participants who mostly were poor, worked in low paying jobs and were financially dependent on their husbands. Other studies that highlight women's financial constraints as a factor preventing women from effectively using modern contraceptives argued that poor women can face difficulties paying for transportation when seeking family planning services (Ayanore et al., 2016; Centre for Health Policy, 2014; Ensor & Cooper, 2004). In this regard, findings from this study support evidence from the literature. This is substantiated by Francisca's story, as she had to travel to Maputo to implant her IUD and believed that lack of money can prevent women from accessing family planning services. Similarly, Joana and Maria believed that finances can prevent women from accessing the contraceptive of choice if they live far from the hospital and do not have money to pay for transportation.

According to WHO (2013) a study conducted in Mozambique on user fee abolishment has shown a positive association between the abolishment of patient fees and increased access and use of primary health services by poor communities. This study by WHO (2013) showed that the removal of patients' fees at the primary health care level promotes the early use of these services by patients, reducing delays and waiting periods. Findings from my study seem to validate this finding by WHO (2013). The women interviewed in this study agreed that the provision of free medicines, including the downturn of costs of some medicines as well as the abolition of patient fees motivates women to seek health services such as family planning services. Thus, even the community itself understands that family planning services are provided free of charge and so they motivate women to utilise these services. A previous study aimed at evaluating the impact of the provision of free primary health services indicated that 70% of health related expenses in households in Mozambique were paid in cash (MISAU,

2008). In a debilitated economic environment, where subsistence agriculture is the main economic activity and people have little access to currency, as the case of Namaacha District, it is understandable how such a policy can positively impact the use of health services, with an emphasis on family planning services.

Several studies pointed to the attitude of health providers and the availability of quality health services as determinants of modern contraceptive use among women at reproductive age (Ensor & Cooper, 2004; Maharaj & Rogan, 2011; Alli, Maharaj, & Vawda, 2012). A crosssectional study conducted in Ethiopia in 2013 indicated that study participants who reported being treated badly by health providers were less likely to use long acting contraceptives than the ones who experienced respectful and dignified treatment by health providers (Yalew et al., 2015). Therefore, Tumlinson et al. (2015) argued that the level of assistance provided to family planning users while selecting the contraceptive method of choice will define the quality of services provided and therefore a woman's decision about whether or not to use the devices. In line with these findings from the literature, all the participants in this study did report experiencing good treatment from health practitioners while seeking contraceptives. Women in this study acknowledge the local health authority leadership in the district by its effort to disseminate information about family planning services and facilitate its access for all women at reproductive age. Participants described participating in community workshops organised by the health department and other CBOs about family planning methods whether in their community precincts or at the local health centre.

Participants also recalled being visited by community health practitioners and being provided with contraceptives and general information about SRH. This can be seen as a positive outcome of government actions to provide family planning methods, and so patients' reflections towards barriers to accessing such methods are described mostly through patient individual barriers and their socio-economic circumstances rather than the supply/provider side. Barriers from the provider side that affect women's use of contraceptives in Mozambique were reported in previous studies (WHO, 2013; WHO, 2014), and this study did not investigate in detail the impact of the current health infrastructure and quality of family planning services available to women. Therefore, this study acknowledge that this is a partial contribution for the debate and interviews with the provider, representatives would be needed to accurately validate these findings. In this regard, some studies highlighted a shortage of contraceptive stock, and ultimately unavailability of women's method of contraceptive of choice as a contributing factor to the poor use of modern contraceptives among women (Bawah et al., 1999; Plummer et al., 2006; Sonalkar et al., 2013). The example from Francisca's story where she had to travel to

implant her IUD due to the unavailability in her local health centre substantiates evidence from the literature that identified the quality and availability of modern contraceptives of choice as a determinant of women's contraceptive use. On the other hand, Claudia reported that she stopped using modern contraceptives due to the negative side effects of pills and injections. With an efficient provision of the different methods of contraceptives, Claudia should be able to choose a different method that is less harmful. However, due to the limited options in Namaacha District, that can explain her uncertainty of using modern contraceptives again. All in all, participants were happy with the services offered by providers, despite the negative results for some women from its use. Negative comments and experiences regarding health provider treatment and quality of services as determinants of health access were described by participants from this study mostly during the section about ANC attendance. This will be further discussed in the next section of this chapter.

#### **6.3.3.** Female experience of ANC attendance

This study used data from 10 women interviewed in the course of two weeks in the district of Namaacha to examine their experience of ANC attendance during pregnancy. Findings from this study showed that the fertility rate among participants was considered high, varying from one to eight children per women interviewed. This finding corroborates the study by MISAU et al. (2013) that identified Namaacha as the district with the highest fertility rate in Maputo province. With a majority youth population as well as higher marriage rates, data from DHS (2011) indicated that the fertility rate in the district was estimated at approximately 5.9 children per woman (MISAU et al., 2013). This study also validates recent findings from MISAU et al. (2015) with data extracted from (IMASIDA, 2015) that also found higher fertility levels in the country, estimated at 5.3 children per women. On the other hand, these data from IMASIDA (2015) showed that the general fertility rate among women were extremely high, estimated at 187 per 1000 women. For the rural areas, IMASIDA (2015) found fertility levels higher than the national rate and were estimated at 6.1 children per woman, whereas in the urban areas that estimate was lower at 3.6 children per woman. However, although the fertility levels are currently high in Mozambique, IMASIDA (2015), there have been reports of a reduction in those estimates during the past years (MISAU et al., 2015). For example, the fertility levels in the country were estimated by DHS (2011) at 5.9 per woman and reduced to 5.3 in 2015 (MISAU et al., 2015). This may be attributed to the partial success in the implementation of the family planning program by the government and partners who provided modern contraceptives free of charge to help women with a higher unmet need for contraceptives to achieve their fertility goals.

Similarly, findings from our study substantiate research findings from the SSA region and Mozambique that shows a pattern of teenage pregnancy in the region. All participants in this study were mothers before completing 18 years old, proving findings from the Mozambique DHS (2011) and IMASIDA (2015) that show higher fertility levels in Mozambique among women between 15 and 19 years of age estimated at 194 per 1000 women. This proportion is much higher in rural areas, estimated at 230 per 1000 women. On the other hand, findings from this study corroborate findings from UNICEF (2015) that showed a positive association between early marriage and teenage pregnancy and described Maputo Province (where the district of Namaaacha is located) as one of the provinces in Mozambique that experienced an increase in the rates of adolescent pregnancy. In order to accomplish their motherhood duties within marriage as customarily expected (Clark et al., 2006) young married women start having children early in marriage, which increases the risk of health complications derived from pregnancy and ultimately increase the instance of maternal and child mortality (UNICEF., 2015; WHO., 2011).

Therefore, participants in this study who all reported attending ANC during some of their previous pregnancies, shared similar reasons in deciding to attend ANC during pregnancy. The majority of participants stated that they were positive about their pregnancy prior to attending ANC. In this regard, nine participants mentioned that they decided to attend ANC in order to check their health and that of their unborn baby. Exceptionally, Antonia indicated that she started attending ANC to test for pregnancy due to her uncertainty. On the other hand, participants in this study recalled being exposed to different sources of information about pregnancy and maternal care. Information provided at the health clinics, during community workshops, in the local media and so on, enabled women to understand the benefits of ANC, so they decided to attend during pregnancy. Ana felt regretful for not having the current knowledge of ANC benefits in her early stages of marriage.

Although participants reported understanding the benefits of ANC and reported always finding time to attend their appointments, the majority of women recalled starting late in pregnancy, and in different periods of their gestation. The women started using ANC services between three and six months of gestation. Exceptionally, Paula started attending ANC during the second month of her second pregnancy to treat the health complications derived from that pregnancy (see Table 5 in Chapter 5). Only three participants, namely Ana, Claudia and Lucia, mentioned starting ANC during the third month of pregnancy. None of the elder participants interviewed reported attending early ANC, such as the case of Antonia, Francisca and Tomasia (48, 37 and 38 years of age respectively) who described starting at 6<sup>th</sup>, 4<sup>th</sup> and 5<sup>th</sup> month of

some of their gestation, respectively. This finding corroborates results from Pell et al. (2013) that found that elder women are particularly at risk of starting late ANC. In addition, these findings are consistant with findings from Mozambique DHS (2011) and IMASIDA (2015) that reported higher levels of ANC early initiation and attendance among young mothers compared to the older ones.

Despite ANC being provided free of charge by the formal health system of Mozambique, the majority of participants in this study reported attending ANC services during the second trimester of pregnancy. This may imply at first glance the existence of barriers that prevent women from accessing formal health care during pregnancy. Hopefully, all participants mentioned attending at least one ANC consultation. This may also imply that women who married early and reside in Namaacha District have limited access to ANC services provided by the formal health system and still face health risks derived from the pregnancy. However, none of the women reported having attended ANC during all their pregnancies or having attended four or more ANC consultations during some of their previous pregnancies. This seems to imply that these women did not seriously assimilate the information about the benefits of regular pregnancy check-ups. On the other hand, it may suggest that these women have access to alternative health and social interventions, which in their view are more trustworthy or more easily accessed than the formal care provided for pregnant women. The WHO (2001) model of ANC proposes four visits to ANC services during normal pregnancies, with the first ANC appointment during the first trimester of gestation. Moreover, findings from this study are also consistent with the results of other studies (WHO, 2003, 2013), which suggests that in Developing Countries, particularly the SSA region, ANC services are not yet available for all, with disparities in the level of ANC attendance between countries. Data for the SSA region showed that the proportion of women attending four or more ANC visits is lower than the ones attending these services at least once (Tarekegn et al., 2014; UNICEF, 2016; WHO,2006c; WHO,2006d; WHO, 2013). The study by Tarekegn et al. (2014) indicated that the proportion of pregnant women attending at least one ANC visit, provided by skilled staff have been increasing during the past decades in developing regions from 63% in 1990 to 71% in 2000, and later to 80% in 2010. For Africa, data for the period 2005 to 2012 estimated the proportion of pregnant women attending four or more ANC visits at 43% (WHO, 2013). Disaggregated data for the region showed that in countries such as Ghana, Kenya, Mozambique, Namibia, Nigeria, South Africa and Zimbabwe more than 60% of pregnant women had visited more than four times ANC services (UNICEF, 2016). Previous data from Mozambique DHS (2011) reported that 51% of women had attended four or more times ANC during pregnancy.

Additionally, findings from my study support findings from other studies (MISAU et al., 2013, 2015; WHO, 2013) that argued that despite evidence of a decrease in ANC attendance in some countries from the SSA region, Mozambique has reached more than 90% of pregnant women who attended at least one ANC visits. Women in this study reported during ANC appointments, being consulted by a skilled health provider, in most cases nurses specialised in the provision of maternal and infant health services. All the participants reported visiting ANC services at least once during their previous pregnancies. Similarly, findings from this study corroborate findings from MISAU et al. (2015) that reported that almost half of women at reproductive age and residing in the rural areas of Mozambique did not visit ANC four or more times. This can be explained by the effect of multiple determinants that vary by country and region. For instance, the study by WHO (2003) argued that the influence of the different determinants of ANC attendance vary by site and cannot be evaluated individually, but rather as a group of factors determining women's decision to utilise ANC services. On the other hand, the data extracted from UNICEF (2016) about ANC in some SSA countries were not disaggregated at the micro-level by province (rural/urban) or district but rather only at the national level. So disparities between countries and regions need to be considered when analysing and reflecting on those results. On the other hand, findings from this study only reported women visiting more than one ANC appointment at an early stage of pregnancy due to complications derived from it. This is the case of Fatima who had a complicated pregnancy and had to visit the health facility in Namaacha several times during her pregnancy and later transferred to Maputo to treat some of these complications. This finding corroborates the findings from Griffiths and Stephenson (2001) that argued that individuals are motivated to use ANC services when they understand the benefits of the services for their and their infant's health.

Furthermore, participants in this study described some of interventions they were offered during their ANC appointments. These included: measurement of the size of the belly; HIV and malaria tests; thep provision of medicine such as Ferrous sulfate + folic acid; mosquito nets; blood and urine tests; and weight measurement. Although participants could not describe clearly and technically all the procedures and services they were offered during their ANC consultations, the list provided by participants included similar ANC interventions developed by WHO and highlighted by Biza et al. (2015). The ANC model package of services lists a set of different health interventions pregnant women must be offered during the four recommended visits for ANC during normal pregnancies (for further details about the ANC list of health interventions see Table 1 in Chapter 1). Participants did not mention clearly if they were given

an obstetric examination, vaccinations or other more specialised tests. Their descriptions were normally elusive, less detailed and with less information about the reasons they were given a specific procedure. This may be due to difficulties remembering the terminology used for some of the technical procedures or perhaps a lack of understanding of these procedures. These participants had a low level of education and would face difficulties in reading and understanding technical information about the health services they used. These findings are consistent with findings from the study by Pell et al. (2013) about the determinants that influence ANC attendance in Ghana, Kenya and Malawi. The study by Pell et al. (2013) indicated that participants' description about the ANC interventions they were offered were vague and provided no detailed information about the objectives of these interventions. Additionally, findings from this study seem to corroborate findings from other studies (Karkee et al., 2014; MISAU et al., 2013; WHO, 2003) that reported a low quality of health interventions provided during ANC visits. For example, results from a study conducted in the SSA region, with data extracted from DHS for the period of 1999-2001 showed that only 27% of Ethiopian women received information about warning signs of pregnancy and 21% had taken urine samples (WHO, 2003). Other examples from Malawi and Uganda showed that only 43% and 15% of women respectively had taken blood samples for further exams (WHO, 2003).

# 6.3.3.1. Self-reported elements affecting women attendance of ANC during pregnancy

This study identified multiple conditions that can influence women's decision to seek and utilise ANC services during pregnancy in Namaacha District. These components include: socio-economic conditions and location of health centres; the occurrence of health complications during pregnancy; women's personal beliefs and behaviours; quality of ANC provided in the health centre, including treatment by health providers; husband and family support; and community support. Previous studies (MISAU et al., 2013, 2015; Pell et al., 2013; Tarekegn et al., 2014) that compared the level of ANC attendance by women from different education backgrounds found a positive association between women's education level and women's ANC attendance during pregnancy. In this study, despite the majority of participants reporting low education levels, they all reported attending ANC in some of their pregnancies. Thus, this may imply that education plays a secondary role in influencing women's decision to use ANC services. However, education may influence the level of women's assimilation and their decision to follow up provider recommendations and return to the health facility for other ANC consultations.

Participants in this study reported seeking ANC during some of their previous pregnancies because they understood the benefits for their and the unborn baby's health. These participants did not finish secondary education, and some did not finish primary education, and Claudia could not read and write. These participants also described at some point in their lives using and trusting more traditional options to deal with pregnancy and health complications derived from it. However, by accessing information about maternal care services available at health centres, and about the benefits of delivering with the assistance of skilled health staff, they decided to attend it later in their pregnancies. These findings validate findings from other study conducted in the SSA Africa region (Tarekegn et al., 2014) that found that women with higher levels of education reported attending more ANC consultations than women with lower levels of education. On the other hand, findings from this study substantiate findings from previous research conducted in Mozambique (MISAU et al., 2013, 2015) that shows that despite higher levels of ANC attendance among women with different levels of education, it was evident that women with lower levels of education reported attending fewer ANC appointments than women with higher levels of education. This may imply that the higher the level of education a woman attains, the more informed, confident and empowered she will be to start attending ANC consultations early in pregnancy.

This study's findings are also consistent with findings from other study (Population Council, 1996) that argued that women with no education are unable to exercise their rights, compromising their well-being. In this study, despite have reported attending at least one ANC consultation, women were not fully exercising their rights of attending four ANC consultations during normal pregnancies as recommended by the WHO model. Thus, it may assumed that education level does not influence women's decision whether or not to attend ANC during pregnancy since all participants reported attending ANC. However, findings from this study showed that the low education level of the majority of participants is associated with delaying the initiation of ANC for most of participants, showing that level of education influences in women's decision to seek ANC early. On the other hand, this study agrees with the findings by Rai (2015) that mentioned that educated women are more knowledgeable about health complications and their symptoms during pregnancy, and so act on it early, which means seeking ANC early in pregnancy. In addition, participants in this study reported that despite starting ANC consultations late, they did so they could get the patient ID card to guarantee the delivery of their babies in the maternity ward with the assistance of a skilled health provider. This finding showed that participants understand the importance of delivery in the formal health system, and so that the only way to guarantee this is through the patient card provided

by the nurses during ANC visits. Thus, the desire to have an institutionalised delivery may influence women's decision to initiate ANC consultations. These findings are consistent with findings from other studies (Gill et al., 2007; Simkhada et al., 2010; Tarekegn et al., 2014; WHO, 2003) that argued that the use of ANC services increase the likelihood of women delivering at health facilities in the presence of a skilled provider. This finding is also similar to findings by Biza et al. (2015) conducted in Mozambique that reported that among other reasons, women seek ANC in order to obtain a patient card so they can guarantee their baby's delivery at the formal maternity ward.

This study also found that socio-economic conditions were an important determinant in influencing women's decision to attend a full regime of ANC appointments. The report by CIP et al. (2016) that discusses the costs of corruption to the Mozambican economy indicated that the country was facing difficulties in managing their national budget and fund the main sectors of government intervention. This means the government had a deficit to finance their national budget and so the amount allocated to the priority sectors of government interventions (health, education, agriculture, infrastructure and roads, workers' wages and payment of debt) was limited. The study by CIP et al. (2016) discussed some of these constrains the country was facing, which include: the country's lucrative extractive industry being in turmoil due to decreasing the price of commodities such as oil, gas and electricity, affecting the overall business environment in the country; the depreciation of the Mozambican currency resulting in higher costs of life; the reduction of tax retention by the government due to the weak business environment in the country; uncertainty among international and national investors about the country's health and business affairs. Thus, the business sector in the country is in its low stage of productivity affect people's quality of life. This study found evidence of the impact of the country's economic crisis as reported by participants such Ana and Francisca, who have crossborder small businesses, as well as by the direct experience the research team had while collecting data for two weeks.

Participants in this study reported that the current economic and political crisis in Mozambique increased the cost of life and made it difficult for them to pay for basic household expenses such as transportation, food, water and electricity. Thus, these participants believed that women's financial status can, as well, influence their decision to utilise ANC. As poor as it is, Namaacha District lacks sufficient health posts to cover the entire population of the district that lives densely separated. Participants also mentioned that the transportation system in the district is very precarious and makes it difficult for them to travel from their location to other areas, such as the health centres, while seeking maternal and child care services. Participants

such as Antonia, Fatima and Joana believed that despite being free of charge, the location of the few health centres and maternity wards in the district makes it difficult for some women to attend ANC during pregnancy and ultimately delivery at the health centre. These participants argued that some women cannot afford to pay for transportation while seeking ANC in health posts located far from their residences. Thus, in cases that the women and their families are economically vulnerable, the chances of women attending ANC regularly are reduced. Participants in this study also added that these women belonging to a low economic status still carry out their household duties during pregnancy, and with the exhaustion of the physical work, they may feel too weak to walk to the health clinic and ultimately decide to postpone or not attend ANC consultations at all. This finding is similar to findings from other studies (MISAU et al., 2013; O'Connell et al., 2015; Rai, 2015; Singh et al., 2012; Tarekegn et al., 2014; WHO, 2003) that argued that women belonging to the highest level of wealth were more likely to use ANC services with skilled staff assistance when compared to women from lower socio-economic strata. This study's findings also validates national data from Mozambique about the prevalence of ANC attendance by women's economic status, extracted from MISAU et al. (2013), that indicated ANC attendance rate ranges from 82.6% for women belonging to the lowest level of wealth to 97.5% for women belonging to the highest level of wealth. Although data from MISAU et al. (2013, 2015) described higher rates of ANC attendance among both groups of women, it was visible that women belonging to the lowest level of wealth have attended ANC less frequently than women belonging to the highest levels of wealth. Similarly, findings from this study showed that all participants belonging to the lowest level of wealth had reported using ANC less than four times during their normal pregnancies.

Health morbidities women experienced during some of their pregnancies was found to be another relevant factor that influenced women's decision to start attending ANC. A report from UNICEF about child marriage and adolescent pregnancy indicated that young married girls tend to become pregnant soon after marriage, when they are not mentally or physically ready to be mothers, increasing the risk of mortality and morbidity for the mother and the baby (UNICEF, 2015). Seven participants from this study described experiencing a variety of health conditions during their pregnancies. These conditions included depression, stress, high blood pressure, weakness, bleeding, anaemia tiredness, dizziness, fever and swollen legs. Findings from this study corroborate evidence from research conducted in Developing Countries (Population Resource Center, 2001; UNFPA 2007) that reported that 40% of women having children every year will suffer from health complications related to pregnancy and 15% from those complications may be deadly. This study's findings are also similar to findings from other

studies (Braxter & Moodley, 2015; Durojaye, 2011; WHO, 2011) that suggested that despite improvements in women's health, maternal mortality and pregnancy complications are still a health burden for women who marry early, particularly in low and middle-income regions. Thus, these participants indicated that ANC consultations were beneficial to them to detect and treat some of these complications as Paula, Fatima and Tomasia narrated. This finding is consistent with research data that emphasise the importance of ANC in detecting, treating and curing health complications that may occur during pregnancy and ultimately reducing potential maternal deaths (Baxter & Moodley, 2015; Gill et al., 2007, WHO, 2012).

Participants who reported attending ANC to treat some of the health complications that arose during pregnancy recognised the signs in their pregnancy as problematic and decided to use maternal health services early in their pregnancy. Fatima, who had the highest level of education among all participants (10th grade) described initiating ANC early because of her awareness of the negative health signs she had during pregnancy. Thus, Fatima described going through a complicated time during her pregnancy with extensive medical care, and ultimately having a successful outcome with the delivery of a healthy baby girl at the maternity ward. Similarly, Paula indicated starting ANC attendance early to treat the anaemia condition she had. These examples corroborate findings from other studies (Pell et al., 2013) that confirm the significance of health complications that occurs during pregnancy as motivator factor in women's decision to visit health clinics early, particularly the ANC consultations. On the other hand, Lucia's narration showed how her decision to delay ANC till the 6<sup>th</sup> month of gestation as well as ignoring the signs of distress during her pregnancy led to her abortion. This finding is in line with findings from the study by Pell et al. (2013) that argued that lack of knowledge regarding pregnancy symptoms was one of the reasons for women to delay the use of ANC services or not to use them at all. Lucia ignored the pains she had for a long time because she felt they were not serious. This delayed her visits to ANC and later caused her abortion. This substantiates findings from other studies (Baxter & Moodley, 2015; Durojaye, 2011; WHO, 2011; WHO, 2015) that argued that women who married early are at greater risk of developing health complications derived from pregnancy that ultimately could result in the death of mother and child.

Moreover, women's personal beliefs, knowledge and attitude during pregnancy were found to be another important determinant in women's decision to attend ANC as described by study participants. Despite being aware of the benefits of regular pregnancy check-ups, some women seem to hold personal beliefs that may prevent them from attending ANC. As Lucia mentioned, she believed her pregnancy was normal despite the pain she had in her belly. Other

participants such Tomasia and Claudia still trust in alternative medicine and so they are likely to decide to use alternative medicine over the one provided at the formal health system. These women seem to have limited knowledge and understanding of the real benefits of formal pregnancy care when compared to alternative methods. This may be explained by their low level of education that can limit their understanding and ability to attend proper care during pregnancy. This is in line with findings by Greenaway et al. (2012) that argued that women's education can positively influence the level of knowledge related to maternal health services acquired. In addition, results from this study found that women who married early may decide not to attend ANC for fear of being chastised and discriminated against, particularly if the pregnancy occurred during adolescence. This was the case of Tomasia who described attending ANC late because she was ashamed of her pregnancy. This finding is consistent with findings from the study by Pell et al. (2013) that argued that pregnancy disclosure influenced the time of use of ANC, and young women have a propensity to hide pregnancy to avoid negative comments and deal with the consequences of it. Findings from this study also corroborate findings by O'Connell et al. (2015) that argued that knowledge related to maternal health issues is one influential factor in women's decision to use ANC services. Additionally, Fatima, Lucia and Maria mentioned that the discomfort some women feel by being naked in front of strangers may prevent them from attending ANC during pregnancy. This means women's personal beliefs, attitudes and assimilation of the message regarding the benefits of ANC are significant factors in influencing women's decision to start using these services. To deal with some of these challenges that prevent active participation of women in these services, the local health services in the district list female nurses at the front of these services' provision so women can feel comfortable to undress and be examined. This was reported by some of the women interviewed.

Furthermore, findings for this study indicated that the health provider's attitude and quality of service provided during ANC consultation is also a relevant factor in influencing women's decision to attend ANC. Participants in this study reported experiencing or hearing about poor treatment from health providers during their ANC consultations. Such is the case of Ana, who recalled hearing other women being shouted at by the nurses during the delivery of one of her babies. Tomasia also described being yelled at and bullied by the health practitioners assisting her during her baby delivery. Other participants such Francisca and Fatima, who did not report experiencing poor treatment from health providers during ANC also shared stories of unprofessionalism from some of the health professionals in the area who refused to assist some pregnant women or who delayed assistance. These findings validates

findings from other studies (Alli, Maharaj, & Vawda, 2012; Biza et al., 2015; Ensor & Cooper, 2004; Karkee et al., 2014; Pell et al., 2013) that discuss the influence of the provider's attitudes and preparedness as well as the quality of services in women's decision to use maternal health services, including ANC. In this regard, a study by Pell et al. (2013) argued that health staff's position and attitude towards patients affect the way women perceive the information provided by the staff and then decide to use ANC services during pregnancy. One of the reasons given by respondents for not using ANC services and possibly delivery with assistance of skilled health staff was the fear of judgement for not accessing services, particularly if the women started attending ANC services later in pregnancy (Pell et al., 2013). Fatima narrated a story about a woman that was refused delivery at the local maternity ward because she did not have a patient card and later she and her twin babies died. Stories similar to the one shared by Fatima might be shared between women and so affect patient trust of the formal health centre, influencing their decision to attend ANC and deliver at the health centre. On the other hand, Ana and Claudia also described other barriers from the provider's side that prevent women from attending ANC that include the long waiting period women have to bear so they can be assisted by a health provider and a shortage of health professionals to reach the demand. This is consistent with findings from other study conducted in Mozambique (Biza et al., 2015) that found that staff shortages, long wait times and lack of privacy of the exams rooms were also barriers that prevent them from seeking ANC services (Biza et al., 2015).

Husbands, including extended family and community support, were found to be a significant determinant in women's decision to attend ANC during pregnancy. Although the majority of participants in this study reported having support from their husband, family members and other community members, they recognise the influence of these individuals in women's decision to attend ANC early in pregnancy. Participants such Francisca and Maria described having support from their husbands to attend ANC as well as from their mothers and other extended family members. They described living in a community where the majority of its members, including elders, were aware of the benefits of ANC for women's and babies' well-being, so they encourage women to access these services during pregnancy. On the other hand, few participants described not having support from their husbands, but they claimed the husbands never prevented them from doing so. Therefore, findings from this study corroborate findings from other studies (Chattopadhyay, 2012; O' Connell et al., 2015; Pathfinder et al., 2013; Pell et al., 2013; Upadhyay et al., 2014; Wai et al., 2015) that reported the husband and extended family influence in women's decision to attend ANC services.

All the participants in this study reported attending ANC and also reported having support or no objection from their partners or other family members to attend these services. Thus, this seems to substantiate the positive influence of husbands and other peers in supporting women's decision to attend ANC. However, the majority of participants who believed that women should decide on their own to attend ANC also believed that the decision of ANC mostly fell under women's responsibilities, with the approval or consent of the husband and consultancy or advice of other peers. This is consistent with findings from the study by Upadhyay et al. (2014) that argued that both women and husbands were the main decisionmakers regarding women's maternal health rather than the mother-in-law. The study stated that husbands were more influential among women adolescents and young adults in deciding to use ANC services and delivering in health facilities. On the other hand, findings from this study showed that elder participants were more likely to decide on their own to attend ANC services, as narrated by Ana, Claudia and Tomasia, who, despite having no support from their husbands, the husbands also never objected to their decision to attend ANC. This finding also corroborates findings from (Upadhyay et al., 2014) that argued that adult women themselves would make decisions regarding their own maternal health matters, including the decision to attend ANC. Although previous studies (O'Connell et al., 2015; Simkhada et al., 2010) reported the influence of mothers-in-law in women's decision to start using ANC services, this study did not find any relevant association of their influence. This may be explained by the favourable social environment of the area that accepts and encourages women's attendance of ANC.

In summary this study found a positive prognosis regarding women's attendance of ANC during pregnancy in Namaacha District. Participants reported having support from their community and respective husbands to utilise ANC during pregnancy. Participants did not report attending four or more times ANC appointments during normal pregnancies as recommended by the WHO ANC model. However, they did report attending at least once during some of their pregnancies. The current struggle includes motivating women to start attending these services earlier in their pregnancy. On the other hand, it also means encouraging the health sector in the district to improve the quality of services provided as well as identifying channels to persuade women to continue the follow-up consultations. From the participants' stories, despite recognising and being grateful for the free maternal services available to them during pregnancy through government and partner channels, they are still aware of the personal and external barriers that may prevent them from starting to attend the appointments early or follow up with their consultations. These barriers were presented in this chapter in relation to

the determinants considered by the theory of gender and power as well as in line with research literature.

## 6.4. Limitations of the Study

The study was conducted outside South Africa, and thus, time constraints and a language barrier were some of the difficulties faced during the data collection process and analysis. Prior to data analysis the transcripts from participants' interviews were mostly conducted in Xichangaan and had to be transcribed into Portuguese and later into English. On the other hand, the majority of participants in this study did not speak Portuguese fluently but could speak and understand Xichangaan fluently. This was solves by recruiting a female research assistant who was born in Namaacha District and could speak fluently and understand both Xichangaan and Portuguese. On the other hand, the process of gathering the gatekeeper letter from Local Government authorities, took more time than expected (about two months). This delayed the submission of the research proposal and consequently ethics clearance to conduct the study. Meanwhile, the principal researcher had to adjust the study time frame, postponing the data collection process.

A limitation of funds was also a barrier since Mozambique was facing an economic crisis in the country, making the logistics of organising the field work more expensive than expected. Personal funds were used during data collection. The research team felt that time constraints would not allow them to engage in seeking funds from exernal, formal sources due to the bureaucracy of the process. Transportation was an issue since not all the interview sites had a flexible route that would allow the research team to access them easily. The district of Namaacha does not have an efficient transportation system. People depend on public transportation and private cars that travel to specified routes. The other routes with no public transportation can only be accessed by walking or using bicycles. To overcome this, the research team conducted the field work using alternatives to reach the participants, including walking, taking public transportation or even hiring a private car.

Due to the nature of the study and limited funds, it was not possible to interview all the selected 12 women who were married before 18 years of age as prescribed in this study proposal. Therefore, the results of the study cannot be generalised to the entire married population of Namaacha District. However, data interpretation can be contextualised due to the fact that women interviewed majority came from same socio-economic background and have access to the same type of maternal health services and so the research team felt that the 10 interviews could provide valid results.

The study by Daymon and Holloway (2002) suggested that when collecting data through human interaction, it is important to pay close attention to ethical issues, because there are inherent problems and dilemmas related to the inductive and holistic nature of qualitative research. During data collection the research team was not welcomed in one of the participant's house because the in-laws were not happy with our presence. We found the participant busy cleaning the yard and although one of the activists had spoken with her previously about our intention to interview her, she refused, arguing that she could not stop doing her household chores to talk to us, especially with her husband family around. To maintain her integrity and follow ethics procedures, which include her right to refuse the interview, the research team did not conduct the interview. Due to time constraints the team was unable to reschedule the interview.

Another limitation from this study is the fact that one cannot generalise the current stage of implementation of maternal services in Namaacha District by only looking at the participants' side (patients). A provider's perspective, which includes NGOs providing SRH services in the district, husbands and mothers-in-law, would be needed to effectively give evidence of the influence of husbands and extended family in women's decision to seek and utilise maternal health services in Namaacha. On the other hand, since participants shared in retrospect their experiences of contraceptive use and ANC attendance, they may not have recalled accurately and likely be one of the biases encountered in this study. However, findings from this study can be validate and found credible since they corroborate findings from previous studies conducted in Mozambique (Biza et al., 2015; MISAU et al., 2013, 2015; UNICEF, 2015) and that used both qualitative and quantitative methodologies, with a study population that included not only women but other stakeholders such as health providers, developmental partners and NGOs.

For this research, due to the nature of the research and sensitivity of the issues studied, we may have encountered difficulties obtaining reliable information from participants. They could provide false statements, leading to bias. This was solved by selecting reliable participants identified through the help of women activists working in a local NGO that act in the area of women's SRH in Namaacha District. Additionally, by ensuring the participants of the confidentiality of the process and that their integrity was guaranteed, this may have motivated them to share truthful information with the research team. All in all, despite limitations, the study was conducted following ethics protocol for qualitative research during the conceptualisation, implementation and presentation of the final draft.

### 6.5. Strength of this Study, Implications for Policy and Further Research

Despite limitations previously cited, this study also showed relevance by contributing to the knowledge of current academic and perhaps medical discussions regarding the effects of early marriage in women's well-being, particularly SRH. This study is relevant by the seriousness and relevance of the study aimed at the African continent, in a time when scientific evidence shows higher levels of early marriage practices in countries such as Mozambique where girls' and women's rights are not fully exercised. The negative consequences of early marriage for Developing Countries have alerted the countries affected by this practice to the need to develop and implement actions to prevent and end this practice. Apart from the vast international agreements and interventions to end early marriage, the new recent commitment made by countries from the SSA region, including Mozambique, to fight and end early marriage practice was materialised with the international conference on early marriage and its impact for girls' well-being, held in May 2017 in Maputo, Mozambique.

The study by Svanemyr et al. (2015) argued that there are still knowledge gaps in identifying the best strategies to end early marriage and its negative effect on women's and children's health. Thus, there is a still need for further evidence-based research to better understand the issue of early marriage practice and be able to identify functional strategies to end the practice. The research team did not come across an old or recent study conducted in Namaacha District that focuses on maternal health utilisation, targeting women who married early. This is consistent with findings from Mozambique (Conselho de Ministros, 2015) that indicated that one of the weaknesses of the country's efforts to fight early marriage is the lack of disaggregated data about early marriage occurrence in the country. Data from Mozambique show higher rates of early marriage prevalence in the north region of the country. However, our findings redirect the discussion about early marriage by also focusing in the impact of the practice for women's well-being in the south region of Mozambique, sometimes neglected by presuming that it is better off than the poor north region of the country. Thus, there is a need to investigate the influence that the location close to the borders such as Namaacha District has in fuelling the practice of early marriage since the district depends greatly from the commerce between borders and remittances from locals working in South Africa or Swaziland. How do men from Namaacha District and working in South Africa and Swaziland perceive early marriage and women's exercise of SRHR? These questions can be answered in future research conducted in micro study areas so that a deep understanding of the issues can lead to strategies to end the problem. On the other hand, findings from this study can inform social intervention programs run by the government and other social actors about the specific issues these women are facing. Thus, programmatic interventions can be developed and aimed at improving the quality of life of girls and women already in marriages. The Mozambican Government is committed through its social and economic development plan to implement actions to empower women in order to achieve gender equality. For instance, in 2015 the country approved the National Strategy to prevent and fight early marriage practice for the period of 2016 to 2019. Among different key areas of intervention, this strategy gives emphasis to interventions aimed at improveing girls SRHR.

The data collection was conducted using life grids, a very useful data collection tool when extracting sensitive information during interviews. No qualitative study conducted in Mozambique has been found that used this methodology for data collection. This allowed the research team to gather detailed and sensitive information from participants that could be used by health policy makers and inform other stakeholders acting on human rights issues with an emphasis on programs aimed at improving women's SRHR. On the other hand, there is still a need to investigate the prevalence of HIV and AIDS among women who married early and reside in Namaacha. This may be necessary since the majority of participants in this study reported not using condoms, which can increase their risk of HIV infection if one member of the couple is involved in extra marital relationships without using condoms. Although condoms have a dual protection function both to prevent pregnancy and HIV and other STIs, its use among Mozambican married women at reproductive age is low and inconsistent. Therefore, this study found the need for further qualitative research regarding the factors that influence the low use of condoms among women who married early so better strategies can be identified to motivate women to use condoms as their preferred contraceptive method. It is proven that condoms are widely available in Mozambique from different sources and mostly free of charge. Thus, the focus would be directed at identifying better strategies to empower women, particularly the younger ones, so they can be able to fully exercise their rights to access birth control mechanisms and other STI preventive measures available.

Furthermore, this study can inform policy makers about the state of maternal health services available to women in Namaacha District through the women's own experience of use. By targeting women who married early and exploring their experience of contraceptive use and ANC attendance, this study will inform the programme's decision makers about specific needs regarding SRH to this individual group of women and what mostly influences their decision to access and ultilise SRH services such as family planning services and ANC during pregnancy. This is in line with the study by (Wyatt et al. 2014) that argued that future programmatic intervention aimed at improving women's use of SRH services with an emphasis

on modern contraceptives has to consider the needs of individual populations. Therefore, apart from considering determinants for health services utilisation from the provider's perspective, they also recommend the application of qualitative research targeting individuals/specific group of populations to identify and tackle the relevant determinants that influence their decision to access and use these services (Wyatt et al., 2014). Thus, by identifying the trend of contraceptive use among women who married early and the preferred methods among this specific group of women, the availability of those devices can improve. On the other hand, there is still a need to identify the best strategies to apply in practice and that consider individual characteristics of the sites, so the theoretical discourse about what to do to end early marriage and its impact on women's well-being should be validated. In addition, a study that discusses interventions to end early marriage indicates that there is a need for further knowledge to improve the success of those interventions. Thus, programs need to identify specific program components to be targeted, the timeframe to implement the programs, their real costs and mechanisms to deliver those interventions (Malhotra et al., 2011). Therefore, research based on evidence still needs to be conducted to inform policy makers and other governmental sectors about the individual and behavioural factors underlining the strategies and their causes. However, one cannot focus on individual behaviours without examining the socio-economic and political context of the study area.

Moreover, this study found a need for future research in the association between the use of maternal health services and religion. This study interviewed a majority of women belonging to the Zion church and one Catholic. They all reported that their churches were supportive of modern family planning methods, but that discussion was not detailed. Thus, an in-depth study to better understand the level of religion's influence in women's decision to seek and use maternal health services such as family planning and ANC during pregnancy would be needed. Finally, there is a need for further research on the link between modern contraceptives available and women's future reproductive intentions in Namaacha district. Findings from IMASIDA (2015) showed that 22% of married women at reproductive age want to have another child as soon as possible whereas 32% wants to have another child after two years or more (MISAU et al., 2015). This study did not investigate the participants' fertility intention in relation to the current availability of modern contraceptives. Therefore, understanding the availability of modern contraceptives for women with an unmet need of family planning is crucial in guaranteeing the success of family planning interventions.

### **Chapter 7: Conclusion**

#### 7.1. Conclusion

The introduction chapter of this thesis presented the trend of maternal health in Developing Countries, particularly the background of women's rights and the exercise of SRHR. Evidence has shown examples of wide implementation of national and international interventions developed worldwide through the years to improve women's rights, particularly SRHR. On the other hand, evidence has corroborated global efforts to protect girls' and children's rights. Successful interventions, accompanied by the development of national and international legal frameworks to guide and protect women's rights, have been documented by scholars. Those interventions have helped improve women's SRHR, particularly in Developing Countries, and are visible through the reduction in global mortality rates and critical maternal health morbidities due to the improvement in the provision and utilisation of maternal health services such as family planning and ANC during pregnancy. Although this study identified a positive trend regarding maternal health (family planning program and ANC) service utilisation, it also found that the use of modern contraceptive methods and ANC attendance during pregnancy among women who married early and reside in Namaacha were low, inconsistent and below the target recommended by the WHO model of ANC. This is considerably worse for adolescent women, particularly the ones living in a community that enforces and embraces early marriage practices such is the case of my study area. Evidence has shown a higher prevalence of early marriage in the SSA region, and the effect of its impact on women's well-being, particularly their SRH. The extensive negative effects of early marriage practice were also documented in Mozambique with a higher incidence in the north region of the country. However, in the south region of the country, particularly the district of Namaacha, early marriage is still deeply rooted in the community, and no evidence was found of a study that has focused on early marriage and its impact on women's well-being, particularly maternal health. Thus, this study sought to explore the experiences of women in Namaacha District, Mozambique who married early and how they talked about their experiences of maternal health. In this respect, emphasis was given to examine their decisions regarding the use of modern contraceptive methods or use of ANC services during pregnancy and delivery.

To understand the experience of contraceptive use and ANC utilisation among women who married early, this study needed to understand the exercise of their rights and how they perceive it in a way that affects their decision to seek and use modern contraceptives and ANC during pregnancy. Thus, this study found that early marriage had negatively impacted women's well-being and further possibilities of growth. Within this context, this study examined women

experience regarding the exercise of their SRHR, with emphasis to their experience of modern contraceptive methods use or attendance of ANC services during pregnancy and delivery. Ten participants were interviewed for this study, and none of the women finished secondary education; the majority of participants did not have a stable profession, with the exception of one who worked as a secretary in a local primary school, and they were economically dependent on their husbands. They described living in privation of basic necessities and in an environment where their decision-making power around general issues and private ones were very low, particularly at early stages of their marriage. For instance, some participants reported being forced to accept their marriage due to their circumstances of poverty and to follow the norms of their community that encourage the practice. Their low level of education and early sexual initiation also increased their risk of becoming a child bride. Participants described being forced to accept early in marriage their responsibility to bear children, and this might justify the low use of contraceptives among this group. Participants also described being submissive to their husband's and other extended family members' demands. However, they also described having gained more space and decision-making power late in marriage. Overall, participants described being satisfied with the marriage despite the challenges of it. They understand the negative impacts of early marriage on women's lives, particularly the negative effect on women's SRH and personal advancement. Therefore, they would never advise girls to marry at an early age.

By understanding the general situation in respect of women's exercise of individual rights, this study found that participants faced several adversities that prevent them from accessing and using maternal health services effectively, including modern contraceptive methods and ANC during pregnancy. In this regard, despite all women reporting starting to have used some method of contraceptive during their marriage, its use was inconsistent, irregular and ineffective. These women described experiencing several health complications due to the use of contraceptives, and this might have influenced their inconsistent use of these methods. On the other hand, participants described having knowledge of modern contraceptives and could name some. However, they did not mention sterilisation as one of the methods, and only one reported using an IUD. The majority of participants reported using mostly oral pills and injections. They described having access to these methods free of charge mostly at the local health clinic and through other channels available in their community that also provide general information about family planning. However, despite the generally widespread availability of modern contraceptives, multiple determinants prevent women from fully accessing and using modern contraceptive methods. Thus, one of the objectives of the study was to describe the

factors that influence women's decision to use maternal health services such as modern contraceptives and ANC during pregnancy, as it is related to their overall experience of maternal health services and exercise of SRHR.

This study found that modern contraceptive use is affected by women's low level of education, low socio-economic conditions, fear of side effects, husbands' and extended family's lack of support, fear of violence and abuse perpetuated by their husbands and women's negative perceptions. Positively, this study found that community acceptance of family planning and a favourable environment open to disseminating information regarding family planning and its benefits could motivate women to use these services. This study also found that majority of women were religious, belonging to the Zion church, and they described having support from their church peers to use modern contraceptives. Thus, religious spaces my encourage women to use modern contraceptives.

Although participants described having positive support from their community regarding family planning, women still needed their husband's approval to make decisions about their own SRH. This is evident due to the higher fertility levels they reported, which for some was a result of part of their responsibilities as married women and to fulfil their husband's desires to have many children. Some of the elder's participants stated that if they had the current knowledge about family planning and its benefits as well as the easy access to modern contraceptives early in their marriages, they would not have so many children. This trend seems to be changing where the young participants reported starting to use contraceptives early in marriage, and their reproductive intention is to have few children in the future. The young participants in this study were very articulate, and despite their low level of education, expressed an understanding of women's rights, particularly the right for education, health and to decide the number of children they want. However, this intention may be affected by the impact of individuals and external barriers that prevent women from accessing family planning methods. These barriers that prevent women from consistently using modern contraceptives impacted more the elder participants, who reported higher parity and being married at times that information and the availability of modern contraceptives were not as accessible as today. All the participants in this study were mothers with higher parity reported mostly among the elder participants. These participants reported that they became first time mothers during their adolescence and so they experienced some difficulties during their pregnancies. Participants reported experiencing some health complications derived from pregnancy that ultimately led them to attend ANC consultations to treat some of these complications. Participants reported understanding the benefits of ANC in protecting the mother's and child's health and so they made it a priority to use these services. However, this finding seems to be contradictory and not fully accurate since the majority of participants reported attending ANC late in pregnancy and having less than four visits. Exceptionally, the ones who started early did so to treat some of the complications. Participants could describe some of the interventions they were offered during ANC appointments. Some of these interventions were physical through examinations and others more informative about pregnancy care and recommendations for delivery. However, their descriptions were not very articulate and coherent and so they were not fully aware about details of the services they were offered. However, their level of understanding about the benefits of ANC were sufficient to lead them to attend these services at one point of pregnancy and ultimately for some to deliver at the local health facility with the assistance of a skilled health professional. Thus, this study found that despite not attending ANC four or more times during pregnancy as recommended by the WHO ANC model, participants in this study understood the real risks of pregnancy and the importance of attending ANC to prevent pregnancy complications. Thus, they made an effort to visit these services so they can benefit from a variety of services offered free of charge and ultimately obtain a patient card that could guarantee the delivery of the baby in the health centre. The challenge in this regard is to motivate women to start attending ANC earlier in pregnancy. Therefore, this study also examined the determinants that may prevent women from attending ANC early in pregnancy as part of their overall experience of use of maternal services, in this case ANC during pregnancy.

This study found that the low levels of early ANC attendance (four or more times) among women who married early in Namaacha District was associated with their low socio-economic level; the occurrence of health complications derived by pregnancy; their low level of education; women's personal beliefs and individual behaviour; distance of health facility; quality and attitude of health provider and husband's and extended family's support. Thus, these determinants interrelate and have been found to influence women's decision to seek and use these services early in pregnancy, despite being offered free of charge. On the other hand, this study found that the community was supportive of women attending ANC and so this channel could be considered to encourage women to seek ANC early in pregnancy, while developing effective strategies to increase the level of ANC attendance among women who married early.

#### 7.2. Recommendations

First of all, there is a need to protect the rights of women who married early by developing efficient strategies to end early marriage practice and support the ones already married. In this regard, for instance, the Girls not Brides (a global partnership to end child marriage), of which Mozambique is a member, developed the Theory of Change that includes strategies to address and end child marriage practices. These strategies developed by the Girls not Brides partners emphasise, among others, girls' empowerment and provision of an array of services (education, health and finance) to support both girls at risk of being child brides and the already married girls. Similarly, Dallao and Greene (2011) and WHO (2012) highlighted some of the interventions that can work to prevent and end early marriage practices, emphasising also a holistic approach in those interventions. Those include:

- Promoting girls' school attendance and improving educational quality;
- Strengthening girls' relationship with their peers and role models;
- Improving girls' professional skills so they can have better chances of finding jobs and earning money;
- Educating community members, including parents, about the benefits of delaying girls' marriage, so they can support girls' rights and their personal development; and
- Strengthening and implementing existing laws, policies and agreements aimed at protecting girls' rights and creating sanctions against the perpetrators of these illegal practices.

On the other hand, other interventions to protect young girls from early marriage were proposed by UNICEF (2005) and include: promoting boys' and girls' equal attendance in school, breaking the discriminatory social norms in education. Others interventions involve the design and implementation of advocacy programs aimed at delivering free and compulsory education beyond primary school. Last, but not least, UNICEF (2005) also argued that the provision of sexual education and increased access to contraceptives and ANC services for the young married girls could also protect married adolescents' rights. Therefore, interventions aimed at improving women's SRHR including the use of modern contraceptive methods and ANC attendance during pregnancy should be developed based on the local context. In this regard, Santhya et al. (2008) identified some programmatic interventions aimed at addressing the special needs and vulnerability of young married women and men namely: promoting condom use by married couples as a dual protection method against unwanted pregnancy and HIV and STIs; providing an effective family planning program to young couples so they can postpone their first born if desired; implementing programs aimed at tackling intimate partner violence, including forced sex, enforcing the laws to sanction against the perpetrators; and promoting the

use of ANC services during pregnancy, delivery and post-partum. This is accomplished by deconstructing the customary notions of masculinity and femininity that affect young women's and men's ability to make better decisions regarding their SRHR.

Moreover, other interventions to improve the current stage of maternal health should be redirected in building women's capacity to effectively use modern contraceptives, including condoms as well as be able to attend ANC early in pregnancy with follow up visits as recommended by the WHO ANC model. This can be done by applying multiple approaches adequate to the region or site such as the community development approach. According to Vincent (2009), applying community development approaches in solving specific issues in the community includes the involvement of the community members in conversations about the issue to be tackled. Thus, unanimously they will identify real interventions based on their own assets and implement these actions in order to achieve their shared vision (Vincent, 2009). Furthermore, health authorities should strive to improve the availability of family planning services so they can reduce the shortage of equipment as well as improve the overall satisfaction for women in need of contraceptives. This can be done by giving women with an unmet need for contraceptives a pleasant and supportive experience while seeking and using any family planning methods. On the other hand, interventions to improve modern contraceptive use should focus on building family and moral values by educating men about the broad benefits of family planning so they can understand the need to support their wives to use it effectively. These interventions should consider the sensitivity of the matter and consider applying an approach that emphasises men's positive qualities so they can be transformed to be a great leader to their families. Thus, these interventions should avoid focusing on the negative effects of the patriarchal system to persuade men to understand their role in improving service uptake but rather focus on men as a human asset in the country's efforts to improve the uptake of family planning services.

Finally, the quality of ANC services including the preparedness of health providers to provide effective services adapted to the local context need to be improved so women can have a dignified and enjoyable maternal experience. The study by Biza et al. (2015) conducted in three health centres of Mozambique suggest a variety of interventions to be implemented by the Ministry of Health to improve ANC attendance in Mozambique. Although this study focused on interventions to specifically target women users of modern contraceptives, the interventions proposed by Biza et al. (2015) were considered relevant to mention by the fact of having been conducted in Mozambique. Those include: improve training on ANC intervention to the health providers; develop an effective organisational and logistic system of ANC service

provision characterised by having sufficient health providers to attend the real patient demand; disseminate information about ANC benefits in the community; and last not least, improve the supply chain system so the shortage of equipment and medicine can be prevented (Biza et al., 2015). Thus, for future programme interventions aimed at improving maternal service uptake in Namaacha District, these interventions described in Biza et al. (2015) with a focus on health facilities should also be considered while implementing other interventions that focus on motivating women to use the services during pregnancy. On the other hand, while disseminating information about ANC benefits in the community, this study recommends that actions to persuade women to attend ANC must apply an individualistic approach by targeting men and other influential peers in the community. Those can include husbands, extended family members, local CBOs and associations as well as the local traditional authorities, so they can be able to support women in the community to attend ANC during their pregnancies. This is consistent with a study by Way et al. (2015) conducted in Myanmar that reported, for example, that women were more likely to attend ANC if accompanied by their husbands or if they felt supported by their partners to use the services. Similar to the study by Way et al. (2015), this study acknowledges the positive role husbands play in patriarchal societies such as Namaacha District to influence women to attend ANC early and deliver at formal maternity ward. Thus, programs of actions to improve ANC attendance need to involve husbands as source of support in the efforts to motivate women to start attending ANC early in pregnancy, as well as continuing with their consultations until childbirth. In this regard, husbands could also support women during pregnancy by helping detect signs of complications if they occur or reminding them to visit ANC early in pregnancy and facilitate the logistics to follow up appointments.

- Abbas, A., Ashwin, P., & Mclean, M. (2013). Qualitative Life grids: A proposed method for comparative European educational research. *European Educational Research Journal*, 12(3), 320-329. ISSN 1474-9041
- Adepoju, A. (2000). Issues and recent trends in international migration in Sub-Saharan Africa, International Social Science Journal, 52, 383-394.
- Agadjanian, V. (2010). Religion and Contraception in Mozambique: A Multidimensional Analysis. Center for Population Dynamics Arizona State University, 8-13. Retrieved from http://paa2011.princeton.edu/papers/112584
- Ahmed, S., Li, Q., Liu, L., and Tsui, A. O. (2012). Maternal deaths averted by contraceptive use: An analysis of 172 countries. *Lancelet*, 380, 311-325.
- Ali, M. M., & Cleland, J. (2010). Contraceptive switching after method-related discontinuation. *Studies in Family Planning*, 41, 129-133.
- Alli, F., Vawda, M. Y., & Maharaj, P. (2012). Interpersonal relations between health care workers and young clients: Barriers to Accessing sexual and reproductive health care. *Journal of Community Health*, 38, 150-155.
- Altfeld, S., Handler, A., Burton, D., & Berman, L. (1997). Wantedness of pregnancy and prenatal health behaviors. *Women's Health*, 26(4), 29-43.
- Anand, A., Shiraishic, R. W., Bunnell, R. E., Jacobs, K., Solehdinc, N., Abdul-Quader, A.S., Marum, L.H., Muttunga, J.N., Kamoto, K., Aberle-Grasse, J.M., & Diaz, T. (2009). Knowledge of HIV status, sexual risk behaviours and contraceptive need among people living with HIV in Kenya and Malawi. *AIDS*, 23, 1565-1573.
- Anguzu, R., Tweheyo, R., Sekandi, J. N., Zalwango, V., Muhumuza, C., Tusiime, S., & Serwadda, D. 2014. Knowledge and attitudes towards use of long acting reversible contraceptives among women of reproductive age in Lubaga division, Kampala district, Uganda. BMC Research Notes, 7, 153.

- Aransiola, J. O., Akinyemi, A. I., & Fatusi, A. O. (2014). Women's perceptions and reflections of male partners and couple dynamics in family planning adoption in selected urban slums in Nigeria: A qualitative exploration. *BMC Public Health*, *14*, 869. Retrieved from http://www.biomedcentral.com/1471-2458/14/869
- Arnaldo, C. (2003). Fertility and its proximate determinants in Mozambique: An analysis of levels, trends, differentials and regional variation. Thesis submitted for the degree of Doctor of Philosophy of the Australian National University.
- Arnaldo, C., Frederico, M. & Dade, A. (2014). Tendências e Factores Associados à Maternidade Precoce em Moçambique. Gazeta de População e Saúde No. 04.
- Atuahene, M. D., Afari, E. O., Adjuik, M., & Obed, S. (2017). Health knowledge, attitudes and practices of family planning service providers and clients in Akwapim North District of Ghana. *Contraception and Reproductive Medicine*, 2, 5. doi 10.1186/s40834-016-0016-3. Retrieved from https://link.springer.com/content/pdf/10.1186%2Fs40834-016-0016-3.pdf
- AVERT. (2014). Young people, adolescents and HIV/AIDS. Retrieved from http://www.avert.org/professionals/hiv-social-issues/key-affected-populations/young-people
- Ayanore, M. A., Pavlova, M., & Groot, W. (2016). Unmet reproductive health needs among women in some West African countries: A systematic review of outcome measures and determinants. *Reproductive Health*, *13*, 5. doi 10.1186/s12978-015-0104-x
- Azfredrick, E. C. (2016). Using Anderson's model of health service utilization to examine use of services by adolescent girls in south-eastern Nigeria. International Journal of Adolescence and Youth, 21:4, 523-529. Retrieved from <a href="http://www.tandfonline.com/doi/pdf/10.1080/02673843.2015.1124790?needAccess=t">http://www.tandfonline.com/doi/pdf/10.1080/02673843.2015.1124790?needAccess=t</a>

- Abbie, E., & Mouton, J. (2001). The logic of sampling: In the practice of social research.

  Oxford: Oxford University Press.
- Bankole, A., Sedgh, G., Okonofua, F., Imarhiagbe, C., Hussain, R. & Wulf, D. (2009). *Barriers to Safe Motherhood in Nigeria*. New York: Guttmacher Institute. Retrieved from https://www.guttmacher.org/sites/default/files/report\_pdf/motherhoodnigeria.pdf
- Barot, S. (2014). Looking back while moving forward: Marking 20 years since the International Conference on Population and Development. *Guttmacher Policy Review*, 17(3). 22-28
- Barua, A., & Kurz, K. (2001). Reproductive health-seeking by married adolescent girls in Maharashtra, India. Reproductive Health Matters. 9(17):53-62
- Bawah, A. A., Akweongo, P., Simmons, R., Phillips, J. F. (1999). Women's fears and men's anxieties. The impact of family planning on gender relations in Northern Ghana. Stud Family Planning, *30*, 54-66.
- Baxter, C., & Moodley, D. (2015). Improving adolescent maternal health. South African Medical Journal, vol.105, n.11, 948-951
- Bbaale, E., & Mpuga, P. (2011). Female education, contraceptive use and fertility: evidence from Uganda: Consilience: The Journal of Sustainable Development Vol. 6, Iss. 1 (2011), Pp. 20–47. Retrieved from https://journals.cdrs.columbia.edu/wp-content/uploads/sites/25/2016/09/234-500-1-PB.pdf
- Bearinger, L. H., Sieving, R. E., Ferguson, J., & Sharma, V. (2007). Global Perspectives on the Reproductive Health of Adolescents: Patterns, Prevention, and Potential. *The Lancet*, 369, 1220-1231.
- Beksinska, M., Smit, J., & Mantel, J. (2012). Progress and challenges to male and female condom use in South Africa. *Sexual Health*, 9(1), 51-58.
- Bendorf, A. (2010). World population trends towards 2050 and beyond. Perth: Future

  Directions International Pty Ltd.Retrieved from

- http://www2.warwick.ac.uk/fac/soc/pais/research/researchcentres/csgr/green/foresight/demography/2010\_fdi\_world\_population\_trends\_towards\_2050\_and\_beyond.pdf
- Bessinger, R., Katende, C., & Gupta, N. (2004). Multi-media campaign exposure effects on knowledge and use of condoms for STI and HIV/AIDS prevention in Uganda. Evaluation and Program Planning 27, p. 397–407. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.578.5863&rep=rep1&type=pdf
- Bhandari, G. P., Premarajan, K. C., Jha, N., Yadav, B. K., Paudel, I. S., Nagesh, S. (2006).

  Prevalence and Determinants of Unmet Need for Family Planning in a District of
  Eastern Region of Nepal.Kathmandu Universdity Medical Journal;4(2).203-10.

  Retrieved from

  http://imsear.li.mahidol.ac.th/bitstream/123456789/46073/2/kumj2006v4n2p.203.pdf
- Biza, A, Traas, J. I, Colomar, M., Belizan, M., Harris, J. R., Crahay, B.,...Betrán, A. P. (2015).
  Challenges and opportunities for implementing evidence-based antenatal care in Mozambique: a qualitative study. *BMC Pregnancy and Childbirth*, 15, 200. doi 10.1186/s12884-015-0625-x
- Boene, H., Gonzalez, R., Vala, A., Ruperez, M., Velasco, C., & Machevo, S. (2013). Perceptions of malaria in pregnancy and acceptability of preventive interventions among Mozambican pregnant women: Implications for effectiveness of malaria control in pregnancy. *PLoS ONE*, *9*(2).
- Bogale, B., Wondafrash, M., Tilahun, T., & Girma, E. (2011). Married women's decision making power on modern contraceptive use in urban and rural southern Ethiopia. *BMC Public Health*. doi: 10.1186/1471-2458-11-342
- Bongaarts, J. (2006). Late Marriage and the HIV Epidemic in sub-Saharan Africa. Population Council, Inc. No 216. New York, USA

- Bongaarts, J., & Bruce, J. (1995). The causes of unmet need for contraception and the social content of services. *Studies in Family Planning*, 26(2), 57-75.
- Brieger, W. R., Ches, P. H., Delano, G. E., Lane, C. G., Oladepo, O., & Oyediran, K. A. (2001).

  West African Youth Initiative: Outcome of a Reproductive Health Education Program.

  Journal of Adolescent Health. Vol. 29(6). P.436-46
- Bruce, J. (1990). Fundamental elements of the quality of care: A simple framework. *Studies in Family Planning*, 21(1), p. 61-91.
- Bruce, J., & Clark, S. (2003). Including married adolescents in adolescent reproductive health and HIV/AIDS policy. In *UNFPA/WHO/Population Council Technical Consultation on Married Adolescents*. Geneva. Retrieved from http://www.popline.org/node/267054
- Bruce, L. (2007). Child marriage in the context of the HIV epidemic: Promoting healthy, safe and productive transitions to adulthood. *Brief no. 11*. Retrieved from http://www.popcouncil.org/uploads/pdfs/TABriefs/PGY\_Brief11\_ChildMarriageHIV.pdf
- Burke, H., & Ambasa, S. C. (2011). Qualitative study of reasons for discontinuation of injectable contraceptives among users and salient reference groups in Kenya. *Afr J Reprod Health*, 15(2), 67-78.
- Castle, S. 2003. Factors influencing young Malians' reluctance to use hormonal contraceptives. Studies Family Planning, 34, 186-199.
- Cau, B. M. (2014). Community influences on contraceptive use in Mozambique. *Health & Place*, 31(2015), 10-16.
- Cau, B. M. (2016). Female migration, local context and contraception use in urban
   Mozambique. Departamento de Geografia, Universidade Eduardo Mondlane, Maputo,
   Mozambique and Centro de Pesquisa em População e Saúde, Maputo, Mozambique.

- Centers for Disease Control and Prevention. (1999). Ten great public health achievements—
  United States, 1900–1999. MMWR *Morb Mortal Wkly Rep*, 48(12), 241-243. Retrieved from
  - http://repository.ubn.ru.nl/bitstream/handle/2066/115719/115719.pdf?sequence=1
- Centers for Disease Control and Prevention. (2015). Severe Maternal Morbidity in the United States. United States of America. Retrieved from https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html
- Centro de Integridade Pública, Michelsen Institute, & Anti-Corruption Resource Centre.

  (2016). Os Custos da Corrupção para a Economia Moçambicana: Por quê é que é importante combater a corrupção num clima de fragilidade fiscal. Centro de Integridade Pública (CIP), Moçambqiue. Retrieved from http://cipmoz.org/images/Documentos/Anti-Corrupcao/CIP-Custos\_da\_Corrupcao.pdf
- Chapman, D. W. (1995). Gender, health and cigarette smoking. In B. C. Amick, S. Levine, A.R. Tarlov, and D. Chapman-Walsh (eds.), *Society and health*. New York: Oxford University Press, 131-171
- Chattopadhyay, A. (2012). Men in maternal care: Evidence from India. Journal of Biosocial Science, 44, 129-153.
- Chersich, M. F., Wabiri, N., Risher, K., Shisana, O., Celentano, D., Rehle, T., Rees, H. (2017).
  Contraception coverage and methods used among women in South Africa: A national household survey. *South Africa Medical Journal*, 107(4), 307-314.
  doi:10.7196/SAMJ.v107i4.12141
- Central Inteligence Agency. (2014). CIA World Factbook. 2014. Mozambique Demographic Profile 2013. Sky Horse Publishing, INC. Washington DC. Retrieved from https://books.google.co.za/books?id=WjEhAgAAQBAJ&pg=PT1714&lpg=PT1714&

- dq=CIA+World+Factbook.+2014.+Mozambique+Demographic+Profile+2013.&sour ce=bl&ots=HFePvAxKUS&sig=All\_Z1X40raLmhH78mS31pWF41U&hl=pt-PT&sa=X&ved=0ahUKEwjA0NXr8obVAhVJAsAKHfUoBoMQ6AEIRzAE#v=one page&q=CIA%20World%20Factbook.%202014.%20Mozambique%20Demographic%20Profile%202013.&f=false
- Clark, S. (2004). Early Marriage and HIV Risks in Sub–Saharan Africa. *Studies in Family Planning*. Vol. 35 (3), 149–160
- Clark, S., Bruce, J., & Dude, A. (2006). Protecting young women from HIV/AIDS: The case against child and adolescent marriage. International Family Planning Perspectives.

  Volume 32(2)79–88 retrieved from https://www.guttmacher.org/sites/default/files/article\_files/3207906.pdf
- Cleland, J., Bernstein, S., Ezeh, A., Faundes, A., Glasier, A., & Innis, J. (2006). Family planning: the unfinished agenda. *Lancet*, *368*(9549), 1810-1827.
- Cleland, J., Conde, A. A., Peterson, H., Ross, J., Tsui, A. (2012). Contraception and health. *Lancet*, 380(9837), 149-156.
- Collett, J. L., & Lizardo, O. (2009). *A power control theory of gender and religiosity*. Journal for the Scientific Study of Religion. 48(2):213–231. University of Notre Dame. Retrieved from https://www3.nd.edu/~jcollet1/pubs/2009-48a.pdf
- Committee on Economic, Social and Cultural Rights (2000). General Comment "14" on the right to the highest attainable standard of health, para. 12. Retrieved from http://www.refworld.org/pdfid/4538838d0.pdf
- Connell, R. W. (1987). Gender and Power: Society, the Person and Sexual Politics.

  Sydney, Allen & Unwin; Cambridge, Polity Press; Stanford, Stanford University

  Press
- Conselho de Ministros de Moçambique. (2004). Mozambican Family Act, 2004.

- Conselho de Ministros de Moçambique. (2015). Estratégia Nacional de Prevenção e Combate dos Casamentos Prematuros em Moçambique 2016-2019, aprovada na 42ª SOCM a 01 Dezembro.
- Costumado, M., Khalema, E., Ndinda, C., & Domingos, M. H. (2015). Women's access to sexual reproductive health and rights services in Mozambique: Advocacy strategies to address barriers. *Ubuntu*, *4*(1), 55-83.
- Dallao, M., & Greene, M. E. (2011). Addressing early marriage of young and adolescent girls.

  Interagency Youth Working Group.
- Darroch, J., & Singh, S. (2013). Trends in contraceptive need and use in developing countries in 2003, 2008, and 2012: An analysis of national surveys. *Lancet*, 381, 1756–1762
- Retrieved from http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(13)60597-8.pdf
- Daymon, C., & Holloway, I. (2002). *Qualitative research methods in public relations and marketing communications*. Taylor & Francis Group. London and New York. Retrieved from http://soniapsebastiao.weebly.com/uploads/2/0/3/9/20393123/christine\_daymon\_and\_

immy\_holloway\_2001\_qualitative\_research\_methods.pdf

- De Vos, A. S., Strydom, H., Fouche, C. B., & Delport, C. S. L. (2002). Research at the grass root: For the social science and human service profession. Pretoria: J. L. Van Schaik Publishers.
- Defoe, B. K. 1997. Effects of socioeconomic disadvantage and women's status on women's health in Cameroon. *Soc. Sci. Med*, *44*(7), 1023-1042.
- Dehne, K. L., & Riedner, G. (2005). Sexually transmitted infections among adolescents: the need for adequate health services. Geneva: World Health Organization. Retrieved from http://apps.who.int/iris/bitstream/10665/43221/1/9241562889.pdf

- Department for International Development (DFID). (2011). Helpdesk Report: The impact of girls' education on early marriage. UK: Human Development Resource Center.
- Retrieved from http://hdrc.dfid.gov.uk/wp-content/uploads/2012/03/Child-Marriage-and-Girls-Education-September-2011.pdf
- Department of Health and Human Services, Office on Women's Health. (2011). Birth control methods fact sheet. Retrieved from http://www.womenshealth.gov/publications/our-publications/fact-sheet/birth-control-methods.html
- Divage, S. N., Divage., J., & Marrengula, M. (2010). Casamentos prematuros em Moçambique:

  Contextos, tendências e realidades. Retrieved from

  https://www.scribd.com/document/179561484/Casamentos-Prematuros-em
  Mocambique
- Drain, P. K., Holmes, K. K., Hughes, J. P., & Koutsky, L.A. (2002). Determinants of cervical cancer rates in developing Countries. *International Journal of Cancer*, 100(2), 199-205. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/ijc.10453/full
- Drake, B & Reid, M. J. (2008). Social work research methods: From conceptualization to dissemination (1st ed.).Pearson Longman.p.37-68 Retrieved from https://www.pearsonhighered.com/assets/samplechapter/0/2/0/5/0205460976.pdf
- Dunkle, K. L., Stephenson, R., Karita, E., Chomba, E., Kayitenkore, K., Vwalika, C., ...Allen, S. (2008). New heterosexually transmitted HIV infections in married or cohabiting couples in urban Zambia and Rwanda: an analysis of survey and clinical data. *Lancet*, 371, 2183-2191.
- Durojaye, E. (2011). Access to contraception for adolescents in Africa: A human rights challenge. XLIV CILS.1-29. Retrieved from http://journals.co.za/docserver/fulltext/cilsa/44/1/cilsa\_v44\_n1\_a1.pdf?expires=14999

- 73746&id=id&accname=57926&checksum=6639AAC7D92424F3483E8A1284972A
- Edwards, R., Mulloli, T. P., Howel, D., Chadwick, T., Bhopal, R., Harrison, R., & Gribbin, H. (2006). Does living near heavy industry cause lung cancer in women? A case-control study using life grid interviews. *Thorax*, *61*, 1076-1082.
- Eggleston, E. (2000). Unintended pregnancy and women's use of prenatal care in Ecuador. Social Science & Medicine, 51(7), 1011-1018.
- Eliason, S., Williams, J. K. A., Eliason, C., Novignon, J., Nonvignon, J., & Aikins, M. (2014).

  Determinants of modern family planning use among women of reproductive age in the Nkwanta district of Ghana: A case–control study. *Reproductive Health*, 11, 65.
- Ensor, T., & Cooper, S. (2004). Overcoming barriers to health service access: influencing the demand side. *Health Policy and Planning*, 19(2).
- Ezegwui, H., Ikeako, L., Ishiekwene, C., Oguanua, T. (2011). The discontinuation rate and reasons for discontinuation of implanon at the family planning clinic of University of Nigeria Teaching Hospital (UNTH) Enugu, Nigeria. *Niger Journal of Medicine*, 20(4), 448.
- Family Care International (FCI) (1999). Meeting the Cairo Challenge: Progress in Sexual and Reproductive Health. New York City. Retrieved from www.familycareintl.org
- Fisher, J. D., & Fisher, W. A. (2000). Theoretical approaches to individual level of change in HIV risk behaviour. In J. Peterson & R. J. DiClemente (Eds). *HIV prevention handbook*. New York: Kluver academic/ Plenum Press, 3-55
- Fisher, J. D., and Fisher, W. A. (1992). Changing AIDS-risk behaviour. *Psicological Bulletin*, 111, 455-474.
- Gabrysch, S., Cousens, S., Cox, J., & Campbell, O. M. R. (2011). The influence of distance and level of care on delivery place in rural Zambia: A study of linked national data in a

- geographic information system. *PLoS Med*, 8(1). e1000394. doi:10.1371/journal.pmed.1000394
- Ganchimeg, T., Ota, E., Morisaki, N., Laopaiboon, M., Lumbiganon, P., & Zhang, J. (2014).

  Pregnancy and childbirth outcomes among adolescent mothers: A World Health

  Organization multi-country study. *BJOG*, *121*(Supplements 1). doi: 10.1111/14710528.12630
- Geelhoed, D., Lafort, I., Chissale, E., Candrinho, B., & Degomme, O. (2013). Integrated maternal and child health services in Mozambique: structural health system limitations overshadow its effect on follow-up of HIV-exposed infants. BMC Health Services Research. doi: 10.1186/1472-6963-13-207.
- Gerntholtz, L., Gibbs, A. & Willan, S. 2011. The African Women's Protocol: Bringing attention to reproductive rights and the MDGs. PLoS Medicine, 8(4), 1-4.
- Ghana Statistical Service. (1993). Ghana Demographic and Health Survey. Calverton, MD:

  Macro International.Retrieved from

  http://www.dhsprogram.com/pubs/pdf/FR59/FR59.pdf
- Giacomini, M. K., Cook, D. J., & Evidence-Based Medicine Working Group. (2000). Users' guides to the medical literature: XXIII. Qualitative research in health care A. Are the results of the study valid? *JAMA*, 284(3), 357-362.
- Gill, K., Pande, R., & Malhotra, A. (2007). Women deliver for development: Background paper for the Women Deliver Conference, 18-20 October 2007. Family Care International and International Center For Research On Women. Retrieved from https://www.icrw.org/wp-content/uploads/2016/10/BACKGROUND-PAPER-FOR-THE-WOMEN-DELIVER-CONFERENCE.pdf
- Girls not Brides. (n.d.). A theory of change on child marriage. London-United Kindon Retrieved from from www.GirlsNotBrides.org.

- Glasier A, Metin Gulmezoglu A, Schmid GP, Moreno CG, & Van Look P. (2006). Sexual and reproductive health: a matter of life and death. *The Lancelet*, *368*, 1595-1607
- Glasier, A. F., Smith, K. B., Vanderspuy, Z. M. (2003). Amenorrhea associated with contraception: An international study on acceptability. *Contraception*, 67, 1-8
- Granziano, E. W., & Raulin, K. (2000). *Early childbearing: Theory and practice*. Newbury Park (N.P): Sage, 133
- Green, C., Mukuria, A., & Rubin, D. (2009). *Addressing early marriage in Uganda*. Washington, DC: Futures Group, Health Policy Initiative, Task Order 1.
- Greenaway, E. S., Leon, J., Baker, D. P.(2012). Understanding the association between maternal education and use of health services in Ghana: Exploring the role of health knowledge. *J Biosoc Sci*, 44, 733–47.
- Groenewald, C., & Bhana, A. (2015). Using the Lifegrid in qualitative interviews with parents and substance abusing adolescents. *Forum Qualitative Sozialforschung/Forum:*Qualitative Social Research, 16(3), Art. 24. Retrieved from http://www.qualitative-research.net/index.php/fqs/article/view/2401/3882
- Gupta, GR. (2000). Gender, Sexuality and HIV/AIDS: The what, the why. Plenary address XIII.International AIDS Conference, Durban, South Africa. Retrieved from http://siteresources.worldbank.org/EXTAFRREGTOPGENDER/Resources/durban\_sp eech.pdf
- Guttmacher Institute. (2008). Improving contraceptive use in the United States. *In Brief*, 2008.

  Retrieved from http://www.guttmacher.org/pubs/2008/05/09/ImprovingContraceptiveUse.pdf,
- Guttmacher Institute. (2015). Barriers to women's contraceptive use in Benin. Retrieved from https://www.guttmacher.org/fr/report/obstacles-la-pratique-contraceptive-desfemmes-au-benin accessed in 01/04/2016

- Gyimah, S. O., Takyi, B. K., Addai, I. 2006. Challenges to the reproductive-health needs of African women: on religion and maternal health utilization in Ghana. Social Science & Medicine (62), 2930–2944.
- Halperin, D., & Epstein, H. (2004). Concurrent sexual partnerships help to explain Africa's high HIV prevalence: Implications for intervention. *The Lancet*, *364*, 4-6.
- Hardee, K., Agarwal, K., Luke, N., Wilson, E., Pendzich, M., Farrell, M., & Cross, H. (1998).

  Post-Cairo reproductive health policies and programs: A Comparative study of eight countries.USAID (4) Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.515.7187&rep=rep1&type=pdf
- Harrison, A., & Montgomery, E. (2001). Life histories, reproductive histories: Rural South

  African Women's narratives of fertility, reproductive health and illness. *Journal of*Southern African Studies, 27(2), 311-328
- Hawkins, C. (2004). From a vicious circle to a virtuous circle: reinforcing strategies of risk, vulnerability, and impact reduction for HIV prevention. *The Lancet*, *364*, 1915–1916.
- Health of Children. (2004). Contraception-meaning, definition, purpose, description, risks.

  Retrieved from http://www.healthofchildren.com/C/Contraception.html
- Healthqual. (2012). Mozambique overview. Retrieved from <a href="http://healthqual.org/mozambique">http://healthqual.org/mozambique</a>
- Health Poverty Action. (2013). The Health Worker Crisis: an analysis of the issues and main international responses.London.United Kingdom Retrieved from https://www.healthpovertyaction.org/wp-content/uploads/downloads/2013/11/Healthworker-crisis-web.pdf
- Helewa, A., & Walker, J. M. (2000). *Critical evaluation of research in physical rehabilitation:*Toward evidence-based practice. WB Saunders: Philadelphia. Retrieved from http://ebm.bmj.com/content/ebmed/7/5/135.full.pdf

- Hoffman-Wanderer, Y., Carmody, L., Chai, J., & Rohrs, S. (2013). Condoms? Yes! Sex? No!

  Conflicting responsibilities for health care for professionals under South A. Ibis

  Reproductive Health: Young Women's Reproductive Health Brief Series. Africa's

  Framework on Reproductive Rights. Cape Town: The Gender, Health & Justice Unit,

  University of Cape Town.
- Høj, L., Da Silva, D., Hedegaard, K., Sandstrom, A., & Aaby, P. 2003. Maternal mortality:
   only 42 days? BJOG: an International Journal of Obstetrics and Gynaecology (110) 995
   -1000 Retrieved from
   file:///C:/Users/User/Downloads/Maternal\_mortality\_Only\_42\_days.pdf
- Holland, P., Berney, L., & Blane D. (1999). The life grid method in health inequalities research.

  \*Health Variations\*, 8-9.
- Human Rights Committee. (2010). Preventable maternal mortality and morbidity and human rights, A/HRC/14/39), para. 6.
- Hurt, L. S., Ronsmans, C. (2002). Time since pregnancy and mortality in women of reproductive age in Matlab, Bangladesh. Paper presented at the British Society for Population Studies. London, UK.
- Instituto Nacional de Estatistica (INE). (2010). Estatística Distrital (Estatísticas do Distrito de Namaacha).
- Retrieved from www.ine.gov.mz/estatisticas/estatisticas...distritais/maputo.../distrito-denamaacha.../fil...
- International Center for Research on Women (ICRW). (2007). *Child marriage and domestic violence*. Washington, DC: ICRW. Retrieved from https://www.icrw.org/wp-content/uploads/2016/10/Child-Marriage-Toolkit.pdf
- International Organization for Migration (IOM). (2007). Briefing note on HIV and labour migration in Mozambique. Retrieved from:

- http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/events/docs/Briefing\_Notes\_HIV\_Mozambique.pdf
- Jain, S and Kurz, K. (2007). New insights into preventing child marriage: A global analysis of factors and programs. Washington DC: International Center for Research on Women.
- Jejeebhoy, S.J., and Sebastian, M.P. (2004). Young people's sexual and reproductive health," in
  - Looking Back, Looking Forward": A Profile of Sexual and Reproductive Health I India, ed. S.J. Jejeebhoy. New Delhi: Rawat Publications, 138–68.
- Jejeebhoy, S., & Bott, S. (2003). Non-consensual sexual experiences of young people: A review of the evidence from developing countries. *South & East Asia Regional Working Paper*, New Delhi: Population Council, No. 16.
- Kabagenyi, A., Jennings, L., Reid, A., Nalwadda, G., Ntozi, J., & Atuyambe, L. (2014).
  Barriers to male involvement in contraceptive uptake and reproductive health services.
  A qualitative study of men and women's perceptions in two rural districts in Uganda.
  Reproductive Health, 11, 21.
- Kaida, A., Kippi, W., Hessel, P., & Lule, K. J. (2005). Male participation in family planning.Results from a qualitative study in Mpigi district, Uganda. *Journal Biosocial Science*,37, 18.
- Karkee, K., Lee, A. H., & Pokharel, P. K. (2014). Women's perception of quality of maternity services: A longitudinal survey in Nepal. *BMC Pregnancy and Childbirth*, *14*, 45.

  Retrieved from http://www.biomedcentral.com/1471-2393/14/45
- Kenya National AIDS Control Council.2015. Kenya's fast-track plan to end HIV and AIDS among adolescents and young people. Retrieved from file:///C:/Users/User/Downloads/kenya\_fast\_tack\_plan\_to\_end\_adolescents\_aids\_and \_young\_people.pdf

- Khalema, N. E., Ndinda, C., Bhembe, L., Makiwane, M., Vawda, M., Mahapa, N., Zondo, M., & Mgcina, N. (2014). Situation analysis of population and development in eight priority districts of KZN and EC: Analysing the determinants of sexual reproductive health and rights. Developed for UNFPA, December 2013.
- Kim, Y. M., Kols, A., Nyakauru, R., Marangwanda, C & Chibatamoto, P. (2001). Promoting sexual responsibility among young people in Zimbabwe. *International Family Planning Perspectives*, 27. Guttmacher Institute.
- Kitui, J., Lewis, S., & Davey, G. (2013). Factors influencing place of delivery for women in Kenya: An analysis of the Kenya demographic and health survey, 2008/2009. *BMC Pregnancy and Childbirth*, 13, 40.
- Klerman, L. V. (1990). The need for a new perspective on prenatal care. In: Markatz IR, Thompson JE, eds. New Perspectives on Prenatal Care. New York: Elsevier. (A/S)
- Koblinsky, M., Chowdhury, M. E., Moran, A., & Ronsmans, C. (2012). Maternal morbidity and disability and their consequences: Neglected agenda in maternal health. *J Health Popul Nutr*, 30(2), 124-130
- Koester, D. (2015). Gender and Power: DLP Concept Brief. University of Birmingham. United Kingdon. Retrieved from http://publications.dlprog.org/Gender&Power.pdf
- Koenig M. A., Zablostska, I., Lutalo, T., Nalugoda, F., Wagman, J., & Gray, R. (2004).

  Coerced first intercourse and reproductive health among adolescent women in Rakai,

  Uganda, *International. Family Planning Perspectives*, 30(4), 156-163.
- Kreuger, L. W. & Neuman, W. L. (2006). *Social work research methods: Qualitative and quantitative applications*. Boston: Pearson/Allyn and Bacon, 548-583. Retrieved from https://www.pearsonhighered.com/assets/samplechapter/0/2/0/5/0205470114.pdf
- Lakew, Y., Reda, A. A., Tamene, H., Benedict, S., & Deribe, K. (2013). Geographical variation and factors influencing modern contraceptive use among married women in Ethiopia:

- Evidence from a national population based survey. *Reproductive Health*, *10*, 52. Retrieved from http://www.reproductive-health-journal.com/content/10/1/52
- Lewis, D. A. (2011). HIV/sexually transmitted infection epidemiology, management and control in the IUSTI Africa region: Focus on sub-Saharan Africa. Retrieved from http://sti.bmj.com/content/sextrans/87/Suppl\_2/ii10.full.pdf
- Li, X. F., Fortney, J. A., Kotelchuck, M., Glover, L. H. (1996). The postpartum period: The key to maternal mortality. *International Journal Gynecology & Obstetrics* (54) 1, 1-10.
- Lloyd, C. B. (2005). Growing up global: The changing transitions to adulthood in developing countries. Washington, DC: National Press. International Family Planning Perspectives.
- Machiyama, K., & Cleland, J. (2013). *Insights into unmet need in Ghana*. London: London School of Hygiene and Tropical Medicine.
- Magnany, R. J., Karim, A. M., Weiss, L. A., Bond, K. C., Lemba, D. M., & Morgan, M. P. H. (2002). Reproductive health risk and protective factors among youth in Lusaka, Zambia. Journal of Adolescent Health. (1):76-86
- Maharaj, P., & Rogan, M. (2011). Missed opportunities for preventing unwanted pregnancy:

  A qualitative study of emergency contraception. *Journal of Family Planning and Reproductive Health Care*, 37, 89-96.
- Maharaj, Z. (1995). A social theory of gender: Connell's "Gender and Power". *Feminist review*, No. 49, Feminist Politics: Colonial/Postcolonial Worlds. Palgrave Macmillan Journals.
- Mahy, M., & Gupta, N. (2001). Trends and differentials in age at first birth in sub-Saharan Africa. Paper Presented at the XXIVth IUSSP General Population Conference. Salvador, Brazil. August 2001.

- Mak, H., Stephenson, R. B., & Juvekar, S. (2008). Social and logistical barriers to the use of reversible contraception among women in a rural Indian village. *J Health Popul Nutr*, 26, 241-250.
- Malhotra, A., Warner, A., McGonagle, A., & Lee-Rife, S. (2011). Solutions to end child marriage: What the evidence shows. Washington DC: International Center for Research on Women.
- Mathur, S., Greene, M., & Malhotra, A. (2003). *Too young to wed: The lives, rights and health of young married girls.* Washington, DC: International Center for Research on Women. Retrieved from: http://www.icrw.org/docs/tooyoungtowed\_1003.pdf
- Matsinhe, C. (2007). Access to sexual and reproductive health services in Mozambique: An analysis of organizational culture and institutional obstacles. Ed Medicus Mundi Catalunya. Women, Aids and Access to Health Care in Sub-Saharan Africa: Approaches from The Social Sciences. Barcelona. Spain.Retrieved from https://www.researchgate.net/publication/258223197\_WOMEN\_AIDS\_AND\_ACCE SS TO HEALTH CARE IN SUB-SAHARAN AFRICA
- Mboane, R., & Bhatta, M. P. Influence of a husband's healthcare decision making role on a woman's intention to use contraceptives among Mozambican women. (2015).

  \*Reproductive Health, 12, 36. doi 10.1186/s12978-015-0010-2
- Mbonu, N. C., Borne, B. V. D. B & Vries, N. K. D. (2010). Gender related power differences, beliefs and reactions towards people living with HIV/AIDS: An urban study in Nigeria. BMC Public Health, 10, 334.
- Mensch, B.S., Miller, R.A., Fisher, A.A., Mwita, J., Keyonzo, N., Ali, F.Y., Ndeti, C.(1994).

  Family planning in Nairobi: A situation analysis of the city commission clinic. *International Family Planning Perspectives*, 20(2):48-54.

- Ministério da Saúde de Moçambique (MISAU), Instituto Nacional de Estatística (INE), ICF
  Internacional. 2016. Inquérito de Indicadores de Imunização, Malária e HIV/SIDA
  (IMASIDA) em Moçambique 2015. Maputo, Moçambique.Rockville, Maryland, EUA:
  INS, INE e ICF International.Retrieved from
  http://pdf.usaid.gov/pdf\_docs/PBAAE679.pdf
- Ministerio de Saúde de Moçambique (MISAU), Instituto Nacional de Estatística (INE) e ICF International (ICFI). (2013). Moçambique Inquérito Demográfico e de Saúde. Calverton, Maryland, USA: MISAU, INE e ICFI. Retrieved from file:///C:/Users/User/Downloads/IDS%202011%20(10).pdf
- Ministério da Saúde de Moçambique (MISAU). 2010. Estratégia de planeamento familiar e contracepção. Maputo (2011-2015-2020)
- Ministério de Administração Estatal. (2005). Perfil do Distrito de Namaacha: Provincia de Maputo. Moçambique
- Ministerio de Saúde de Moçambique (MISAU). (2008). International Health Partnership:

  Taking Stock Report Mozambique. Retrieved from 
  http://www.internationalhealthpartnershipnet/pdf/07\_MOZAMBIQUE\_TSR\_EN\_FIN 
  AL
- Mosha, I., Ruben, R., Kakoko, D. (2013). Family planning decisions, perceptions and gender dynamics among couples in Mwanza, Tanzania. A qualitative study. *BMC Public Health*, 13, 523.
- Mubyazi, G. M., Bloch, P., Magnussen, P., Olsen, O. E., Byskov, J., Hansen, K. S. & Bygbjerg,
  I. C. (2010). Women's experiences and views about costs of seeking malaria chemoprevention and other antenatal services: a qualitative study from two districts in rural Tanzania. *Malaria Journal*, 9, 54. Retrieved from http://www.malariajournal.com/content/9/1/54

- Mueller, R. D., Germain, A., Fredrick, B., & Bourne, K. (2009). Towards asexual ethics and responsibilities. *Reproductive Health Matters*, 17(33):111-119.
- Najnin, N., Bennett, C. M., Luby, S. P. (2011). Inequalities in care-seeking for febrile illness of under-five children in urban Dhaka, Bangladesh. *J Health Popul Nutr*, 29, 523.
- Ndinda, C., Ndhlovu, T., & Khalema, N. E. (2017). Conceptions of contraceptive use in rural Kwazulu-Natal, South Africa: Lessons for programming. *International Journal of Environmental Research and Public Health* (14), 353, 11.Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5409554/pdf/ijerph-14-00353.pdf
- Novogradec, A. (2009). The lifecourse of esophageal cancer patients traced by means of the lifegrid. Faculty of Environmental Studies. Presented at Conference on Health over the Life Course, University of Western Ontario, London, Ontario, 14-19 October.

  Retrieved from http://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=1007&context=rdchealthconference
- O'Connell, T. S., Juliet, K., Bedford, A., Thiede, M., & McIntyre, D. (2015). Synthesizing qualitative and quantitative evidence on non-financial access barriers: Implications for assessment at the district level. *International Journal for Equity in Health*, *14*, 54 doi 10.1186/s12939-015-0181-z
- O'Reilly, K. R., Kennedy, C. E., Fonner, V. A., & Sweat, M. D. (2013). Family planning counselling for women living with HIV: A systematic review of the evidence of effectiveness on contraceptive uptake and pregnancy incidence, 1990 to 2011. *BMC Public Health*. doi: 10.1186/1471-2458-13-935
- Ochako, R., Mbondo, M., Aloo, S., Kaimenyi, S., Thompson, R., Temmerman, M., & Kays, M. (2015). Barriers to modern contraceptive methods uptake among young women in Kenya: a qualitative study. *BMC Public Health*, *15*, 118. doi: 10.1186/s12889-015-1483-1

- Omoeva, C., Hatch, R., & Sylla, B. (2014). Teenage, married, and out of school: Effects of early marriage and childbirth on school dropout. Education Policy and Data Center.

  Retrieved from http://www.ungei.org/EPDC\_EarlyMarriage\_Report.pdf
- Osakinle, E. O., Babatunde, J. O., & Alade, F. A. (2013). Youths and their choice of contraceptives towards An effective reproductive health: The case of Ekiti state, Nigeria. *European Scientific Journal* (9), 9, 193-202.
- Panchanadeswaran, S., Johnson S. C., Go, V.F., Srikrishnan, A.K., Sivaran, S., Solomon, S., ...Calentano, D. (2008). Using the theory of gender and power to examine experiences of partner violence, sexual negotiation, and risk of HIV/ AIDS among economically disadvantaged women in Southern India. *Journal of Aggression, Maltreatment & Trauma*, 15(3-4), 155-178. doi: 10.1080.
- Panday, S., Makiwane, M., Ranchod, C., & Letsoalo, T. (2009). Teenage pregnancy in South

  Africa with a specific focus on school-going learners. Child, Youth, Family and

  Social Development, Human Sciences Research Council. Pretoria: Department of Basic

  Education.Retrieved from

  http://www.gov.za/sites/www.gov.za/files/DoBE\_Teenage\_Pregnancy\_Report.pdf
- Parry, O., Thomson, C., & Fowkes, G. (1999). Life course data collection: qualitative interviewing using the lifegrid. *Sociological Research Online*, *4*(2) Retrieved from http://www.socresonline.org. uk/4/2/parry.html
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, California: Sage Publications.
- Pell, C., Menaca, A., Were, F., Afrah, N. A., Chatio, S., Taylor, L. M., ...Pool, R. (2013).
  Factors Affecting Antenatal Care Attendance: Results from Qualitative Studies in
  Ghana, Kenya and Malawi. PLoS ONE, 8(1) Retrieved from e53747.
  doi:10.1371/journal.pone.0053747

- Pettifor, A.E., Rees, H.V., Kleinschmidt, I., Steffenson, A.E., MacPhaila, C., Madikizela, L.H., ...Padian, N. (2005) Young people's sexual health in South Africa: HIV prevalence and sexual behaviours from a nationally representative household survey. Lippincott Williams & Wilkins.1531
- Retrieved from file:///C:/Users/214584176/Downloads/pettifor\_final.pdf
- Phiri, M., King, R., & Newell, J. N. (2015). Behaviour change techniques and contraceptive use in low and middle income countries: A review. *Reproductive Health*, *12*, 100. doi 10.1186/s12978-015-0091-y
- Pietkiewicz, I., & Smith, J. A. (2012). A practical guide to using Interpretative Phenomenological Analysis in qualitative research psychology. *Czasopismo Psychologicne*, 18(2),361-369.
- Planned Parenthood Federation of America, Inc. (2012). *Birth control*. Retrieved from http://www.plannedparenthood.org/health-topics/birth-control-4211.htm
- Plummer, M.L., Wight, D., Wamoyi, J., Mshana, G., Hayes, R. J., Ross, D. A. (2006). Farming with your hoe in a sack. Condom attitudes, access and use in rural Tanzania. *Study Family Planning*, *37*, 29-40.
- Pope, C., Royen, P. V. & Baker, S. (2002). Qualitative methods in research on healthcare quality. *Qual Saf Health Care*, 11, 148-152.
- Population Action International. (2008). A silent Partner: HIV in Marriage. Washington, DC 20036, USA. Retrieved from www.silentpartnerfilm.com
- Population Council. (1996). The unfinished transition. New York 10017.
- Population Reference Bureau, Instituto Nacional de Estatistica, & Ministério da Saúde. (2013).

  Cartaz de dados sobre a população. Moçambique, 2013.Retrieved from http://www.prb.org/pdf13/mozambique-population-datasheet-2013.pdf

- Population Reference Bureau & African Population & Health Research Center. (2008).2008

  Africa Population Data Sheet. Retrueved from
- http://www.prb.org/pdf08/africadatasheet2008.pdf
- Population Reference Bureau. (2008). Family Planning Worldwide: 2008 DATA SHEET.

  Retrieved from http://www.prb.org/pdf08/fpds08.pdf
- Population Reference Bureau. (2009). World population data sheet. *Popul Bull*, *64*, 3.Retrieved from http://www.ipsr.mahidol.ac.th/AllAboutPopulation/Download/09wpds\_eng.pdf
- Population Reference Bureau. (2010). World population data sheet. *Popul Bull*, 6. *Retrievef* from http://www.prb.org/pdf10/10wpds\_eng.pdf
- Population Resource Center. (2001). Maternal Mortality and Morbidity. Retrieved from <a href="http://www.prcdc.org/summaries/matmort/matmort.html">http://www.prcdc.org/summaries/matmort/matmort.html</a>
- Posel, D & Rudwick, S. (2011). Marriage and ilobolo [Bridewealth] in contemporary Zulu Society. Working Paper No. 60. ISBN 978-1-86840-714-9. South Africa. Retrieved from http://sds.ukzn.ac.za/Files/Documents/Default/WP%2060-Posel%20and%20Rudwick.pdf
- Pradhan, E. K., West, K. P., Katz, J. 2002. Risk of death following pregnancy in rural Nepal.

  \*Bull World Health Organ, 80, 887-91.
- Pulerwitz, J., Amaro, H., De Jong, W., Gortmaker, S. L., and Rudd, R. (2002). Relationship power, condom use and HIV risk among women in the USA. *AIDS Care*, *14*, 789-800.
- Rai, R. K. (2015). Utilization of maternal health-care services by Muslim women in India, Bangladesh, and Pakistan, 2005–2007. *Journal of Public Health*, 23, 37-48. doi 10.1007/s10389-014-0651-6
- Rai, R. K., Singh, P. K., Kumar, C., & Parasuraman, S. (2013). Teenage childbearing: A growing public health concern in need of urgent policy and program action. *Journal of Public Health*, 21, 379-384.

- Rasch, V., Silberschmidt, M., Mchumvu, Y., & Mmary, V. (2000). Adolescent girls with illegally induced abortion in Dar es Salaam: the discrepancy between sexual behaviour and lack of access to contraception. *Reproductive Health Matters*, 8, 52-62.
- Reynolds, H. W., Steiner, M. J., Cates, W. (2005). Contraception's proved potential to fight HIV. Sex Transm Infect, 81, 184-185.
- Richardson, J. C., Ong, B. N., Sim, J., & Corbett, M. (2009). *Begin at the beginning: Using a life grid for exploring illness experience*. University of Surrey.57. Retrieved from http://sru.soc.surrey.ac.uk/SRU57.pdf
- Richter, M. S., & Mlambo, G. T. (2005). Perceptions of rural teenagers on teenage pregnancy. *Health SA Gesondheid*, 10, 61-69.
- Ronsmans, C., Graham, W. J. (2006). Maternal Survival 1: Maternal mortality: Who, when, where, and why. Lancelet (368), no9542, 1189-1200
- Roye, C. F., & Seals, B. (2001). A qualitative assessment of condom use decisions by female adolescents who use hormonal contraception. *Journal of the Association of Nurses in AIDS Care*, (12)6, 78-87.
- Rubin, A & Babbie, E. R. (2008). Research methods for social work (6<sup>th</sup> ed). Thomsom, Brooks/Cole.Belmont,CA.USA
- Rutstien, S. O. (2008). Further evidence of the effects of preceding birth intervals on neonatal, infant, and under-five years mortality and nutritional Status in developing countries. In Calverton, Maryland: Macro International, MEASURE DHS. [86] p. (DHS Working Papers No. 41; USAID Contract No. GPO-C-00-03-00002-00). Retrieved from http://www.popline.org/node/209750.
- S.J. Jejeebhoy, ed. (2004). Looking forward: A profile of sexual and reproductive health in India. New Delhi: Rawat Publications.

- Sachs, J. D., McArthur, J. W. (2005). The Millennium Project: A plan for meeting the Millennium Development. *Lancet*, 36(5), 347-353.
- Sandelowski, M., & Barroso, J. (2003). Classifying the findings in qualitative studies. *Qualitative Health Research*, 13(7), 905-923.
- Santhya, K.G., Jejeebhoy, S.J., and Ghosh, S. (2008). Early marriage and sexual and reproductive health risks: Experiences of young women and men in Andhra Pradesh and Madhya Pradesh, India. New Delhi: Population Council.Retrived from http://www.ohchr.org/Documents/Issues/Women/WRGS/ForcedMarriage/NGO/Popul ationCouncil22.pdf
- Santhya, K.G., and Jejeebhoy, S.J. (2007). Early marriage and HIV/AIDS: Risk factors among young women in India. *Economic and Political Weekly* 42(14):1291–97.
- Santhya, K.G. and Jejeebhoy, S.J. (2003). "Sexual and reproductive health needs of married adolescent girls," *Economic and Political Weekly* 38(41): 4370–77
- Saroha, E., Altarac, M., Sibley, & L. M. (2008). Caste and maternal health care service use among rural Hindu women in Maitha, Uttar Pradesh, India. *Journal of Midwifery & Women's Health*, 53(5), 41–47.
- Scheppersa, E., Dongen, E. V., Dekker, J., Geertzen, J., & Dekker, J. (2006). Potential barriers to the use of health services among ethnic minorities: A review. *Family Practice*, 23, 325-348.
- Schwandt, T. A. (2001). Dictionary of qualitative inquiry (2<sup>nd</sup> ed). Thousand Oaks, CA: Sage.
- Scott, S. (2009). HIV/AIDS: Understanding socio-cultural factors and their influence on sexual behaviour and decision making in Africa. Journal of the Manitoba Anthropology Students Association, 28, 83-93.

- Sedgh, G., Hussain, R., Bankole, A., & Singh, S. (2007). Women with an unmet need for contraception in developing countries and their reasons for not using a method. New York: The Guttmacher Institute.
- Selvester, K., Cambaco, D., Bié, V., & Mndzebele, A. (2012). *Determinants of HIV in key hotspots on the Southern transport corridor: Maputo to Swaziland*. Retrived from http://southafrica.iom.int/system/files/drupal-private/STC\_Report\_WEB.pdf
- Senderowitz, J. (1999). Making reproductive health services youth friendly. Washington, DC: FOCUS on Young Adults: 1-51.
- Shah, I. H. (2010). Family Planning and Reproductive Health. *Demography* Vol I . Retrieved from http://www.eolss.net/sample-chapters/c04/e6-147-05.pdf
- Shah, I. H., & Ahman, E. (2009). Unsafe abortion: Global and regional incidence, trends, consequences and challenges. *Journal of Obstetric and Gynaecological Cancer*, 31(12), 1149-1158.
- Shah, I. H. (2007). Family planning and reproductive health. *Demography* Vol I. Department of Reproductive Health and Research, World Health Organization, Geneva, Switzerlan
- Shattuck, D., Kerner, B., Gilles, K., Hartmann, M., Ngombe, T., & Guest, G. (2011). Encouraging contraceptive uptake by motivating men to communicate about family planning: The Malawi Male Motivator project. *Am J Public Health*, *101*(6), 10891095.
- Simkhada, B., Porter, M. A., & Teijlingen, E. R. V. (2010). The role of mothers-in-law in antenatal care decision-making in Nepal: A qualitative study. *BMC Pregnancy and Childbirth*, 10, 34.
- Singh, P. K., Rai, R. K., Alagarajan, M., & Singh, L. (2012). Determinants of maternity care services utilization among married adolescents in rural India. *PLoS ONE*, 7(2). e31666. doi:10.1371/journal.pone.0031666

- Singh, S., Darroch, J. E., Ashford, L. S., & Vlassoff, M. (2009). Adding it up: The costs and benefits of investing in family planning and maternal and newborn health. Guttmacher Institute/UNFPA.
- Singh, S., Darroch, J. E., Vlassoff, M., and Nadeau, J. (2003). Adding it up: the benefits of investing in sexual and reproductive health care. New York: The Alan Guttmacher Institute and United Nations Population Fund (UNFPA).
- Smith, J. A., & Beksinska, M. E. (2013). Hormonal contraceptive continuation and switching in South Africa: Implications for evaluating the association of injectable hormonal contraceptive use and HIV. *J Acquir Immune Defic Syndr*, 62(3), 363-365.
- Smith, J. A., Osborn, M. (2003). Interpretative phenomenological analysis. In J. A. Smith (ed.), *Qualitative psychology: A practical guide to research methods*. London: Sage. (51-80)
- Solo, J., Odonkor, M., Pile, J.M., & Wickstrom, J. (2005). Repositioning family planning Ghana case study: 'Give them the power.' New York: The ACQUIRE Project/EngenderHealth.
- Sonalkar, S., Mody, S., Phillips, S., & Gaffield, M. E. (2013). Programmatic aspects of postpartum family planning in developing countries. A qualitative analysis of key informant interviews in Kenya and Ethiopia. *Afr J Reprod Health*, 17, 54-6.
- Southern African Development Community. (2008). Sexual and Reproductive Health Strategy for the SADC Region 2006 2015. Retrived from http://www.sadc.int/files/7913/5293/3503/Sexual\_And\_Reproductive\_Health\_for\_SA DC 2006-2015.pdf
- Speidel, J., Sinding, S., Gillespie, D., Maguire, E., & Neuse, M. (2009). Making the case for US. In International Family Planning Assistance. Baltimore, Maryland: Johns Hopkins Bloomberg School of Public Health, Bill and Melinda Gates Institute for Population

- and Reproductive Health.Retrieved from http://www.jhsph.edu/sebin/u/d/MakingtheCase.pdf
- Speizer, I. S., Calhoun, L. M., Hoke, T., & Sengupta, R. (2013). Measurement of unmet need for family planning: Longitudinal analysis of the impact of fertility desires on subsequent childbearing behaviors among urban women from Uttar Pradesh, India. *Contraception*, 88(4), 553-560
- Starrs, A. (1998). The Safe Motherhood Action Agenda: Priorities for the Next Decade. Report on the Safe Motherhood Technical Consultation 18-23 October 1997, Colorado, Sri Lanka. New York.
- Stephenson, R., Vwalika, B., Greenberg, L., Ahmed, Y., Vwalika, C., & Chomba, E. (2011).

  A randomized controlled trial to promote long-term contraceptive use among HIV-serodiscordant and concordant positive couples in Zambia. *Journal of Womens Health*, 20(4), 567-574.
- Stephenson, R., and Hennink, M. (2004). Barriers to family planning use amongst the urban poor in Pakistan: Opportunities and Choices. Southampton, University of Southampton, School of Social Sciences; 34.; Retrieved from https://eprints.soton.ac.uk/34736/1/Pakistan%2520barriers%2520WP2.PDF
- Stover, J., & Ross, J. (2010). How increased contraceptive Use has reduced maternal mortality. *Matern Child Health J*, 14(5), 687-695.
- Stuart, J. E., Secura, G. M., Zhao, Q., Pittman, M. E., & Peipert, J. F. (2013). Factors associated with 12-month discontinuation among contraceptive pill, patch and ring users. *Obstet Gynecol*, *121*(2 Pt 1), 330-336.
- Subramanian, L., Oliveras, E., Bowser, D., Okunogbe, A., Mehl, A., Jacinto, A., ...Chilundo, B. (2013). Evaluating the coverage and cost of community health worker programs in Nampula Province in Mozambique. Pathfinder International.

- Sweat, M. D., O'Reilly, K. R., Schmid, G. P., Denison, J., and De Zoysa, I. (2004). Cost effectiveness of nevirapine to prevent mother-to-child HIV transmission in eight African countries. *AIDS*, *18*, 1661-1671.
- Tarekegn, S. M., Lieberman, L. S., and Giedraitis, V. (2014). Determinants of maternal health service utilization in Ethiopia: Analysis of the 2011 Ethiopian Demographic and Health Survey. *BMC Pregnancy and Childbirth*. doi:10.1186/1471-2393-14-161
- Tawk, H. M., Simpson, J. M., & Mindel, A. (2004). Condom use in multi-partnered females. *International Journal of STD & AIDS*, 15(6), 403-407.
- The United Nations Human Rights Office of the High Commissioner (OHCHR). (2015).

  Information Series on Sexual and Reproductive Health and Rights: Maternal Mortality and Morbidity.Retrieved from http://www.ohchr.org/Documents/Issues/Women/WRGS/SexualHealth/INFO\_MMM

  \_WEB.pdf
- Thomas, D. R. (2003). *A general inductive approach for qualitative data analysis*. Auckland: School of Population Health,. University of Auckland.
- Tripney, J., Kwan, I., & Bird, K. S. (2013). Post abortion family planning counselling and services for women in low-income countries: A systematic review. *Contraception*, 87(1), 17-25.
- Tumlinson, K., Pence, B. W., Curtis, S. L., Marshall, S. W., & Speizer, L. S. (2015). Quality of care and contraceptive use in urban Kenya. 41 (2), 69-79. doi: 10.1363/4106915.
- Wentzel, M.E.(2003). Historical and contemporary dimensions of migration between South Africa and its neighbouring countries. (Unpublished paper delivered at HRSC migration workshop, Pretoria 17-20 March). Retrieved from http://repository.hsrc.ac.za/bitstream/handle/20.500.11910/8928/1994.pdf?sequence=

1

- Underwood, C., Hachond, H., Serlemitsos, E., & Kumar, U.B. (2006). Reducing the risk of HIV transmission among adolescents in Zambia: Psychosocial and behavioural correlates of viewing a risk-reduction media campaign. *Journal of Adolescent Health*.
- United Nations. (1995). Report of the International Conference on Population and Development, Cairo, 5-13 September 1994. United Nations Publication Sales No. E.95.X111.18, New York: United Nations. Retrieved from http://www.un.org/popin/icpd/conference/offeng/poa.html
- United Nations. (2012a). The Millennium Development Goals Report 2012. New York Retrieved from http://www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf
- United Nations. (2012b). 5.5 Antenatal care coverage (at least one visit and at least four visits).

  Retrieved from http://mdgs.un.org/unsd/mi/wiki/5-5-Antenatal-care-coverage-at-least-one-visit-and-at-least-four-visits.ashx
- United Nations. (2014). Framework of Actions for the Follow-up to the Programme of Action of the International Conference on Population and Development Beyond 2014: Report of the Secretary-General. New York: Retrieved from https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of %20action%20for%20the%20followup%20to%20the%20PoA%20of%20the%20ICP D.pdf
- United Nations Children's Fund. (2001). *Early marriage: Child spouses*. Innocenti Research

  Centre, Florence.Retrieved from https://www.unicefirc.org/publications/pdf/digest7e.pdf
- United Nations Children's Fund. (2005). Early Marriage A Harmful Traditional Practice: A

  Statistical Exploration. .Retrieved from

  https://www.unicef.org/publications/files/Early\_Marriage\_12.lo.pdf

- United Nations Children's Fund. (2009). The state of the World's Children 2009: Maternal and New born Health. Retrieved from https://www.unicef.org/publications/files/SOWC\_2009\_Main\_\_Report\_\_03112009.pdf
- United Nations Children's Fund. (2013). Ending child marriage: Progress and prospects. New York.Retrieved from https://www.unicef.org/media/files/Child\_Marriage\_Report\_7\_17\_LR..pdf
- United Nations Children's Fund. (2015). Child Marriage and Adolescent Pregnancy in Mozambique: Causes and Impact.Retrieved from http://www.unicef.org.mz/wp-content/uploads/2015/07/EN\_Statistical\_Analysis\_Child\_Marriage\_Adolescent\_Pregnancy\_aw-Low-Res.pdf
- United Nations Children's Fund. (2016). Data on maternal health and antenatal care.\_Retrieved from\_http://data.unicef.org/maternal-health/antenatal-care.html
- United Nations Department of Economic and Social Affairs, Population Division. (2013).

  World contraceptive use 2011. New York: United Nations.Retrieved from http://www.un.org/en/development/desa/population/publications/pdf/family/worldContraceptivePatternsWallChart2013.pdf
- United Nations Educational, Scientific and Cultural Organization. (2003).UNESCO'S Gender
  Mainstreaming Implementation Framework (GMIF) for 2002-2007. Paris, France.
  Retrieved from http://unesdoc.unesco.org/images/0013/001318/131854e.pdf
- United Nations International Children's Emergency Fund. (2001). *Early Marriage: Child Spouses*. Innocenti Research Centre, Florence. Retrieved from https://www.unicefirc.org/publications/pdf/digest7e.pdf
- United Nations International Children's Emergency Fund. (2005). Early Marriage A Harmful Traditional Practice: A Statistical Exploration.

- United Nations International Children's Emergency Fund. (2016). Data on maternal health and antenatal care. Retrieved from http://data.unicef.org/maternal-health/antenatal-care.html
- United Nations Population Division. (2011). World population prospects: The 2010 revision. New York.
- United Nations Population Fund. (2007). Facts about Safe Motherhood. Retrieved from http://www.unfpa.org/mothers/facts.htm
- United Nations Population Fund. (2011). Indicadores Sociais e Demograficos em Moçambique.Retrieved from https://www.un.cv/files/PT-SWOP11-WEB.pdf
- United Nations Population Fund. (2012). The state of the world population: By Choice, Not by Chance Family Planning, Human Rights and Development. Retrieved from <a href="https://www.unfpa.org/sites/default/files/pub-pdf/EN\_SWOP2012\_Report.pdf">https://www.unfpa.org/sites/default/files/pub-pdf/EN\_SWOP2012\_Report.pdf</a>
- United Nations Population Fund. (2013). ICPD and Human Rights: 20 years of advancing reproductive rights through UN treaty bodies and legal reform.Retrieved from https://www.unfpa.org/sites/default/files/pubpdf/icpd\_and\_human\_rights\_20\_years.pf
- United Nations Program on HIV/AIDS (UNAIDS). (2004). The global coalition on women and AIDS. Retrieved from http://data.unaids.org/gcwa/gcwa\_backgrounder\_en.pdf
- United Nations Program on HIV/AIDS. (2008). 2008 Report on the Global AIDS Epidemic.

  Geneva.Retrieve from http://www.unaids.org/sites/default/files/media\_asset/jc1510\_2008globalreport\_en\_0. pdf
- United Nations Program on HIV/AIDS. (2013). Global report: UNAIDS report on the global AIDS epidemic 2013.Retrieved from http://www.unaids.org/sites/default/files/media\_asset/UNAIDS\_Global\_Report\_2013 \_en\_1.pdf

- United Nations Program on HIV/AIDS. (2014). The Gap Report.Retrieved from http://files.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/20 14/UNAIDS\_Gap\_report\_en.pdf
- United Nations Program on HIV/AIDS. (2015). Facts Sheet: Global Statistics.Retrieved from http://www.unaids.org/sites/default/files/media\_asset/20150901\_FactSheet\_2015\_en. pdf
- United Nations Women. (2011). Programming module on working with the health sector to address violence against women and girls.Retrieved from http://www.endvawnow.org/uploads/modules/pdf/1405612448.pdf
- United States Agency for International Development. (2004). Focused Antenatal Care:

  Planning and Providing Care during Pregnancy: Program Brief.Retrieved from

  http://pdf.usaid.gov/pdf\_docs/Pnada620.pdf
- Upadhyay, P., Liabsuetrakul, T., Shrestha, A.B., & Pradhan, N. (2014). Influence of family members on utilization of maternal health care services among teen and adult pregnant women in Kathmandu, Nepal: A cross sectional study. *Reproductive Health*, 11, 92. Retrieved from http://www.reproductive-health-journal.com/content/11/1/92
- Vincent II, J.M.J. 2009. Community Development Practice. In R. Philipps and R. H. Pittman (eds). *An Introduction to Community Development* pp. (58-73). London and New York: Routledge.
- Wablembo, M. S., Notzi, J., & Kwagala, B. (2011). Does Couple Discussion Influence Unmet Need for Family Planning in Uganda? Princeton Education Papers.
- Wado, Y. D., Afework, M. F., and Hindin, M. J. (2013). Unintended pregnancies and the use of maternal health services in southwestern Ethiopia. *BMC International Health and Human Rights*. doi: 10.1186/1472-698X-13-36

- Wai, K. M., Shibanuma, A., Oo, N. N., Fillman, T. J., Saw, Y. M., & Jimba, M. (2015). Are husbands involving in their spouses' utilization of maternal care services? A cross-sectional study in Yangon, Myanmar. *PLoS ONE*, 10(12), e0144135. doi:10.1371/journal.pone.0144135, 1-12
- Wambui, T., Eka, A. C., & Alehagen, S. (2009). Perceptions of family planning among low-income men in Western Kenya. *Int Nurs Rev*, 56, 340-345.
- Ward, V. M., Bertrand, J. T., & Puac, F. (1992). Unmet need for family planning in Uganda?

  Princeton Education Papers exploring sociocultural barriers to family planning among

  Mayans in Guatemala. *Int Fam Plan Perspect*, 18, 59-65.
- Ward, V. M., Bertrand, J. T., &Puac, F. (1992). Exploring sociocultural barriers to family planning among Mayans in Guatemala. *International Family Planning Perspective*, 18, 59-65.
- Washington, L., & Tallis, V. (2012). Sexual and reproductive health and rights: a useful discourse for feminist analysis and activism? BUWA! *A Journal on African Women's Experiences*, 2(1).Retrieved from http://www.osisa.org/sites/default/files/06-10.pdf
- Weeks, J. R. (2010). *Population: An introduction to concepts and issues* (11<sup>th</sup> ed.). Belmonte, USA. Cengage Learning.
- Wentzel, M. E. (2003). Historical and contemporary dimensions of migration between South Africa and its neighbouring countries. (Unpublished paper delivered at HRSC migration workshop, Pretoria 17-20 March).
- Westoff, C. F., & Bankole, A. (2000). Trends in the demand for family limitation in developing countries. *International Family Planning Perspective*, 26, 56-97.
- Willan, S. (2013). A Review of Teenage Pregnancy in South Africa Experiences of Schooling, and Knowledge and Access to Sexual & Reproductive Health Services.

  Partners in Sexual Health (PSH).

- Williamson, L. M., Parkes, A., Wight, D., Petticrew, M., & Hart, G. J. (2009). Limits to modern contraceptive use among young women in developing countries: a systematic review of qualitative research. *Reproductive Health*, 6, 3. doi:10.1186/1742-4755-6.Retrieved from http://www.reproductive-health-journal.com/content/6/1/3
- Wilson, S., Cunningham-Burley, S., Bancroft, A., Backett-Milburn, K., & Masters, H. (2007). Young people, biographical narratives and the life grid: Young people's accounts of parental substance use. *Qualitative Research*, 7(1), 135-151.
- Wingood, G. M., & DiClemente, R. J. (2000). Application of the theory of gender and power to examine HIV-related exposures, risk factors, and effective interventions for women. *Health Education Behaviour*, 27(5), 539-565.
- Wood, K., & Jewkes, R. (2006). Blood blockages and scolding nurses: barriers to adolescent contraceptive use in South Africa. *Reprod Health Matters*. *14*, 109-118.
- World Bank (2013).Mozambique country profile. Retrieved from http://www.worldbank.org/en/country/mozambique
- World Health Organization, United Nations International Children's Emergency Fund, United Nations Population Fund, World Bank, & the United Nations Population Division. (2015). Trends in maternal mortality: 1990 to 2015.
- World Health Organization. (2015). Family planning/Contraception: Fact sheet No. 351.
- World Health Organization. (2014a). Maternal Mortality, Fact sheet No. 348, May 2014.
- World Health Organization. (2014b). *Country Cooperation Strategy at Glance*. WHO/CCU/14.03/Mozambique
- World Health Organization. (2013). Increasing access for child and maternal health care services: the Mozambique experience. ISBN: 978-929023263-6 (NLM Classification: WA 310)

- World Health Organization. (2012a). Trends in maternal mortality: 1990 to 2010: WHO, UNICEF, UNFPA and The World Bank estimates. ISBN 978 92 4 150363 1
- Retrieved from http://apps.who.int/iris/bitstream/10665/44874/1/9789241503631\_eng.pdf
- World Health Organization. (2012b). Early marriages, adolescent and young pregnancies: Report by the Secretariat. Sixty-Fifth World Health Assembly: A65/13.
- Retrieved from <a href="http://apps.who.int/gb/ebwha/pdf\_files/WHA65/A65\_13-en.pdf">http://apps.who.int/gb/ebwha/pdf\_files/WHA65/A65\_13-en.pdf</a>
- World Health Organization. (2011). WHO guidelines on preventing early pregnancy and poor reproductive health outcomes among adolescents in developing countries. Geneva, Switzerland.

  Retrieved from <a href="http://www.who.int/immunization/hpv/target/preventing-early-pregnancy-and-poor-reproductive-outcomes-who-2006.pdf">http://www.who.int/immunization/hpv/target/preventing-early-pregnancy-and-poor-reproductive-outcomes-who-2006.pdf</a>
- World Health Organization. (2009). Reduction of maternal mortality: a joint WHO/UNFPA/UNICEF/World Bank statement. Geneva.
- World Health Organization. (2008). Adolescent pregnancy. Volume 1, No.1 Retrieved from http://www.who.int/maternal\_child\_adolescent/documents/mpsnnotes\_2\_lr.pdf
- World Health Organization. (2006a). *Defining Sexual Health: Report of a Technical Consultation on Sexual Health*. Geneva: 5.Retrieved from http://www.who.int/reproductivehealth/topics/gender\_rights/defining\_sexual\_health.p
- World Health Organization. (2006b). Contraceptive prevalence rate (%). Retrieved from http://www.who.int/whosis/whostat2006ContraceptivePrevalenceRate.pdf
- World Health Organization. (2006c). Antenatal care coverage (%). Retrieved from http://www.who.int/whosis/whostat2006AntenatalCareCoverage.pdf
- World Health Organization. (2006d). Provision of effective antenatal care: Integrated management of pregnancy and childbirth (IMPAC).

- World Health Organization. (2004a). Reproductive Health Strategy to Accelerate Progress towards the attainment of International Development Goals and Targets.Retrieved from http://apps.who.int/iris/bitstream/10665/68754/1/WHO\_RHR\_04.8.pdf
- World Health Organization. (2004b). International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, vol. 2, Instruction Manual, 2nd ed.Retrieved from http://www.who.int/classifications/icd/ICD-10\_2nd\_ed\_volume2.pdf
- World Health Organization. (2003). Antenatal care in developing countries: promises, achievements and missed opportunities. An analysis of trends, levels and differentials, 1990-2001. Geneva, Switzerland: World Health Organization; 2003. Retrieved from <a href="http://www.childinfo.org/files/antenatal\_care.pdf">http://www.childinfo.org/files/antenatal\_care.pdf</a>
- World Health Organization. (2002). WHO Antenatal care Randomized Trial: Manual for the Implementation of the New Model.Retrieved from http://apps.who.int/iris/bitstream/10665/42513/1/WHO\_RHR\_01.30.pdf
- World Health Organization. (1994). *Antenatal Care: Report of a Technical Working Group*. WHO/FRH/MSM/96.8.
- Wulifan, J. K., Brenner, S., Jahn, A., & De Allegri, M. (2016). A scoping review on determinants of unmet need for family planning among women of reproductive age in low and middle income countries. *BMC Women's Health*, 16, 2. doi 10.1186/s12905-015-0281-3
- Wyatt, K. D., Anderson, R. T., Creedon, D., Montori, V. M., Bachman, J., Erwin, P., & LeBlanc, A. (2014). Women's values in contraceptive choice: a systematic review of relevant attributes included in decision aids. *BMC Women's Health*, 14, 28. doi:10.1186/1472-6874-14-28
- Yalew, S. A., Zeleke, B. M., & Teferra, A. S. (2015). Demand for long acting contraceptive methods and associated factors among family planning service users, Northwest

Ethiopia: a health facility based cross sectional study. *BMC Research Notes*, 8, 29: doi 10.1186/s13104-015-0974-6

You, D., Hug, L., & Anthony, D. (2015). UNICEF report Generation 2030 Africa calls upon investing in and empowering girls and young women. *Reproductive Health*, *12*, 18. doi 10.1186/s12978-015-0007-x

**APPENDICES** 

Appendix 1: Interview Guide 1 (Snapshot- 1st phase)

Interview Details:						
Site	of Interview Date Intervi	iewer				
Part	icipant Details:					
Participant Number						
Plea	se answer the following questions as honestly as possible. All answers are co	onfiden	tial			
1.	Tell me about yourself (Probe: place of birth, level of education, early sexperiences of violence, work and economic conditions, education, marriage)?  How old are you?  3. Are you married and for how long?		<b>—</b> [	No		
4.	Do you have any children? How many (Probe: gender)	Yes		No		
5.	Do you live with your husband? (Probe: in your own home or with extended family- in laws?					

6.	Do you know what is meant by the term contraceptives? Yes No Explain						
7.	Do you know what is meant by the term antenatal care?)						
	Yes No Explain						
	What can you tell me about understanding of family						
8.	planning (Probe: Do you know what is meant by sexual						
	reproductive health (SRH)?						
9.	Have you ever used any type of contraceptives? If so, which						
<i>)</i> .	ones and why?						
10	When you were pregnant, did you attend to antenatal care? If so, explain? If not why						
10.	not?						

## Appendix 2: Guião de entrevista (Life Grid - Snapshot- 1ª fase)

Detalhes de entrevista:											
Lugar entrevista	da			Data	a			Nome Entrevis r	do [		
Detalhes de	e partici <sub>]</sub>	pante:									
Número de Participante											
Por favor, responda as perguntas seguintes o mais honestamente possível. Todas as suas respostas serão mantidas confidenciais											
Fale-me sobre si (Evidências: Lugar de nascimento, nível educação, experiências sexuais,  1. experiências de violência, condições de trabalho e financeira, etc)											
2. Quan	tos anos	tens?		3.	Es casa tempo?	da? Por o	quanto		Sim		Não
										7	
4. Você t	em filho	s? Qua	ntos? (evid	ência	: Género	<b>)</b> )			Sim		Não
5.											

	Você vive com o seu marido? (Evidência: partilha a casa somente com o marido/ partilha a casa com o marido e a familia alagada)				
6.	Sabe o que são contraceptivos?	Sim	Não (explique)		
7.	Sabe o que são cuidados pre-natais	Sim	Nao (Explique)		
8.	O que entendes por planeamento familiar? (Evidência: Sabes o significado da sigla SSR?)?				
9.	Já usou algum tipo de contraceptivos? Se sim, qual (ais) e porque?				
10.	Durante a sua última gravidez, visitou os serviços de razões para a sua resposta.	cuidados	s prenatal? Deia as		

### **Appendix 3 Interview Guide 2: (Life Grid in-depth- 2<sup>nd</sup> Phase)**

### A. Exploring Contraceptive Use for Women who marry early

- 1. Do you use contraceptives? if so, how long have you been using contraceptives (if any)?
- 2. Can you reflect why did you choose that specific method?
- 3. Does your husband use condoms? How consistently does he use condoms? Do you use condoms?
- 4. Do you think women like you should (or not) use contraceptives?

#### **B.** Understanding Barriers and Facilitators to Contraceptive Use

- 1. What were the benefits of using contraceptives for you?
- 2. Do you feel you have the right to make your own decision regarding contraceptives use? Explain
- 3. Do you follow all the recommendations provided for correct contraceptive use?
- **4.** What are the community beliefs about the use of modern contraceptives in your opinion?
- 5. Does your husband and extended family support your decision of using contraceptives?
- **6.** What do you think prevents most women to use contraceptives?

#### **D.** Exploring Antenatal Care and Access

- a) In your previous pregnancies did you use antenatal care services? What were the benefits of antenatal care attendance?
- b) Do you recall times during pregnancy (ies), where you experienced emotional distress, anxiety, or depression?
- c) Who accompanied you during the antenatal care visits? (Probe: mother, sister, mother in law, husband, friend?)
- d) With all your pregnancy (ies), were there complications (if any) reported during antenatal care visits? Did you follow all the recommendations provided during antenatal care visits? Who helped you during delivery?

### E. Understanding Barriers and Facilitators for Antenatal Care Services

- Did you feel you have the right to make your own decision regarding antenatal care?
   Explain
- 2. What are the community beliefs about the use of modern antenatal care by pregnant married women?

- 3. Does your husband and extended family support your decision of using antenatal care services?
- 4. Aside from time spent in your daily activities, did you find time to visit antenatal care when on need?
- 5. What do you think prevents most women in using antenatal care)? (Probe: do you think it's far to go to a clinic or to see a doctor? Did you have to wait long to see a doctors or a nurse? Who paid for transport? Hospital fee?
- 6. How did health providers treat you when you were seeking antenatal care?
- 7. Do you feel you know about prenatal and antenatal care?

#### F. Recommendations for Service Provision and Empowerment of Women

- 1. What do you think can be change to improve contraceptive use in Mozambique? (for women, in the community within the healthcare system? Probe: Would you recommend for your daughter or your sister to use contraceptive and antenatal care (why or why not?)
- 2. What do you think can be change to improve antenatal care services use in Mozambique? (in the family, in the community, in the healthcare system?

#### **Appendix 4** Guião de entrevista 2: (Life Grid – 2ª fase)

# A. Explorando o uso de contraceptivos modernos entre mulheres que se casaram antes dos 18 anos

- 1. Voce usa contraceptivos modernos? Se sim, por quanto tempo tem vindo a usar contraceptivos?
- 2. Podes reflectir em torno das razões que te levaram a escolher esse tipo de contraceptivos?
- 3. O teu marido usa preservativos? O uso de preservatives é regular? Voce usa preservativos?
- 4. Achas que mulheres na tua posição deveriam usar contraceptivos modernos?

#### B. Explorando barreiras e facilitadores que influenciam o uso de contraceptivos

- 1. Quais foram os beneficios do uso de contraceptivos para si?
- 2. Achas que tens o direito de decidir pessoalmente sobre o uso de contraceptivos na sua relação? Explique
- 3. Segues todas as recomendações relacionadas com contraceptivos, oferecidas pelos provedores de saúde?
- **4.** Na sua opinião, quais são as crenças que a comunidade tem, relacionada com contraceptivos modernos?
- 5. Você tem apoio do seu marido e outros membros da sua familia no que concerne ao uso de contraceptivos?
- **6.** O que achas que dificulta o uso effectivo de contraceptivos por parte das mulheres casadas?

#### D. Explorando o uso dos serviços de cuidados pre-natais por parte das mulheres casadas

- a) Na sua gravidez anterior, você usou os serviços de cuidados pre-natais? Quais foram os beneficios para si?
- b) Durante a (s) sua (s) gravidez (es), lembra-se de ter tido algum tipo de stress, ansiedade ou depressão?
- c) Durante as visitas aos serviços de cuidados pre-natais, teve companhia de alguem?
   (Evidência: mãe, irmã, sogra, marido, amiga)
- d) Durante a (s) sua (s) anteriores gravidez (es), teve algum tipo de complicação detectada durante as visitas pré-natais? Você segue as recomendações dadas pelos agentes de saúde durante as visitas pré-natais? Quem a assistiu durante o seu parto?

# E. Explorando barreiras e facilitadores que influenciam o uso de serviços de cuidados pre-natais

- Na tua opinião você acha que deve decidir por si mesma o uso de cuidados pre-natais?
   Explique
- 2. Na sua opinião, quais são as crenças da sua comunidade em relação ao uso dos serviços dos cuidados pre-natais pelas mulheres, durante a gravidez.
- 3. Você é motivada pela sua familia e marido para usar os serviços de cuidados pre-natais durante a gravidez?
- 4. Para além do seu tempo para actividades diárias e a cuidar da sua familia, você tem tempo para visitor os serviços de cuidados pre-natais quando necessário?
- 5. Na sua opinião, quais são as barreiras que as mulheres que casam cedo enfrentam para aceder aos serviços de cuidados pre-natais? (Evidências: residência distante do Centro de saúde? Longo tempo de espera para ver um provedor de saúde? Custo de transporte? Custo de medicamentos e consulta?
- 6. Você ficou satisfeita com o tratamento dos provedores de saúde durante as visitas aos serviços de cuidados pre-natais.
- 7. Você acha que tem conhecimento sobre o funcionamento dos serviços de cuidados prenatais?

# F. Recomendação para melhoria dos serviços de saúde materna e empoderamento das mulheres

- 1. Na sua opinião, o que deveria ser feito para melhorar o uso de contraceptivos modernos em Moçambique? Recomendarias o uso de contraceptivos para a sua filha ou Irma? Porque?
- 2. Na sua opinião, o que deveria ser feito para melhorar o uso de serviços de cuidados prenatais em Moçambique? A nível de família, comunidade, Sistema de saúde,

**Appendix 5** Informed Consent Form

(to be read out by researcher before the beginning of the interview. one copy of the form to be

*left with the respondent; one copy to be signed by the respondent and kept by the researcher.)* 

My name is Maximino Gervasio Sebastiao Costumado (student number 214584176). I am a

master student in Population Studies enrolled at the University of KwaZulu Natal-Howard

College Campus in Durban, South Africa. Currently, I am conducting a study aim to explore

the experience of married girls when they seek maternal health services such as antenatal care

and access to contraceptive methods in Namaacha District, Mozambique.

If you have any questions my contact details are:

Cell: 00258..... or 0027717729387.

Email: 214584176@ukzn.ac.za ou mcostumado@yahoo.com.br

This study is supervised by Mr Mohamed Vawda at the school of Built Environment and

Development studies, University of KwaZulu Natal.

School of Built Environment and Development studies, University of KwaZulu Natal, Durban

4041, South Africa.

Telephone:

e-mail: Vawdam1@ukzn.ac.za

Thank you for agreeing to take part in the study. Before we start I would like to emphasize that:

232

-your participation is entirely voluntary;

-you are free to refuse to answer any question;

-you are free to withdraw at any time and this will not result in any disadvantage.

If you agree to participate, I will interview you for about an hour- 1-1/2. Should we run out of time during the first interview, one more appointment will be arranged. There is no risk to you in participating in this project. The interview and recordings will be kept strictly confidential and will be available only to members of the research team. Excerpts from the interview may be made part of the final research report but I will not use your name or any information that may identify you. Shredders certified to an appropriate security level will be used for destroying paper and CDs discs with recordings.

Please sign this form to show that I have read the content	ats to you.
(Signed) (Date)	
Signature of Witness	
(Where applicable)	
(Signed)	
(Date)	
Signature of Witness	
(Where applicable)	

**Appendix 6 Informed consent form – Portuguese version** 

(A ser lido pelo pesquisador antes do inicio da entrevista, uma cópia do formulário a ser

deixado com o respondent, uma cópia a ser assinada pelo entrevistado e mantida pelo

pesquisador)

Meu nome é Maximino Gervasio Sebastiao Costumado (estudante número 214584176). Eu sou

um estudante de mestrado em Estudos de População na Universidade de KwaZulu Natal-

Howard College Campus em Durban, South Africa. Actualmente estou a realizar um estudo

com o objective de explorer a experiência de mulheres casadas antes de completer 18 anos, no

que concerne ao uso de serviços de saúde maternal, particularmente acesso a cuidados pré-

natais e uso de métodos contraceptivos no distrito de Namaacha em Moçambique.

Se você tiver alguma dúvida sobre este estudo, não hesite em usar os contactos abaixo:

If you have any questions my contact details are:

Maximino Costumado

Cell: 00258..... or 0027717729387.

Email: 214584176@ukzn.ac.za ou mcostumado@yahoo.com.br

Este estudo é supervisionado por Mohammed Vawda da Escola de Estudos de Ambiente e

Desenvolvimento, Universidade de Kwazulu Natal

Durban 4041, South Africa; Telephone: 0312601115; e-mail: Vawdam1@ukzn.ac.za

Obrigado por concordar em participar do estudo. Antes de comecar, gostaria de salientar que:

-a sua participação é livre;

-você está livre de se recusar a responder qualquer pergunta;

-Você é livre para se retirar a qualquer momento e isso não resultara em nenhum prejuizo.

234

Se você concordar em participar, eu vou entrevista-lo por cerca de 45 minutos a um hora e meia. Se ficar sem tempo durante a primeira entrevista, será marcada mais uma entrevista. Não ha nenhum risco para você participar deste projecto. Caso aceite que a entrevista seja gravida, a informação será mantida estritamente confidencial e estara disponível somente para os membros da equipa de pesquisa. Excertos da entrevista podem fazer parte do relatório final da pesquisa, mas não vou usar seu nome ou qualquer informação que possa identifica-lo. Os trituradores certificicados com um nível de segurança apropriado serão usados para destruir discos de papel e cds com gravações.

(onde aplicável)

## Apppendix 7

## **Declaration by participant**

	full names of the participant) herby confirm that the nature of this research project, and I consent
I understand that I am at liberty to withdraw fi	rom this project at any time, should I desire to.
I consent to this interview being recorded (if a	pplicable).
Signature of the participant	Date

## Apppendix 8

## Declaração de participante

Eu(No compreendo o conteúdo deste document e a naturo em participar do projecto de pesquisa.	
Eu entendo que estou livre para me retirar desse pr	rojecto a qualquer momento, se eu desejar.
Por meio deste, concord que esta entrevista seja gr	ravida ( ).
Por este meio, não autorizo a gravação desta entre	vista ( ).
Assinatura do participante	Data

Appendix 9 Ethical clearance



23 November 2016

Mr Maximino GS Costumado 214584176 School of Built Environment and Development Studies **Howard College Campus** 

Dear Mr Costumado

Protocol reference number: HSS/1445/016M

Project title: Exploring Maternal health experiences of Contraceptive use and Antenatal Care for Young Women who marry early in Namaacha, Mozambique.

Full Approval – Full Committee Reviewed Protocol

In response to your application received 5 September 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

**Humanities & Social Sciences Research Ethics Committee** 

/pm

cc Supervisor: Mohamed Vawda

cc Academic Leader Research: Prof Maheshvari Naidu

cc School Administrator: Ms Nonhlanhla Radebe and Mr N Memela

**Humanities & Social Sciences Research Ethics Committee** 

Dr Shenuka Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3587/8350/4557 FacsImile: +27 (0) 31 260 4609 Email: ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za

Website: www.ukzn.ac.za

