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Adolescent Reproductive Health in Cameroon

Prevention of adolescent pregnancies through access to sexual and reproductive health measures in Cameroon

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Abstract

Preventing adolescent pregnancies and improving adolescent reproductive health are important as they not only touch on more tangible issues like maternal and child mortality, but also have a long-term effect on any country's basic wellbeing, from economic growth to societal and cultural development, to gender and equality issues. Nevertheless, pregnancies in adolescence still represent an important health challenge in the sub-Saharan country of Cameroon.

This study seeks to establish a better understanding of the current reproductive health situation for adolescents in Cameroon and determine if adolescents have the means available to prevent early age pregnancy. Its main objectives are to answer these questions: 1) *What is the Cameroonian government doing with respect to health polices and sexual health programs in order to prevent adolescents from early pregnancies, and what are the main outcomes of any health programs implemented?* 2) *What are the main barriers limiting improvement of adolescents' sexual and reproductive health situation in Cameroon?* This study uses a review-based method to explore literature on the subject of adolescent reproductive health in Cameroon. The review considers the background to the current adolescent reproductive health situation in Cameroon, and describes the policies and programs used in efforts to meet the country's reproductive health needs.

The main findings show that the Cameroonian government has a set of written health policies, dating back to the early 1990s, which touch on reproductive health, but none of them specifically address the issues of the subject among adolescents in Cameroon. Most of the implemented reproductive health programs have been short-term efforts headed up by non-governmental entities. Among these initiatives, the "Aunties program" and those based on peer education have shown the most effectiveness and promise among adolescents. Overall the efforts expended so far have regrettably been inadequate. The main barriers limiting the improvement of sexual and reproductive health in Cameroon can be summarised as: lack of existence of and access to qualified "adolescent-friendly" health facilities and personnel, lack of political will in development and implementation of nationwide health policies and programs, and a too short time-frame for the programs implemented. The situation is further complicated by structural, political, cultural and religious factors that have created a standstill and frequent unwillingness to move towards progress in bettering the reproductive health situation of Cameroonian adolescents.

Keywords: Adolescent, Pregnancy, Sexual Health, Reproductive Health, Cameroon

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Ida Kristin Engen

"Deliver

A world where every

Pregnancy is wanted,

Wanted,

Every childbirth

Is safe,

And every young person's potential is

Fulfilled"

(UNFPA Cameroon 2013, 36)

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List of abbreviations

AIDS—Acquired Immune Deficiency Syndrome

ARH—Adolescent Reproductive Health

DHS—Demographic and Health Survey

DPNP—Declaration of National Population Policy

FHI—Family Health International

GDP—Gross Domestic Product

GIZ—German International Cooperation

GTZ—German Technical Cooperation (now GIZ)

HIV—Human Immunodeficiency Virus

ICPD—International Conference on Population and Development

IEC—Information, education, and communication

IRESCO—Institute of Behavioural Research and Studies

LP—Life planning

MCH/FP—Cameroons Maternal and Child Health Care and Family Planning Services Policy

MDGs—Millennium Development Goals

MeSH—Medical Subject Headings

NGO—Non-Governmental Organisation

PMSC—Programme de Marketing Social de Cameroun

PSI—Population Services International

RENATA—National Network of Aunties Associations

STI—Sexual Transmitted Infection

UN—United Nations

UNAIDS—Joint United Nations Programme on HIV/AIDS

UNDP—United Nations Development Programme

UNFPA—United Nations Population Fund

UNICEF—The United Nations Children`s Fund

UNIFEM—United Nations Development Fund for Women

USAID—U.S Agency for International Development

WHO—World Health Organization

1. INTRODUCTION

Reproductive health has been a focus of health programs worldwide since the International Conference on Population and Development (ICPD) in 1994. However, in many countries, sexual and reproductive health needs focusing specifically on adolescents are often unrecognized or even neglected to this day. Globally, almost 16 million girls aged 15-19 years give birth each year, most prevalent in low- and middle-income countries located in sub-Saharan Africa (Christiansen, Gibbs, and Chandra-Mouli 2013). A large number of these young women undergo unsafe abortions, where risks of dying from pregnancy-related causes are very high (WHO 2011, 9).

The benefits of preventing the negative short- and long term impacts of becoming pregnant and having children at such a young age may to some seem self-evident, but for those living in lower-income regions of the world they often are not. In these societies we often find a general public that has detrimental knowledge gaps on issues concerning sexual and reproductive health. This in turn leads to real-life negative consequences for all parties concerned, having serious repercussions affecting every facet of individual lives and societies at large. In areas with high prevalence adolescent pregnancies we often find high level of poverty, lower education levels, gender inequalities and general poor standards of health. Despite knowledge among policymakers that preventing early pregnancies is the key to changing these negative outcomes, adolescents in sub-Saharan Africa still have limited access to reproductive health information and services. In this thesis I draw attention to the sub-Saharan country of Cameroon, a country where adolescent pregnancies are considered an immense public health challenge. More specifically, I will explore the state of the country's adolescent sexual and reproductive health policies and programs in order to give a comprehensive review of concerns regarding preventing adolescent pregnancies.

1.1. Background and relevance

Early pregnancies still represent an important health challenge

In 2011, the world was home to almost 1.2 billion adolescents aged 14-19 years (UNICEF 2011, 2). Adolescence is a period of transition from childhood to adulthood, and the age when most people start to explore their sexuality. This natural sexual behaviour puts these youngsters at risk of being affected by undesirable sexual and reproductive health concerns, including early pregnancies and the risks associated with undergoing unsafe abortions. Nearly one in five girls worldwide becomes a mother before her 18th birthday, as 16 million girls aged 15-19 years give

birth annually, accounting for almost 11 % of all births globally (Christiansen, Gibbs, and Chandra-Mouli 2013; WHO 2011, 9). Even though adolescent pregnancy worldwide is on the decline, high rates in low- and middle-income countries still persist. In fact, early pregnancies among adolescents still represent an important health challenge in those areas. These pregnancies are of concern due to their well-established health and socioeconomic consequences, and are considered high risk pregnancies associated with a high-number of obstetric and psychological complications (Chandra-Mouli, Camacho, and Michaud 2013, 517; Rowbottom 2007, 3; Tebeu et al. 2010).

Young girls facing unwanted pregnancies often pursue the option of abortion. Each year almost 3 million girls aged 15-19 years undergo unsafe abortions, often administered by unskilled providers (Christiansen, Gibbs, and Chandra-Mouli 2013; WHO 2011, 9). Due to legal and social restrictions on access to abortion facilities, a great number of young girls worldwide risk their health, or even their lives, in attempts to terminate their pregnancies. We know that complications arising from pregnancies and childbirth are the leading cause of mortality among adolescent girls in low- and middle-income countries today (Chandra-Mouli, Camacho, and Michaud 2013; Mbizvo and Zaidi 2010). Children born to young mothers are also at risk; infants born by mothers below 20 years of age have a 50 % higher risk of dying during their first month of life. Compared to children born by women above the age of 20 years, these newborns also have a higher risk of a low birthweight, which itself is a risk factor for later morbidity for those children (WHO 2011, 9).

Adolescent pregnancy – not just a health concern but also a socioeconomic issue

There are several causes leading to early pregnancies; access to contraceptives, sexual health information and family planning services are still scarce for adolescents in many societies. Even when contraceptives are widely accessible, adolescents are less likely to use them in comparison to adults. Determinants of sexual and reproductive health include several factors beyond available health care services, as socioeconomic variables also have significant effects on outcomes. Adolescent pregnancy is not just a health concern; it is also a socio-economic development issue. Becoming a young mother leads to a higher risk of a life in poverty, partly due to loss of educational and employment opportunities (Chandra-Mouli and Camacho 2010; UNFPA Cameroon 2010). Even today, a number of adolescent girls are married off at an early age and therefore shoulder societal pressures to become pregnant early in life. Yet in recent years, due to education and cultural changes, many girls now delay marriage until they get older. As a result, adolescents today will be more likely to have sex with multiple partners before they

get married, and it is recognised that premarital pregnancy rates are increasing worldwide, even in low- to middle-income countries where typically more conservative attitudes towards extramarital sex are observed (Kirby, Laris, and Rolleri 2007, 206).

Cameroon – an important target for reproductive health programs

One of the countries in sub-Saharan Africa where adolescent pregnancies are recognised as a public health challenge is Cameroon. Adolescent girls contribute to nearly 14 % of all childbirths in the country, 2.83 % of them being girls under the age of 16 (Kongnyuy et al. 2008, 149; Tebeu et al. 2010, 1-4; UNFPA Cameroon 2012, 11). It is recognised that childbearing begins early in Cameroon, with 29 % of adolescent girls either pregnant or already having one child (Institut National de la Statistique 2005, 1). For some of these young mothers, their pregnancies are intended and wanted, but for many they are not.

Evidence shows that Cameroonian adolescents follow a worldwide trend in having their sexual intercourse debut at an early age, the mean age for first sexual experience being at 15 years. Additionally, many adolescents are engaged in unprotected sexual practises, combined with having multiple partners. This puts them at greater risk of unwanted pregnancies and also leads them to having unsafe abortions (Foumane et al. 2013). In Cameroon induced abortion is restricted by law, so the majority of abortions are performed under unsafe conditions. Numbers from year 2000 and 2003 showed an estimated 20-29 unsafe abortions per 1000 women aged 15-49 in Cameroon (Schuster 2010, 139).

Scholars in the field argue that, because of the risk associated with high prevalence of early sexual behaviour, low contraceptive use, and many early pregnancies, adolescents in Cameroon are an important target group for sexual and reproductive health programs (Meekers and Klein 2002, 62; Tebeu et al. 2010, 4). In order to prevent early age pregnancies, it is important to make sure that adolescents have the means to make informed and healthy choices concerning their sexual and reproductive health. Yet, as it stands, reproductive health and family planning services in Cameroon mainly target older married women, and adolescents often remain largely overlooked (UNFPA Cameroon 2012).

Adolescent reproductive health needs often go unnoticed or are viewed through the lens of religious and cultural values, which in turn limit the possibility to provide highly needed care (Creel and Perry 2003, 1; Fatusi and Hindin 2010). Sexual health education, access to contraceptives and adolescent-oriented health care services are important elements in preventing early pregnancies. Nevertheless, in many low- and middle-income countries, Cameroon

included, health facilities often fail to provide adolescents with sexual health information, counselling or adolescent-friendly health services (Mbizvo and Zaidi 2010, 4-6). Many doctors and nurses do not have enough knowledge to communicate with this age group in order to meet them at their level. This is exacerbated when many health care providers, due to ethical dilemmas, decline to provide health services to adolescents without their parents or guardians present. The subsequent social and cultural tensions that arise make a constructive conversation on sensitive reproductive health topics difficult.

Change in sexual behaviour – a complex issue

Change in sexual behaviour remains a primary goal of global preventive sexual and reproductive health efforts. It is a complex issue influenced by numerous hard-to-predict variables, ranging from acknowledging individual freedoms and desires, social and cultural relationships, to the socio-economic dynamics of a society. In spite of the complexities, adolescence is a time of opportunity and development, a time when youngsters are impressionable and malleable to good influences. It is an important phase in their lives where efforts could be made to help them navigate risks, and guidance given towards making healthy choices (UNICEF 2011, 2). Here peer education, adolescents teaching other adolescents, is a demonstrably effective approach to circumventing the risks associated with reproductive health issues. Additionally it enhances their knowledge and perception of sexuality and the benefits of contraceptives. This approach has been used successfully, over the past 15 years, in several preventive programs throughout sub-Saharan African countries, predominantly in the area of adolescent sexual and reproductive health (Bastien et al. 2008, 185–186).

Access to reproductive health – a human right

Though the arguments for investing in adolescent health are manifold, the most important one is also the most simple: it is a basic right, in principle, under existing human rights agreements. Especially for young girls, reproductive rights are of crucial importance to health and equality (Katzive et al. 1999, 2; The World Bank 2011; UNICEF 2011, 3). The Global strategy for women's and children's health, initiated by the United Nations in 2010, also emphasizes the importance of addressing the health and welfare of adolescent girls, in order to achieve Millennium Development Goal #5, concerning maternal mortality reduction (WHO 2011, 9). All of this indicates that adolescents' reproductive health concerns are in clear need of much attention. Even if progress has been made, there are still gaps in the field of sexual and reproductive health, a major concern being the continuous violation of adolescents' agreed upon

rights to sexual and reproductive health information and health care services (Chandra-Mouli, Camacho, and Michaud 2013; Cook, Dickens, and Fathalla 2003, 11).

1.2. Cameroon – Africa in miniature

On the west coast of Africa, in the easternmost part of the Gulf of Guinea, we find the Republic of Cameroon. It consists of ten different regions, with the political capital Yaoundé located in the Centre region. Cameroon, because of its cultural, religious, and linguistic diversity, is by its citizens fondly called "Africa in Miniature". This is exemplified in that Cameroon has more than 240 different ethnic tribes, and is a country where various religions are practiced, including Roman Catholicism (38 %), Protestantism (26 %) and Islam (21 %) (Johnson-Hanks 2003, 162; UNFPA Cameroon 2010, 11). In addition to the official languages of English and French, more than 200 local languages are spoken within Cameroon's ethnic groups. Cameroon was originally colonised by the Germans in 1884, was after the First World War divided between British and French rule. It became an independent republic in 1960 and has since remained politically stable, having an elected president as head of state and a multi-party political system. The political landscape since 1990 has been characterized by multi-party politics and there are over one hundred political parties registered. The Republic of Cameroon has been a member of the United Nations (UN) since September 1960 (Ako et al. 2006; Ministry of Public Health 2006; The Republic of Cameroon National Website 2012; UNFPA Cameroon 2010).

Cameroon's population of nearly 20 million is predominately concentrated to urban areas. The population is characterized by a very high percentage of adolescents, a composition that will remain for years to come. The fact that the life expectancy is among the lowest in the world, with an average life expectancy of 52 years, contributes to the expected high percentage of adolescents constituting the population (UNdata 2011). Nearly 60 % of the country's population is under the age of 25, with 5 million girls younger than 19 years of age (The Republic of Cameroon National Website 2012; Ndonko et al. 2010; UNdata 2011). This demographic profile illustrates that adolescents in Cameroon are a critical target group for preventive sexual and reproductive health programs and services.

Economic growth, as large part of the population lives below the poverty line

The Republic of Cameroon has political and social stability which has attracted major investments in agriculture, forestry and petroleum in recent years. This is also reflected in the growth of the country's gross domestic product (GDP), which has been at nearly 3.5 % a year since 2003 (The World Bank 2013b; The World Bank 2011; Ndonko et al. 2010, 8). The World

Bank (2013a) classifies Cameroon as a lower middle-income country, with a GDP of US$25.24 billion in 2011. Despite its economic growth, close to 40 % of the population still live below the poverty line, and 33 % of Cameroon's population lives on less than US$1.25 per day (The World Bank 2011). This economic inequality has Cameroon ranked at 95th out of 135 countries on the Human Poverty Index (The World Bank 2013b, 11; UNFPA Cameroon 2012, 23). Poverty and inequality typically impacts the most vulnerable members of any society, and adolescent girls, especially those living in poor rural areas, are a germane example (The World Bank 2011). At the moment, Cameroon's poor infrastructure and weak governance make it challenging to reach the economic regulation needed to mitigate the countries high poverty rate (The World Bank 2013a, 4). On the other hand, their high percentage of adolescents and young population provides an opportunity, given the vigour that comes with youth, for economic growth and future poverty reduction (UNFPA Cameroon 2013, 7).

Women's socioeconomic standings – a health determinant

Gender equality and women's empowerment are important determinants for improving reproductive health. In many parts of Cameroonian society, the impact of culture and religion on gender equality is profound. Women are perceived as being secondary to men, a social construction that governs many facets of women's everyday lives, work opportunities, education, health, and even basic human rights (UNFPA Cameroon 2010, 21). Cameroon, a country where numerous women suffer from substantial gender inequalities, is ranked 126th out of 157 countries in the Gender-Related Development Index (The World Bank 2011). As a result many women come to lack the autonomy needed to take the measures necessary to prevent becoming pregnant at an early age (Soh 2007, 7; The World Bank 2011; UNFPA Cameroon 2012). Simply improving women's socioeconomic situation will unfortunately not automatically lead to better reproductive health choices. Reports indicate that better health outcomes will be supressed if adolescent women lack access to qualified family planning and reproductive health services, regardless of what socioeconomic status they hold (The World Bank 2011, 1).

1.3. Cameroonian health care and reproductive health indicators

Under the management of The Ministry of Public Health, Cameroon has nearly 160 health districts dived into more than 1400 health areas (Ministry of Public Health Cameroon 2006, 15). The Ministry of Public Health manages all health care activities in Cameroon, including the field of reproductive health. Soh (2007) and UNFPA Cameroon (2012) affirm that the Ministry of Public Health receives insufficient budget allocations each year for its mandate to manage health

care facilities, which in most cases are underdeveloped. Cameroon's total health expenditures amounts to 5.2 % of their total GDP, resulting in a level of health spending of US$61 per capita per year. Noteworthy is that Cameroon's epidemiological status – the degree of general illness in a country – more resembles that of countries with extremely low health expenditures per capita, on the order of US$10-15 per capita annually (The World Bank 2013a, 8; UNFPA Cameroon 2010, 35). These facts cannot help but suggest that there is some degree of mismanagement of allocated funds taking place.

Components of reproductive health resources

The public health sector consists of several health units, divided across regional and district areas, which are split into six different categories, based on their field of operating and level of competence. The components of reproductive health services include: adolescent care, mother-child care clinics, high risk clinics, family planning clinics, and medico-social centres (Ako et al. 2006; Ngeve 2008). Despite several efforts by the Cameroonian government to recruit health care professionals to their facilities, the low coverage of medical staff has remained level in the past two decades. The health personnel to population ratio is below WHO recommendations, with only 0.19 physicians per 1000 inhabitants and 1.6 nurses and midwives per 1000 (UNFPA Cameroon 2012, 20; The World Bank 2011). Deficient infrastructure and shortage in medical staff continue to hinder sufficient delivery of sexual and reproductive health care services, including family planning. As a result many women rely on private health care services, often leading to expensive out-of-pocket costs, a situation that especially hinders adolescent women's access to sorely needed reproductive health services (Soh 2007, 3; UNFPA Cameroon 2012, 19-20).

There is neither a governmental health insurance system in Cameroon, nor any dedicated social security system that cares for adolescents who become pregnant. Consequently, if a young girl becomes pregnant she has to cover all the costs from pre-natal care to the delivery, including consultations, medication, laboratory tests, and even the medical equipment needed (e.g. disposable gloves, spatulas, pads etc.) (Kongnyuy et al. 2008, 153; The World Bank 2013a, 9). In spite of these circumstances, health care costs in public health institutions are centrally regulated and maintained at a "reasonable" level that the general population can afford. Affordable and qualitative health care services remain a public imperative and a right, on paper, guaranteed by the Cameroonian Constitution (Center for Reproductive Rights 2003, 72).

High fertility rate – low contraceptive use

The fertility rate in Cameroon remains high, with an annual population growth rate of 2.1 %, and the adolescent fertility rate being at 118 births per 1000 adolescents (The World Bank 2013b; UNdata 2011). Cameroonian women had given birth to an average of approximately 5.1 children each in 2011, with adolescent girls contributing to nearly 12 % of that total fertility (Tebeu et al. 2010, 1; UNFPA Cameroon 2012, 11). Contraceptive use among Cameroonian women in reproductive age remains low, despite a slight increase in recent years the prevalence is at 29 % for women in reproductive age (15 - 49 years), counting all contraceptive methods available (including withdrawal and the calendar-based method). Only 14 % of Cameroonian women use a modern contraceptive method such as sterilization, male or female condoms, hormonal pills, or injections and implants. Contraceptive use prevalence is extremely uneven in its distribution, ranging from 2.6 % in North Cameroon to 43.9 % in the capital city of Yaoundé (The World Bank 2011; UNFPA Cameroon 2012, 10). The male condom is the most used modern contraceptive method among married women in Cameroon, with a usage rate of 7.6 %. Only 1.9 % of married women of reproductive age use the contraceptive pill (National Institute of Statistics 2012, 12).

Rising maternal mortality rate

Unfortunately, many young women in Cameroon lose their lives due to pregnancy-related complications, deaths that easily could be prevented if the appropriate resources were made available. Maternal mortality remains high and has seen a recent increase from 600 maternal deaths per 100 000 live births in 2011 to 782 deaths in year 2012 (The World Bank 2011; UNFPA Cameroon 2013, 18). Despite efforts to fight these high numbers of maternal-related deaths, every two hours a woman dies from pregnancy-related causes in Cameroon. As a consequence, the progress towards Millennium Development Goal (MDG) #5 – "to reduce the maternal mortality rate by three quarters by the year 2015" – is still far from its target. From this perspective, reducing the high rates of maternal mortality is still a highly justifiable development goal for Cameroon. In attempts to achieve this, the government has extended the time limit for the MDG #5 to 2020 (Fauveau 2011, 59; UNFPA Cameroon 2013, 33). Assisting the Cameroonian government and people in this endeavour are several international multilateral institutions; The World Bank, German International Cooperation (GIZ), WHO, UNICEF, and UNFPA. Under the overall supervision of the Cameroonian Ministry of Public Health, these institutions are playing significant roles in current health development, as they are financing

several reproductive health projects directed specifically towards women and children (Ndonko et al. 2010; Ngeve 2008; Soh 2007; UNFPA Cameroon 2013).

1.4. Aims and objectives

I had an opportunity to work as an intern at the Department of Reproductive Health and Research at the World Health Organization headquarters in Geneva, in the summer and autumn of 2012. During this internship, I was captivated by and able to work intimately with adolescent sexual and reproductive health issues. As I gained more knowledge on these issues, and understood the importance of preventing early pregnancies, I wanted to expand that knowledge and apply it to a master`s thesis focusing on Cameroon.

Reproductive health is defined as a state of complete physical, mental, and social well-being in connection to the reproductive organs, not merely the absence of disease related to said organs. This embraces the aspect of people being able to have a satisfying and safe sex life and at the same time having the freedom to choose if, when, and how often they want to have children (Cook, Dickens, and Fathalla 2003, 8). It is important to make clear that adolescents are not a homogeneous group, and particularly that adolescent girls are the most disadvantaged in terms of poor reproductive health outcomes (Cook, Dickens, and Fathalla 2003, 278). The central focus throughout the thesis will therefore be aspects of reproductive health concerning adolescent girls, a group that in Cameroon is the most disenfranchised and in the greatest need of interventions.

The purpose of this thesis is to get a better understanding of what the Cameroonian government and the primary NGOs are doing, with respect to the country's health polices and sexual health programs, in order to prevent adolescents from early pregnancies. The thesis also takes a closer look at adolescents' access to sexual health education and reproductive health care services in Cameroon, as well as the barriers obstructing progress in said areas. I contend that the knowledge gathered and presented in this study will not only pertain to Cameroon but will be generalizable to a meaningful degree to other countries in sub-Saharan Africa.

The following research questions were formulated to guide the study:

- *What is the Cameroonian government doing with respect to health polices and sexual health programs in order to prevent adolescents from early pregnancies, and what are the main outcomes of the health programs implemented?*
- *What are the main barriers limiting improvement of adolescents' sexual and reproductive health situation in Cameroon?*

1.5. Structure of the thesis

In the second chapter the methodological framework will be presented. It includes the research design, sources of data, and data collection methods. The validity and reliability of the thesis, together with the research's challenges and limitations will also be discussed here. In Chapter 3 the health policies targeting adolescent reproductive health, implemented after the 1994 International Conference on Population and Development agreement, will be presented and reviewed. Next, the most central sexual and reproductive health programs underway in Cameroon will be portrayed and analysed. Then the main results of the sexual and reproductive health programs will be presented. Chapter 3 will also provide an overview of what the government and the main NGOs operating in Cameroon have achieved regarding health policies and programs in order to prevent adolescent pregnancies. In Chapter 4, Cameroonian adolescents' access to sexual health education and information will be explored. Furthermore, the access to reproductive health care services will be examined. Chapter 5 covers the main barriers to improving the adolescent reproductive health status quo, treating the impact of Cameroon's legal codes and socio-cultural and economic factors. In the final chapter, Chapter 6, the review will be briefly summarized combined with concluding discussions and remarks.

2. METHODOLOGY

2.1. Sources of data and data collection methods

This is a review-based study with a qualitative approach which explores existing literature on the subject of adolescent reproductive health policies and programs in Cameroon. It is not a systematic literature review in the strictest sense, since all the systematic steps in the searches and the inclusion and exclusion criteria that this would entail were not clearly defined and pursued. A review-based dissertation is a structured search and review of empirical and theoretical literature related to the research questions and topic, and requires a critical and analytical approach on the literature under examination. To most effectively achieve the main objectives of this study, it is deemed that this method is the most appropriate for the task. The review is intended to develop a better understanding of the research topic itself, areas researched and analysed previously, and provide insights into the key concerns and variables relevant to the research area (Hart 1999, 26–28; Hart 2005, 143–153; Halvorsen 2008, 241). Review-based dissertations in the social sciences have the ability to bring understanding, awareness, and clarity to a problem, as they can identify the causes of a problem and also potentially provide means to eradicate it (Hart 2005, 147).

The study is based on secondary literature and data collected from several reliable sources in order to investigate the research questions. Several websites were visited in order to obtain data whilst exploring the field of interest, including the official websites for: World Health Organization (WHO), United Nations Development Programme (UNDP), United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF), United Nations (UN), The World Bank, Guttmacher Institute, the Cameroonian government, the Center for Reproductive Law and Policy, Center for Reproductive Rights, and the Geneva Foundation for Medical and Health Research (GFMER). A portion of the literature and information used throughout the thesis was collected during an internship, between August and September 2012, at the Department of Reproductive Health and Research at WHO headquarters in Geneva. Access to comprehensive literature concerning reproductive health, and discussions with distinguished people in the field of interest, provided a unique opportunity to collect useful information, viewpoints, and insights into the world of reproductive health.

In the process of searching for literature several academic databases were used; EBSCOhost, BISYS, Google Scholar, Ovid Medline, DOAJ, Academic Search Premier, Popline: Reproductive Health Database, African Index Medicus (AIM), and PubMed. Comprehensive literature searches were conducted, and the following key words were used in different single and Boolean search combinations; *"Reproductive Health"*, *"Sexual Health"*, *"Sexual Health Education"*, *"Reproductive Health Services"*, *"Reproductive Health Policies"*, *"Adolescent Reproductive Health Policies"*, *"Adolescent Reproductive Health Programs", "Adolescence"*, *"Youth"*, *"Teenagers", "Pregnancy"* and *"Cameroon"*. When searching on PubMed, selected Medical Subject Headings (MeSH) were integrated. The following MeSH terms were used; *"Adolescent", "Pregnancy", "Minors", "Reproductive Health"*, *and "Education"*. This strategy was adopted to obtain broader search results in the field of interest so as to not exclude any pertinent literature.

Less systematic searches were also conducted in the search for reproductive health policies, strategy documents, and materials regarding sexual health education programs and health services. In addition to searches in academic databases, a selection of grey literature was also reviewed. Due to limitations in the relevant literature, snowball searches were performed by going through reference lists and bibliographies, which provided additional literature to review and utilise. As a result of limitations in existing literature on reproductive health policies and programs in Cameroon, the range of literature included was set between the publication years 1990 to 2013. Literature that was not in English, Norwegian, or any of the Scandinavian

languages (Swedish and Danish) was excluded from the study. Even if Cameroon is a multilingual country and French joins English as one of the main languages, literature in French was excluded from this review due to limited language skills. All the searches were undertaken between May 2012 and July 2013.

Empirical literature, including reports and evaluations, constituted the majority of the literature considered appropriate for the thesis. Included are reports and guidelines from the WHO, UNFPA Cameroon, UNDP, GMFER, the World Bank, German International Cooperation (GIZ), Institute of Behavioural Research and Studies (IRESCO), Population Council, Center for Reproductive law and Policy, Family Health International (FHI), and Center for Reproductive Rights. Selected academic books on the subject were also used to get a broader perspective on the issues concerning reproductive and sexual health, with a particular focus on countries located in sub-Saharan Africa. Statistics and data utilised are obtained from Demographic and Health Surveys (DHS) in Cameroon, the World Bank, WHO, UN, UNFPA and the Ministry of Public Health in Cameroon. Researchers central to the field of reproductive health in Cameroon include: Anne-Emmanuèle Calvès, Michael Soh, Rebecca Ngeve, Dominique Meekers, Pierre Marie Tebeu, Eugene Justine Kongnyuy, and their colleagues. E-mail exchange with Dr Flavien Ndonko from GIZ, and Georgette Taku from RENATA (the National Network of Aunties Associations), together with their contributions regarding the "Aunties Project", were found to be particularly useful.

2.2. Validity and reliability

In order to investigate the research questions, a wide range of scholarly works on the subject of reproductive health issues in Cameroon was used throughout the thesis. This breadth allowed for diversity in views, a broader background of knowledge, a limit on biases, and an increase to the degree of validity. The majority of literature used appears in well-known international journals and was composed by scholars at universities, research institutions, and multilateral organisations. Also, the main project and program evaluations utilised, are produced by well-known international and national NGOs operating in the field of reproductive health in Cameroon. It is important to note that data from low- and middle-income countries may have variable degrees of uncertainty due to a lack of technical equipment and limited data collecting methods available (Murray 2007). As a result, statistics used in the study were crosschecked with other known references to maximize reliability and validity.

2.3. Research challenges and limitations

The most noteworthy challenge faced in the literature review was the limited number of reports or policy analysis on reproductive health policies and programs in Cameroon. Broad and comprehensive literature is available on adolescent reproductive health policies and programs in low- and middle-income countries, but not for Cameroon specifically. It was challenging to find relevant information concerning Cameroonian reproductive health polices and policy development, particularly from Cameroonian governmental departments and institutions. Due to the importance of highlighting adolescents' reproductive health situation, I was interested in exploring what has been and is being achieved in order to improve that situation in Cameroon. This goal acknowledges the absence of existing policies and accepts the known challenges and barriers that trouble reproductive health in Cameroon.

Other than the lack of abundant information on the subject matter, one must also consider the degree of biases that some reports may contain (Kirby, Laris, and Rolleri 2007, 213), and a healthy scepticism, though anecdotally-based, as to the degree of reliability in reports informed the thesis-writing process. In view of the above, research papers, reports and policy analysis on reproductive health policies and programs have been chosen with care. Those given most priority are the ones funded and evaluated by well-known organisations, universities, and research institutions, as well as trusted peers in the field of reproductive health. One should be aware that reports funded by international NGOs or governmental institutions, may also call for caution concerning potential biases.

Due to page and scope limitations of the thesis, all the issues and determinants regarding the research topic cannot be considered, described, and analysed fully in this study. For instance, even if many HIV/AIDS prevention programs may also influence adolescent risky sexual behaviour and contraceptive use, these policies and programs cannot be explored in this paper due to said limitations. It is also important to emphasise that many of the findings presented in this study are interrelated and that there will necessarily be some overlap among the chapters.

3. REPRODUCTIVE HEALTH POLICY AND PROGRAMS – PROMOTING ADOLESCENTS HEALTH IN CAMEROON

In this chapter, health policies implemented in Cameroon after the 1994 ICPD "Programme of Action" agreement and targeting adolescent reproductive health will be presented and reviewed. The most central sexual and reproductive health programs implemented in Cameroon will be portrayed and explored. Finally, the main results of the sexual and reproductive health programs will be presented.

3.1. Reproductive health policies after Cairo 1994 ICPD

At the International Conference on Population and Development (ICPD) conference held in Cairo in 1994, Cameroon was one of 179 UN member states who signed a historic agreement binding them to the 20-year "Programme of Action", which includes a provision on sexual and reproductive health information and adolescent-friendly reproductive health services, including family planning (Calvès 2002a, 1; UN 1994). The Programme of Action proposed that high-quality reproductive health services and information should be made available to adolescents in order to help them gain knowledge about sexuality and protect them from unwanted pregnancies and sexually transmitted infections (STIs, including HIV/AIDS) (Pillay and Flisher 2008, 23; UN 1994). The ICPD conference and its action plan was one of the first steps towards improving adolescents' reproductive health situation worldwide, and one of the first occasions that these important issues were put on the world agenda.

"Programme of action" – reproductive health on the world agenda

The Programme of Action was adopted a year later in the UN's Fourth World Conference on Women, held in Beijing. During this conference many of the same issues were discussed along with the "Convention on the Rights of the Child". For the first time, a human rights perspective was associated with sexual and reproductive health (Pillay and Flisher 2008, 24 ; Lindstrand 2007, 233). The two conferences made clear that reproductive rights embrace certain human rights, already recognized in international human rights documents and in national laws, including the International Covenant on Economic, Social, and Cultural Rights (Katzive et al. 1999, 2). Cameroon is also a signatory of the African Charter on Human Rights, the International Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of the Child, and the Convention on the Elimination of All Forms of Discrimination against Women (Center for Reproductive Rights 2003, 70- 84). Adolescent reproductive health may be a human right, but the concept is still new and controversial in many sub-Saharan African countries. According

to Calvès (2002a), there is often a crucial gap between the Programme of Action declaration and resolutions by policymakers, on the one hand, and the actual design of adolescent reproductive health policies and programs on the other.

Policy is, according to Cook, Dickens, and Fathalla, defined as a plan or a purpose that a government or an organisation intends to implement fully or progressively in order to achieve a specific goal (Cook, Dickens, and Fathalla 2003, 95). The purpose of adolescent sexual and reproductive health policy is to identify and achieve consensus from the principal stakeholders in the field, then to designate roles and responsibilities. Perhaps most important is ensuring that adolescent sexual and reproductive health is given a higher priority throughout a country or community, in addition to improving and prioritising adolescent sexual and reproductive health activities (Pillay and Flisher 2008, 16). The Ministry of Public Health is responsible for implementing health policies in Cameroon, as stated in Decree No.95/040 of December 7, 1995. The main objectives of primary health care delivery in Cameroon are outlined in the "Statement of the National Primary Health Care Reorientation Policy". This policy incorporates community participation, respect for human rights, validation of the relationship between health and development, and the basic rights to healthcare and health information (Center for Reproductive Rights 2003, 71; Katzive et al. 1999, 5).

The National Population Policy

Calvès (2002a) states that one way to look at a country's political recognition of adolescent sexual and reproductive health is to examine their national population policy, health policy and education policy. The 'population policy' provides guidance to government on population and development affairs, including reproductive health. Cameroon elaborated its such policy two years prior to the 1994 ICPD meeting in Cairo. They announced the "Declaration of National Population Policy" (DPNP) in 1992, with the stated purpose of improving the quality of life of their citizens, despite limits in available resources, and with a special emphasis on mother and child. According to Calvès (2002a), these documents point out that early and unwanted pregnancy health concerns should be taken into consideration, although the term *reproductive health* itself does not appear, and adolescents are not declared a specific target of the program. Activities identified to prevent early pregnancies were focused on increasing the level of education among young girls, combined with the introduction of sexual health education in Cameroon (Calvès 2002a, 8; Center for Reproductive Rights 2003, 74).

Tantchou and Wilson (2000) state in their report that the 1992 DPNP was a substantial departure from the pro-natal orientation of the 1960s and 1970s, as the government became more concerned with slowing Cameroon's rapid population growth. Efforts were made by politicians to revise the 1992 policy so as to cohere with and meet the goals and ambitions set by the 1994 ICPD and the 1995 World Conference on Women. Unfortunately, structural instability in the Cameroonian government in that period prevented the newly for the purpose established National Population Committee from meeting. Consequently in 2002, fully eight years after the ICPD conference, the 1992 declaration still remained neither properly addressed nor even once amended (Calvès 2002a, 8; Tantchou and Wilson 2000, 9).

Additionally, Katzive et al. (1999) describe that "The Declaration of the National Restructuring of Primary Health Care", also from 1992, was designed but never fully executed. At the point of its conception one of the objectives was to reduce maternal mortality by half before the end of the year 2000. However, economic crisis and inadequate financial resources at the time hindered the policy from ever being implemented. Katzive et al. (1999) argue that lack of funding and access to investment resources was detrimental to the maintenance and development of Cameroon's health infrastructure. Governments must assign resources to ensure that policies are implemented, something that requires both economic and political stability, a condition which was not present in Cameroon at the time (Pillay and Flisher 2008, 15).

The National Maternal and Child Health Care and Family Planning Policies

Strikingly, in 1993, the Cameroonian government formulated the "Declaration of the National Maternal and Infant Health and Family Planning through Health Care", a policy which was then presented to United Nations Population Fund (UNFPA) for financing. The policy was approved by the UNFPA in January 1996, with the objectives of improving access to family planning services and reducing maternal and infant mortality. The Cameroonian Ministry of Public Health together with the Ministry of Social Affairs and the Ministry of Women's Affairs and Status in Society, were directly involved in the implementation process of this project (Center for Reproductive Rights 2003, 71; Katzive et al. 1999, 6). The reports from the Center for Reproductive Rights (2003) and Katzive et al. (1999) do not make clear if adolescents were a specific target group in this declaration, even if adolescents were and still are significant contributors to the high rates of maternal mortality in Cameroon.

In 1995, the Ministry of Public Health in Cameroon developed the "Maternal and Child Health Care and Family Planning Services Policy and Standards" (MCH/FP), a policy that marks the

emergence of the concept of reproductive health in Cameroon. Regrettably, as Calvès (2002a) points out, the document does not contain the phrase *reproductive health* and adolescent health objectives are merely stated in general terms. It does however describe the intention of targeted intervention aimed at adolescents, in order to prevent early pregnancies and induced abortions. The policy document is unclear about what specific activities were expected to be used in order to address these concerns (Calvès 2002a, 10). The MCH/FP policy, together with the "Declaration of Health Policy" (developed in 1996 by the Cameroonian government), is what regulates today's health care delivery and practice in Cameroon, including reproductive health services (Center for Reproductive Rights 2003; Ministry of Public Health 2006; Tantchou and Wilson 2000). Additionally, in 1999, the Ministry of Public Health formed a national forum whose efforts were directed towards reproductive health concerns in Cameroon, including regulating the quality of health service delivery (Ngeve 2008, 3). Components from the ICPD were recommended, and after elaboration in the national forum, some of those components were indeed adopted for immediate implementation in hospitals (Ngeve 2008). However, precisely which ICPD components were actually implemented or if any of them was directed at adolescents are not specified in the study.

The National Reproductive Health Policy – a new focus on reproductive health

The government has since developed a "Sectorial Health Strategy 2005-2015" and a "National Reproductive Health Policy" in efforts to reduce the high level of maternal and neonatal mortality in Cameroon. These efforts have as their main objective to improve public health by means of improving the availability of reproductive health services, including provisions concerning family planning services (Ministry of Public Health 2006; UNFPA Cameroon 2012, 3-5; Ngeve 2008, 3-6). However, Dongmo (2010a), a representative from the Ministry of Public Health, states that measures to implement adolescent reproductive health services are only briefly mentioned in the strategy plan.

Shortly afterwards, the "Roadmap for Reduction of Maternal and Neonatal Mortality in Cameroon 2006-2015", sponsored by WHO, UNDP, UNICEF, GTZ and the French Cooperation, was composed in order to meet the 1994 ICPD and the 1995 Fourth World conference on Women's commitments (Ministry of Public Health 2006, 4; Ngeve 2008, 3- 6). This "Roadmap" became a part of the "National Reproductive Health Programme", which is intended to be an instrument to speed up maternal mortality reduction, in order to meet the Millennium Development Goals (MDGs). The roadmap's main ambitions are to improve delivery of reproductive health care services, sourcing of qualified health staff, strengthening of

family planning services and capacity-building for Cameroon's communities. Perhaps most important is the objective to empower women in Cameroon (Ministry of Public Health 2006, 4; Ngeve 2008, 3- 6).

Continually updating reproductive health policies and standards are one of the priority interventions stated in the "Roadmap" document. An additional action specifically targeted at adolescents is the development of appropriate communication tools used when teaching youngsters how to avoid early pregnancies (Ministry of Public Health 2006, 36-45). Exactly how this guidance should be achieved is not listed in the "Roadmap" document. However, it is stated that the guidance of adolescents, in order to prevent pregnancies, was scheduled to take place at the community level with the Department of Health Promotion in charge, having an estimated timetable spanning from 2006 to 2010 (Ministry of Public Health 2006, 112–113). There is currently no evaluation report available in order to ascertain if the goals set regarding adolescents have been reached, as the "Roadmap" is intended to run up to 2015.

Still no Adolescent Reproductive Health Policy implemented

Despite all the above measures to move beyond the status quo of reproductive health, no official adolescent reproductive health policy has yet been implemented in Cameroon (Calvès 2002a; Dongmo 2010a), although a policy titled "National Adolescent Health Policy" was drafted by the Ministry of Public Health in 1998. Avoiding unwanted pregnancies among adolescents was one of the targets stated in that policy draft; a policy intended to promote access to health services, combined with counselling activities aimed at adolescents. However, this policy was never formalised, let alone implemented (Calvès 2002a, 18). These findings suggest that the Cameroonian government has had continual and serious challenges in applying proposed or adopted policies directed at adolescent reproductive health. As described earlier, Cameroon has long struggled with structural instability and financial difficulties, preventing it from putting its policies into action. What causes concern, and where further research is needed, is why this continues to occur and why an adolescent reproductive health policy has yet to be implemented as a stand-alone policy, fully 15 years after it was scheduled to appear. Then again, it is of little use to inaugurate a policy if the country does not have the financial resources and measures to put it into action fully, where proposed actions to prevent early pregnancies are just points listed in governmental documents. In this regard, it will be revealing to explore if Cameroonian adolescents have the means available to prevent early pregnancies despite a non-existent adolescent reproductive health policy.

Against this backdrop, Cameroon's political recognition of adolescent sexual and reproductive health can, as mentioned earlier, also be perceived in view of their education policies. In the broader context, reproductive health is considered a part of the gender issues portfolio, where young women's access to education can be an important step towards improving the status of women in general. It is recognized that the literacy level and girls' access to formal education have an impact on the capacity to protect and improve their reproductive and sexual health (Cook, Dickens, and Fathalla 2003; Tantchou and Wilson 2000). According to Tebeu et al. (2010), illiteracy accounts for an important predisposing factor to early childbearing among adolescents. Ngeve (2008) confirms in her study that the Cameroonian government has instituted the policy "Education for All and the Promotion of the Girl-Child" in an attempt to increase school enrolment among girls. Education is as a result free of charge at the primary level (ages 6-11). Also, one of the overall objectives of the "National Population Policy", DPNP, is to promote primary education, with a special focus on the girl child (Calvès 2002, 13; Center for Reproductive Rights 2003, 83).

Growth and Employment Strategy Papers – investing in public health

The latest (2012) UNFPA Cameroon report - produced in cooperation with the Ministries of Public Health, of the Economy, Planning and Regional Development, and of Women's Empowerment and Family - reveals that the Cameroonian government is concerned about the current reproductive health situation in Cameroon. This is clearly expressed in the "Growth and Employment Strategy Papers", which present a plan to invest in the public health sector and expressly call attention to the situation of Cameroon's youth (15-24 years) and women (UNFPA Cameroon 2012, 3-5; Ngeve 2008, 3-6). In this regard, the government in Cameroon also confirms that it is time to give special attention to reproductive health, youth, and gender equality issues (UNFPA Cameroon 2012). In the efforts to improve the reproductive health situation for adolescents and in order to call for political will, it could be effective to implement an official adolescent reproductive health policy in Cameroon. This notion is in line with Dongmo's recommendations (2010a). He suggests that a policy on adolescent sexual and reproductive health should, due to its importance, be developed as a stand-alone policy project and not just as a subsidiary of reproductive health policies in general.

3.2. Sexual and reproductive health programs – key components and models

Worldwide, the majority of young people initiate sexual activity during adolescence. A large body of literature demonstrates that many Cameroonian adolescents initiate sex at an early age, engage in unsafe sexual practices, and have multiple sexual partners before they enter marriage (Foumane et al. 2013; Institute National de la Statistique 2005; Tebeu et al. 2010). A recent study on "sexual activity of adolescent school girls in an urban secondary school", conducted in the capital of Yaoundé, shows that the mean age of first sexual intercourse was 15.3 years of age. It is also shown that half of the girls participating in the study have had multiple sexual partners, and half did not use condoms consistently during sexual activities (Foumane et al. 2013, 85-86). Meekers, Klein, and Foyet (2003) argue that the age of first intercourse for females has not changed over time in Yaoundé and Douala, but that the probability of early sexual intercourse varied with the level of education. Their study, based on data from the Adolescent Reproductive Health Survey 2002, also shows that 71 % of adolescents aged 15-19 years use condoms occasionally, but only 20 % of the boys and 14 % of the girls reported consistent condom use (Meekers, Klein, and Foyet 2003, 418–419). Comparing these results, one must draw the conclusion that adolescents are familiar with contraceptives but do not use them consistently. This tendency is also seen in the country as a whole, where 89 % report they have knowledge of a contraceptive method, but where contraceptive usage prevalence for women of reproductive age remains at 29 %, for all contraceptive methods available (Institut National de la Statistique 2005; The World Bank 2011). The abovementioned risky sexual behaviour is known to be a strong determinant factor for early pregnancies in adolescence.

Risky sexual behaviour – a severe health risk

Adolescent pregnancy is associated with a range of health hazards, including complications following the pregnancy and the risks of illegal or unsafe abortions. An unsafe abortion is defined by the WHO as the termination of a pregnancy performed by someone without the medical skills or training to perform these procedure safely, or performed in a location that does not meet minimal medical standards (Mbizvo and Zaidi 2010, 4; WHO 2012, 18). Many Cameroonian adolescent girls risk their lives to end an unwanted pregnancy. Since induced abortion is restricted by law, the majority of these procedures are performed under illegal and unsafe conditions (Calvès 2002b; Schuster 2010). Foumane et al.'s (2013) study in a secondary school in Yaoundé showed that as a result of unwanted pregnancies, 61 % of the adolescent girls who reported having been pregnant had terminated their pregnancies with induced abortions. In

general, Meekers and Calvès (1999) assert that approximately 18 % of adolescent pregnancies in Cameroon lead to induced abortions.

As stated, these results show that a large number of adolescent girls choose to terminate unwanted pregnancies, even with the high risk of severe complications (e.g. infections, perforation of the uterus and bladder, as well as severe haemorrhages). Adolescents in particular tend to delay seeking care for complications following these abortions, and Ngeve (2008) shows in her study that abortion is the cause of almost 40 % of obstetrics and gynaecological emergency admissions in Cameroon. This finding has important implications for developing and offering sexual and reproductive health information and services to Cameroonian adolescents. This knowledge, if conveyed correctly, may help to increase contraceptive use and prevent early pregnancies and adverse reproductive health outcomes.

Sexual Health Programs – preventing early pregnancies and increasing contraceptive use

Many adolescents in Cameroon are aware of the risks of early pregnancies and are familiar with contraceptives, but their behaviour nevertheless often fails to reflect this knowledge. In response to this trend, NGOs joined with the Government of Cameroon to implement several sexual-reproductive health programs. These programs that have been in place since early 2000 are directed at adolescents and youth (15-24 years). Their aims are to increase contraceptive use, reduce the prevalence of STIs/HIV, and to prevent adolescent pregnancies (Meekers, Klein, and Foyet 2003). Lule et al. (2006) insist that activities concerning adolescent health should emphasize prevention efforts, since almost every social and health hazard during adolescence is preventable, if the required measures are in place. Prevention is also a very cost-effective strategy, especially in this age group. McAnarney and Hendee (1989) further encourage that prevention of early pregnancy and its outcomes must be considered by and infused into several levels, from the governmental level to the community level, in schools, amongst religious leaders, and even within families (McAnarney and Hendee 1989, 78).

Below is an overview table of the main sexual and reproductive health programs aimed at preventing adolescent pregnancy that have been implemented in Cameroon. The overview contains the programs' objectives, the institutions in charge of program design and implementation, and the areas within the country where the programs were initiated.

TABLE 1: SEXUAL AND REPRODUCTIVE HEALTH PROGRAMS IMPLEMENTED IN CAMEROON

Name of the program | Target group | Theoretical framework	Activities/Objectives	Implemented/ Managed by	Year:	Location /area
"Among Youth" Target group: - Adolescent/youth (age 12-24) - In- and out-of-school adolescent/youth - Urban area Basis: theoretical framework not specified	To increase contraceptive use, reduce STIs/HIV prevalence, and prevent unwanted pregnancies, with peer education and media campaigns (the magazine "among Youth", brochures and comic books).	IRESCO and Population Council Funded by: USAID	2000 to 2002 (est. 19 months)	Yaoundé (in Mokolo) and control site in Douala (in New Bell)
"Aunties" for sexual health and non-violence Target group: - Adolescent/youth (age not specified) - In- and out-of-school adolescent/youth - Urban and rural areas Basis: theoretical framework not specified	Unwed young mothers become advocates, teachers, and counsellors to prevent early pregnancies among adolescent/youth. Use peer education as their main strategy, with personal counselling and school interventions. Use media to spread the word, through videos, fact sheets and their web-site.	GIZ and RENATA	2001-ongoing	On a national scale
"Entre Nous Jeunes" (Among Us Youths) Target group: - Adolescent/youth (Age 10-25) - In- and out-of-school adolescent/youth - Urban area Basis: theoretical framework not specified	Comprehensive sexual health peer education program- as a strategy to increase contraceptive prevalence, prevent STIs/HIV, and early and unwanted pregnancies among adolescents/youth. Distribution of IEC materials (calendars, comic strips, posters, calendars).	Family Health and AIDS in West and Central Africa Project, and IRESCO	1997-1998 (18 months) Follow-up survey in 1999	Nkongsamba (120 km from Doula), Comparison community: Mbalmayo (40 km from Yaoundé)
"100 % Jeunes" (100 % Youths) Target group: - Unmarried adolescent/youth (Age 15-24) - In- and out-of-school adolescent/youth - Urban area Basis: The Health Belief Model/Social Learning Theory/Theory of Reasoned Action	A social marketing program to address high rates of STIs/HIV and high levels of early pregnancies. With mass media (radio show, shows in-schools and at sports events, and a monthly magazine), peer education, and interpersonal communication	PMSC and PSI, with support from the Gates Foundation	2000 - 2003	Yaoundé and Douala, Integrated into a nationwide program
"Horizon Jeunes" Target group: - Adolescent/youth (Age 12-25) - In- and out-of-school adolescent/youth - Urban area Basis: The Health Belief Model	A social marketing program to improve adolescent reproductive health, and increase the use of health services, with IEC activities, youth clubs, talk shows, peer education, and distribution of contraceptives (condoms and oral contraceptives).	PMSC and PSI	1996-1997	Edèa and Bafia-Integrated into a nationwide program

Sources: (See Asfhord, Bulsara, and Neukom 2000; Alford, Cheetham, and Hauser 2005; IRESCO 2002; Ndonko et al. 2010; Plautz and Meekers 2007; Speizer, Tambashe, and Tegang 2001;Van Rossem and Meekers 2000).

Behaviour change theories –background for program strategies

A large number of reproductive health programs and studies are based on behaviour change theories and models, which are used to identify a program's objectives and interventions (Plautz and Meekers 2007). Meekers, Agha, and Klein (2005) identified the Health Belief Model, the Social Learning Theory, and the Theory of Reasoned Action as the three most commonly used behaviour change theories used in the field of reproductive health. Theories and models are often used in the discipline of social sciences to explain and predict social behaviour and social phenomena (Elster 2007). The "100 Jeunes" program, presented in Table 1, is grounded on a theoretical framework that makes use of perspectives from several behaviour change theories; the Health Belief Model, Theory of Reasoned Action and the Social Learning Theory (Meekers, Agha, and Klein 2005, 530e2). The "Horizon Jeunes" program is based on a revised version of the Health Belief Model, a model that is widely employed in a wide range of health related contexts. This model is based on a psychological expectancy-value theory that attempts to explain preventive behaviour on the basis of health-related motivations and perceptions; to be precise, that a person will take health-related preventive actions (e.g. use condoms) if the person believes that a negative health condition (as STIs and unwanted pregnancy) can be avoided (Aarø, Schaalma, and Åstrøm 2008, 40; R. Van Rossem and Meekers 2000, 385). The other reproductive health programs implemented in Cameroon may also be grounded on one theoretical framework or another, even if this is not specified in any of the reports sourced for this review.

Peer education and Social Marketing – interventions to promote healthy sexual behaviour

All of the sexual and reproductive health programs presented in Table 1 aim to motivate adolescents to engage in healthier sexual behaviour, to take self-protective action through contraceptive use, and increase the use of health services. Perhaps most importantly they aim to increase awareness and knowledge of sexual health matters, so adolescents have the means to make healthy informed choices regarding their sexual and reproductive lives. The programs implemented in Cameroon all use mass media, information, education, and communication (IEC) activities, peer-based interventions, or a combination of these strategies in order to obtain their program objectives.

Peer education has been a popular educational strategy utilised in sub-Saharan African health promotion campaigns and several prevention programs since the mid-1990s. Particularly in the area of sexual and reproductive health, this strategy has demonstrated its validity. Several media programs have operated in Sub-Saharan Africa, include peer education as one of their

components as a means of getting in touch with, and influencing, adolescents (Bastien et al. 2008; Speizer, Tambashe, and Tegang 2001). According to R. V. Rossem and Meekers (2011) the basic idea behind peer-education is that adoption of safer sexual behaviour is influenced by the attitudes and behaviours of other adolescents. Therefore, peers are an effective way of encouraging behavioural change. In this regard, peer educators can be seen as "change agents" relative to their peers and may function as guides or motivators that facilitate behavioural change (Bastien et al. 2008, 190). Yet another perspective is that peer education is especially useful in reaching those adolescents who no longer are enrolled in school, including street children and sex workers, where formal educational measures have little to no influence (Lule et al. 2006, 1115).

Even if this cost-effective strategy has been widely utilised with varying degrees of success in sub-Saharan Africa, it has its critics. Many scholars consider this approach to be an inappropriate strategy to promote behavioural change among adolescents. Their criticism is based on the fact that adolescents are also greatly influenced by their extended family, along with the social norms of the communities they call home. Another criticism is that health workers may be perceived as a more credible source of obtaining sexual and reproductive health information than peers (Bastien et al. 2008; Mason-Jones, Mathews, and Flisher 2011; R. V. Rossem and Meekers 2011). However, as stated above, Cameroon suffers from a low coverage of medical health professionals; therefore, peer-education can be a useful approach to promote healthy sexual behaviour in areas where health professionals are in short supply. At the same time, it is important to educate peer-educators regularly to ensure that the information they share is accurate and valid.

The "Entre Nous Jeunes" program together with the "Aunties" program chose peer education as their primary strategy. The "100 % Jeunes", "Among Youth" in addition to "Horizon Jeunes" programs, all used peer education as one of their strategies, combined with mass media and social marketing. Social marketing has according to Meekers and Rahaim (2005) been an essential part of several reproductive health programs in many low-and middle-income countries over the past two decades. Social marketing in adolescent reproductive health programs aim to improve reproductive health of the adolescents by using commercial approaches to promote healthy behaviour. These programs also work on increasing access to contraceptives and health services. The social marketing strategy is considered a cost-effective approach in conveying widespread access to contraceptives and family planning services. Social marketing, as stated by Asfhord, Bulsara, and Neukom (2000), aims to increase both the supply and demand sides of

health products and reproductive health services in the attempt to promote healthier lifestyles. Contraceptives such as condoms are sold rather than given away, making adolescents put a higher the value on them, which in turn leads to more consistent contraceptive use. Social marketing campaigns often employ a wide range of media, including TV and radio shows, and live theatrical performances as well as interpersonal communication to reach out to adolescents (Asfhord, Bulsara, and Neukom 2000; Lule et al. 2006; Meekers, Agha, and Klein 2005; Meekers and Rahaim 2005).

3.3. Results and evaluations of health programs completed in Cameroon

Research indicates that the adolescent reproductive health programs implemented in Cameroon all had positive results in a number of their respective program objectives. Adolescents showed an increase in knowledge of protective factors to prevent sexual transmitted infections (STIs) and unwanted pregnancies, increased use of oral contraceptives and condoms, and improved communication between partners and friends regarding the importance of condom use (See Alford, Cheetham, and Hauser 2005; Asfhord, Bulsara, and Neukom 2000; IRESCO 2002; Ndonko et al. 2010; Plautz and Meekers 2007; R. Van Rossem and Meekers 2000). In the following section, some the main results of the sexual and reproductive health programs, presented in Table 1, will be shortly summarised.

"100 % Jeunes" and "Entre Nous Jeunes"

Meekers, Agha, and Klein (2005) show in their research that condom use improved significantly among adolescent of both genders during the "100% Jeunes" social marketing program. Between the years 2000 and 2002, measurements revealed that the percentage of youth (15-24 years) who ever used condoms increased from 58 % to 65 % for males, and from 51 % to 62 % for females (Meekers, Agha, and Klein 2005, 530.e8). The study further uncovered that girls in particular became more comfortable with buying condoms during the duration of the intervention and also had increased knowledge of correct proper condom use. Moreover, results also showed that adolescents, both boys and girls, with high exposure to the "100 Jeunes" program face lower barriers to condom use (Meekers, Agha, and Klein 2005). Similar tendencies and outcomes were observed in the evaluation of the "Entre Nous Jeunes" peer-educator program. Those who had an encounter with a peer-educator were significantly more likely to report use of modern contraceptives, including condoms (Alford, Cheetham, and Hauser 2005, 27). Speizer, Tambashe, and Tegang (2001), show in their evaluation of the "Entre Nous Jeunes" program that contact with a peer-educator is associated with increased spontaneous display of knowledge

about modern contraceptive methods and STI symptoms (among females). Moreover, the study also revealed that adolescents who are currently in school are more likely to use condoms then adolescents who have dropped out (Speizer, Tambashe, and Tegang 2001, 348).

"Among Youth"

The evaluation of the "Among Youth" program regarding condom use did not reveal same positive outcomes, given that condom use remained insufficient after the conclusion of the program (IRESCO 2002, 22). IRESCO advises that the there are many barriers to consistent condom use, even among adolescents who recognize the benefits of consistent use. Males in particular reported the belief that their sexual partner was "healthy" as a reason for not using condoms consistently. Fidelity and abstinence were reported as well-known prevention methods among adolescents (IRESCO 2002, 18-22). On the upside, the report revealed that adolescents exposed to the program stated that they used a condom during their last sexual activity, showing a significant increase especially among girls when compared to pre-program exposure (IRESCO 2002, 16-22).

"Horizon Jeunes"

The evaluation of the social marketing program "Horizon Jeunes", showed that the program had a positive effect on awareness of condom use as a method to prevent pregnancies. It also showed an increased knowledge of oral contraceptives among both genders (Alford, Cheetham, and Hauser 2005, 5). Data from the R. Van Rossem and Meekers (2000) evaluation of the program makes clear that the program was effective in improving adolescents' perceptions regarding the benefits of preventive methods. Interestingly, by the end of the "Horizon Jeunes" program, half of the boys reported that they were at risk of causing an unwanted pregnancy. Among the girls on the other hand, awareness of the risk of unwanted pregnancies was much lower, and no change in their beliefs was observed as a result of the program (R. Van Rossem and Meekers 2000, 401).

The "Aunties" peer-education program

The "Aunties" peer-education program is, according to Ndonko et al. (2010, 5), a promising models for empowering young women to look after their sexual and reproductive health, an approach that is transferrable to other countries with similar conditions and needs. The project's aim is to recruit unwed mothers who became pregnant in their teens to be trained and function as peer-educators in their own communities. The "Aunties" program was launched by German International Cooperation (GIZ) in Cameroon in 2001. Since then 12,000 young mothers have

become “aunties”, peer-educators spread over all of Cameroons ten regions (Ndonko et al. 2010, 5). The trained “aunties” have voluntarily educated adolescents on sexual and reproductive health concerns. This work is carried out on the local level in their own communities, districts, and local schools, potentially reaching out to between 228,000 and 300,000 adolescents each year (Ndonko et al. 2010, 23). The National Network of Aunties Associations’ (RENATA) campaigns against rape, incest, and to prevent early pregnancy, have reached both national and international media and also initiated political and public debates about these often seen taboo topics (Ndonko et al. 2010, 7).

Evaluating outcomes and behavioural change resulting from the programs

Most of the programs above focus their efforts on informing and enlightening their target groups in hopes of changing their behaviours, but doing so has its challenges. Improved knowledge about the importance of preventive measures does not necessarily result in changes in behaviour, even though behaviour change is one of the most important desired effects of any reproductive health program. A shift in adolescents’ sexual behaviour is the single most valuable outcome, in that it would most likely lead to the best result in efforts to reduce early pregnancies (IRESCO 2002, 22; Speizer, Tambashe, and Tegang 2001, 347). Comparing the findings, several of the adolescent reproductive health programs lead to identified behaviour change among adolescents in different aspects. A study of trends in behaviour over a 36-month period showed that as a result of the “100 % Jeunes” program, positive changes occurred among adolescents (Plautz and Meekers 2007). Plautz and Meekers (2007) further state that the “100 % Jeunes” program is an important factor in increased condom use among adolescents of both genders. Moreover, the Institute of Behavioural Research and Studies revealed that adolescents adopted behavioural changes to prevent early pregnancies as a result of the “Among Youth” peer education program (IRESCO 2002, 22). R. Van Rossem and Meekers’s (2000) evaluation of the “Horizon Jeunes” program showed that the program caused a postponement in first sexual activity for women, a change particularly important for adolescents girls since any delay reduces the risks of early and unwanted pregnancies (R. Van Rossem and Meekers 2000, 401). There is also evidence that the “Entre Nous Jeunes” program was effective at changing adolescent behaviour, in the sense that adolescents adopted protective measures, i.e. condom use, after interacting with peer-educators (Speizer, Tambashe, and Tegang 2001,349-350).

The sexual and reproductive health programs implemented aims to promote healthy sexual behaviour and prevent early pregnancies among adolescents. The outcomes and behavioural changes from these programs are sometimes seen soon after their implementation, while others

can only be measured long after their execution. The ability to evaluate the effects of these programs is as important as the planning and implementation of them (Schaalma and Kaaya 2008, 72). Until recently, many program-planners and policymakers in low-and middle-income countries did not have access to program evaluations that identified effective programs. It would be ideal to have evaluation methods where one could compare and assess the effectiveness of analogous programs aimed at adolescents in similar contexts. Without evaluations, policymakers and program-planners cannot learn from each other or from history, and hence can be thwarted in their efforts to allocate financial resources to interventions that have actually proven useful and perhaps even stop spending resources on programmes that have shown themselves to be less effective (Alford, Cheetham, and Hauser 2005, 3; Schaalma and Kaaya 2008, 72-73).

In general, the outcomes of the programs trying to reduce adolescent pregnancies is difficult to measure, given that pregnancies occur less frequent than sexual activity and condom or contraceptive use (UNESCO 2009, 15). Consequently, UNESCO (2009) states in "International Technical Guidance on Sexuality Education", that considerably larger samples are needed to measure adequately the impact of programs on pregnancy rates. In other words, the programs carried out in Cameroon might be too small to yield trustworthy observations with regards to their effect on the adolescent pregnancy rate. As specified by Calvès (2002a), the reproductive health programs implemented in Cameroon tend to have a narrow geographic scope that emphasises Cameroons major cities.

Sexual and reproductive health programs – how to advance

Supported by the reports reviewed, it is proposed to use several strategies in order to reach more optimal adolescent awareness on the topics of sexual and reproductive health. The strategies would comprise a combination of peer-education, social marketing, and using existing mass media. Furthermore, it has been shown that a mixture of these strategies, combined with high exposure to preventive health messages targeted at adolescents, are useful in helping adolescents translate knowledge into healthy behaviour. In spite the fact that the above programs have shown positive change in adolescent's sexual and reproductive health behaviour as well as increased knowledge of preventive measures, all of them - except the "Aunties" program - have been short-term, running for a maximum of only 18 months.

Therefore, it is this author's contention that future programs be implemented for at least two to three years in order to optimize their beneficial effects. In doing so we also would be able to measure better a program's full, long-term impact on behavioural change. This is in line with the

recommendations of R. Van Rossem and Meekers (2000) and Speizer, Tambashe, and Tegang (2001). Another argument is that small programs run in specific areas - predominantly urban ones at that - may not have the desired effect in the long run. Part of the dilemma that needs to be addressed is that health programs are based on funding from international agencies and organisations, leading to them having timeframes and geographic range that are often limited in scale. However, social marketing and peer-based interventions are often centred around voluntary work and are seen as cost-effective strategies. Hence, there is a promising model to apply on a large scale in Cameroon to reach out to adolescents living in rural areas where access to health facilities and reproductive health information are limited.

4. ACCESS TO SEXUAL AND REPRODUCTIVE HEALTH INFORMATION AND SERVICES – ADOLESCENTS' UNMET NEEDS

4.1. Distribution of sexual- and reproductive health education

Access to sexual and reproductive health information is an important element in promoting and improving adolescents' reproductive health. Offering them sexual and reproductive health education, either in a school setting or in a health facility, empowers them with the skills and knowledge needed to make informed responsible decisions regarding their sexuality. This in turn may lead to reduction in the number of early pregnancies and mitigation of other reproductive health concerns. Furthermore, delivery of effective sexual and reproductive health education will have a long term positive impact on adolescents of both genders (The World Bank 2011; Tylee et al. 2007; UNESCO 2009).

One of the objectives pointed out in the "Maternal and Child Health Care and Family Planning Services Policy and Standards" (MCH/FP), implemented in 1995, was to provide sexual health education and family life education in Cameroon. The MCH/FP policy states; "that every person in reproductive age is entitled to information on family planning" (Calvès 2002a, 10). Furthermore, the right to reproductive health information is written into the 1996 Constitution of the Republic of Cameroon, which outlines all rights guaranteed to the citizens of Cameroon (Groupe Mauger 1996; Ngeve 2008, 5). In 1998 the Cameroonian government embarked on awareness-raising efforts to lower the country's high birth rates and advocated and supported family planning education, education on contraceptives, and sexual health education (Katzive et al. 1999, 5). Subsequently, Calvès (2002a) declares in her study that the Ministry of Education drafted the "Declaration of Health Policy in School" in 1998, with the purpose of introducing

health services and "Family Life Education" (FLE) from kindergarten (ages 4-6) up to secondary school (ages 11-21).

These findings show that the Cameroonian government has, for a long period of time, acknowledged the need to make sexual and reproductive health information and education available to their citizens. However, almost a decade later, services specialized in sexual education - including national guidelines for sexual health education in schools - had not been developed fully by the government. At present, only a limited number of schools offer a few lessons on human reproduction, all at the secondary school level (Ako et al. 2006; Dongmo 2010a; Ngeve 2008). The 2012 UNFPA Cameroon report revealed that adolescents today often have little information regarding sexual and reproductive health issues, and as a consequence are reluctant to take actions necessary to protect themselves from reproductive health risks (UNFPA Cameroon 2012, 7). As stated in chapter 3, the sexual and reproductive health information programs carried out in Cameroon, have just largely been short-term programs and the (2012) UNFPA Cameroon shows that the urgent need to provide this information to adolescents is still present. Ideally, a sexual and reproductive health education program, implemented across the country, could educate and inform adolescents on reproductive health matters. This program would also be in line with recommendations from the World Health Organization's guidelines "Preventing Early Pregnancy and Poor Reproductive Outcomes Among Adolescents in Developing Countries", which strongly supports introducing curriculum-based sexual health education in order to reduce early pregnancies (before the age of 20 years) (WHO 2011, 39).

Sexual health education – a promising intervention to prevent early pregnancies

The importance of sexual health education has been well documented over the last years and UNESCO in collaboration with UNICEF, UNAIDS, WHO and UNFPA, has developed an "International Technical Guidance on Sexual Education" to assist authorities in the design and implementation of sexual health education in schools (UNESCO 2009, 3). Sexual health education programs implemented in school settings have the potential to reach a large number of adolescents before they become sexual active. In this regard, Kirby, Laris, and Rolleri (2006) argue that sexual health education programs based on a written curriculum and implemented in school settings or in health clinics, are promising interventions to prevent and reduce adolescent sexual risk behaviour and negative reproductive health outcomes. To reach an even broader target group these education programs can also be implemented in community settings, where one might find higher-risk adolescents, such as those who have dropped out of school (Kirby, Laris, and Rolleri 2007, 206).

In the 2002 baseline study GTZ (German Technical Cooperation, now GIZ) carried out in the South-West region in Cameroon, young respondents recommended that sexual health education should be introduced in schools as a means for girls to gain knowledge on how to prevent pregnancies (Ndonko, Ngong, and Vignon-Makong 2002, 12). This indicates that adolescents themselves feel the need to introduce sexual health education programs into school curriculums in Cameroon. An early integration of such information and education programs is also in line with recommendations by those working locally in the field of reproductive health in Cameroon (Dongmo 2010a; Ngeve 2008). In addition, Tebeu et al. (2010) also concluded in their research that early integration of sexual health education in the school curriculum is much needed in Cameroon, and would be a good measure to prevent early pregnancy among adolescent girls.

Sexual health education programs – still absent in public schools

For now, in the absence of sexual health education programs in public schools, campaigns that promote safe sexual practices and the importance of family planning are carried out all over Cameroon. These are run by the government in collaboration with stakeholders, i.e. NGOs, working in the field. Information is disseminated through seminars, health clubs, workshops, and through the media. Posters and brochures with sexual and reproductive health information are also being posted on Cameroon's university campuses (Ngeve 2008, 5-6; UNFPA Cameroon 2013, 26). Here it is important to note that WHO-Department of Reproductive Health and Research (2006) states in their policy brief "Promoting and Safeguarding the Sexual and Reproductive Health of Adolescents" that sexual and reproductive health education should start before the onset of sexual activities. Given that the mean age for first sexual experience in Cameroon is 15 years, there are concerns that sexual health information given at university level is simply too late. Hence, sexual health information and contraceptive promotion should more suitable be provided starting as early as in secondary schools, when the target audience is younger and less likely to have initiated sexual activities.

Additionally, a number of NGOs offer sexual education in schools, amongst them the "Aunties" project mentioned earlier, implemented by GTZ (Ndonko et al. 2010). Their school interventions consist of short presentations spread over a school term or a school year, and cover topics concerning: puberty, contraceptives, STIs, HIV/AIDS, and communication with partners, parents, and peers (Ndonko et al. 2010, 14). "Maternal and Child Aid Cameroon" is also working on "Life Planning" (LP) programs, including sexual health information in 30 public and private secondary schools in the North-West region of Cameroon. The LP program has as one of its objectives to reduce school dropouts due to adolescent pregnancies (Ngala 2012). In Cameroon

there are also a few religious institutions, primarily Catholic and Muslim, that offer sexual and reproductive health talks. In Muslim communities sexual health education is sometimes offered as a part of religious instruction (Center for Reproductive Rights 2003; Dongmo 2010a; Katzive et al. 1999). On the Catholic side, Dongmo (2010a) reports on a program called "EVA" ('Education for Life and Love' in French) promoting family planning, although this program strongly discourages any modern contraceptive methods and only advocates abstinence as a prevention method. The extent and effects of these religious programs are hard to assess as there is no readily available data. Consequently, further research is recommended to investigate the effects and outcomes of these educational programs.

Implementation of sexual health education – religious and cultural constrains

Sexual and reproductive health information accessibility is often in conflict with religion and culture. Research indicates that the religious diversity in Cameroon is a challenge when it comes to implementing sexual health education, since the many religious groups have differing understandings and interpretations of what constitutes reproductive health (Ngeve 2008; Tantchou and Wilson 2000). As Tantchou and Wilson (2000) point out, the Protestant churches are in support of health policies and even provide reproductive health services at their own health centres. Conversely, the Catholic Church and many Islamic leaders oppose any policy and program elements associated with modern contraceptive methods. That being said, despite the inhibiting effects of these religious values, it is important to involve religious leaders in the development of sexual education, as it is crucial to make these programs culturally sensitive to the environments in which they are implemented. At the same time, it could be argued that it is as crucial to address the very cultural norms or religious values that increase the risk of reproductive health vulnerabilities in the first place. In this sense efforts should be made to change the sets of values and norms that inhibit work towards improved reproductive health and, especially in this context, have a positive effect on reducing early pregnancies.

Making the task more daunting, Ngeve (2008) asserts in her research that sexual health guidance in Cameroon is a taboo subject in most homes and schools. In fact, many parents are against a reproductive health curriculum being taught in schools. This aversion is rooted in cultural norms and traditional beliefs and is a situation which makes reproductive health information relatively inaccessible to many adolescents in Cameroon (Katzive et al. 1999, 4; Ngala 2012; Ngeve 2008, 11; Schuster 2010, 132). A representative from the Ministry of Public Health in Cameroon, Roger Dongmo (2010a), also confirms that discussions with adolescents regarding sexual health are seen as a taboo by the overall population, which has created a barrier to improving sexual

health education in Cameroon. In the UNESCO (2009) guideline regarding sexual education, the importance of parental involvement in the programs is emphasized, in view of the fact that parental concerns regarding sexual health education are often based on misunderstandings about the nature and effects of such educational programs. These misunderstandings have led to restrictions in access to sexuality education and information about contraceptives, mostly due to concern of encouraging immoral sexual behaviour outside marriage (Schuster 2010, 132).

The findings in this chapter indicate that cultural and religious values in Cameroon are hindering adolescents from obtaining sexual and reproductive health information, even if the right to reproductive health information is written into Cameroon's constitution. Interestingly, as shown in the literature, adolescents in Cameroon are having sex at an early age and are getting pregnant outside marriage, despite the impression that premarital sex is supposedly taboo and an immoral behaviour in society at large. However, further research, which takes these variables into account, will need to be undertaken to understand more clearly the effects of religious and cultural values on adolescent's sexual behaviour and contraceptive use.

Even if it is not realistic that a sexual health education programme alone can eliminate the risk of early and unwanted pregnancies among adolescents, it is a step in the right direction. Education combined with access to high quality health services is a clear path towards the reduction of these risks and vulnerabilities (UNESCO 2009, 2). Caution should be taken that if this highly needed education and information is not provided the adolescents, there is a risk of them obtaining unreliable haphazard knowledge, where potentially the misinformation on sexual and reproductive health issues leads to negative effects on their health and lives.

4.2. Family planning and reproductive health services – a growing need

Access to family planning services is an essential component in the attempt to reduce unintended adolescent pregnancies, and must include those adolescents who want to postpone or space their pregnancies. The delivery of high quality reproductive health services is as important for adolescents as it is for older women. However, in many societies family planning services are highly limited to married older women and adolescents' needs are often overlooked in the provision of family planning services. In general, access to health care services has many determining factors; financial, socio-cultural, religious and geographical constraints (Christiansen, Gibbs, and Chandra-Mouli 2013; WHO 2007).

The need for family planning services has displayed consistent growth in Cameroon since the early 1990s. For all women of reproductive age the numbers from 2011 show that the need has been deficient by approximately 20 % (Fauveau 2011, 58). Data from the latest Demographic and Health Survey (DHS 2011) in Cameroon shows that about 40 % of women of reproductive age wish to delay or prevent future pregnancies (UNFPA Cameroon 2013, 18; UNFPA Cameroon 2012, 8-12). Research confirms that despite Cameroon's efforts to improve health care services, improved family planning programs and health clinics that offer family planning services are still too few in number (Ako et al. 2006; Ngeve 2008, 4; UNFPA Cameroon 2012). As discussed in chapter 3, the Cameroonian government has raised considerable awareness regarding offering family planning services, and one of the main objectives in the "Roadmap for the Reproduction of Maternal and Neonatal Mortality in Cameroon 2006-2015" is to strengthen the provision of family planning services (Ngeve 2008; Ministry of Public Health 2006).

Access to reproductive health services – a continuing concern

According to the UNFPA Cameroon (2012) report on reproductive health, access to reproductive health care services has always been a concern in Cameroon, given that only parts of Cameroon's population have access to them. There is evidence that public reproductive health services in Cameroon still are of poor quality, lack qualified health personnel and are unequally distributed between urban and rural areas. In most cases, adolescents are mixed with adults in the majority of health service locations that offers reproductive health services (See Dongmo, 2010b; Ngeve 2008; Soh 2007; UNFPA Cameroon 2012; The World Bank 2011). Dongmo (2010b) reveals that public health facilities devoted to adolescent health are limited in scale, and those health facilities that do offer reproductive health services for adolescents are mostly pilot projects initiated by international organisations and located in Cameroon's capital, Yaoundé. Adolescents are for the most part being offered health services in high-risk clinics, clinics that are intended for pregnant women with increased risk of poor reproductive health outcomes; these are only located in Cameroon's main cities. Additionally, in places where access to high-risk clinics are not available, high-risk groups are also being taken care of in "Maternal and Infant Health and Family Planning Centres" (Ako et al. 2006; Dongmo 2010b). Cameroonian adolescents with sexual transmitted infections (STIs) are mainly consulted at medico-social centres, which again are only to be found in the main cities (Ako et al. 2006).

Family planning and reproductive health services – barriers to obtaining care

Exacerbating the problem, even in areas where family planning and reproductive health services are available, the Center for Reproductive Rights (2003, 84) in line with Katzive et al.(1999, 15)

has revealed that adolescents in Cameroon rarely visit these health facilities. It has to be said that no empirical research regarding the low utilisation of family planning services among adolescents in this region has been carried out, and several questions regarding this issue remain unanswered and unanswerable at present. Further research regarding this issue in Cameroon is therefore recommended. However, Tylee et al. (2007) in agreement with the WHO (2007) points out that despite different contexts, health-seeking behaviour among adolescents and the barriers to seek care adolescents face are reasonably similar worldwide. They state that fear concerning lack of confidentiality and privacy creates a major barrier for adolescents to use these health services. Concurrently, lack of knowledge among health personnel concerning adolescents' needs, as well as moralising and judgemental health workers may create additional barriers (Chandra-Mouli, Camacho, and Michaud 2013, 518; WHO 2007,43). Similar tendencies are certainly perceived in Cameroon, where it has been acknowledged that health workers have been reluctant to offer reproductive health services to adolescents (Tantchou and Wilson 2000, 17). In this regard, actors in the field agree with the WHO and have stressed the need to make reproductive health services offered to this target group 'adolescent-friendly', in an effort to lower the barriers that prevents adolescents from obtaining sorely-needed reproductive health services (Chandra-Mouli, Camacho, and Michaud 2013; Tylee et al. 2007; WHO 2009).

The need for "adolescent-friendly" health services

In the absent of adolescent-friendly health services in public health facilities in Cameroon, school-based health services may be a well-situated place to offer adolescents these services. Calvès (2002a) shows in her study that the "Declaration of Health Policy in School" claims that health services are to be provided for adolescents in school. However, she further reveals that it is not explained clearly if reproductive health services are included in these services (Calvès 2002a, 13). Recent papers shows that medical services for adolescents in schools exist, but in secondary school the services offered are only emergency care for trauma and fever, and do not specifically target sexual and reproductive health matters (Ako et al. 2006; Dongmo 2010b).

Low contraceptive use coupled with a high abortion rate among Cameroonian adolescents provides another solid reason to develop adolescent-friendly health services. Knowing that the low prevalence of contraceptive usage leads to early unwanted pregnancy, it is no surprise when data reveals that about 86,6 % of adolescents have knowledge about at least one contraceptive method, but only about one fifth (20,2 %) actually use any (Ngeve 2008, 12; UNFPA Cameroon 2012, 12). Cook, Dickens, and Fathalla (2003) argue that making contraceptives readily available is one of the best preventive methods to reduce unwanted pregnancies and induced

abortions. In Cameroon, condoms are provided free to the public in many health facilities and are also available in kiosks for a small amount of money (Ngeve 2008, 6; UNFPA Cameroon 2012, 17). However, despite this accessibility, several studies show that numerous Cameroonian adolescents tend to not use condoms, or other contraceptives, due to misconceptions regarding their use and benefits, e.g. that the contraceptive pill can stop menstruation and cause sterility (see Meekers and Klein 2002; Ndonko, Ngong, and Vignon-Makong 2002, 18- 29; Ngeve 2008; R. V. Rossem and Meekers 2011). These findings demonstrate that it is important that adolescents are given trouble-free access to reproductive health information services to combat their misconceptions about contraceptives. Offering correct information on the advantages and effectiveness of contraceptives are important steps to prevent unwanted pregnancies in adolescence. In this regard, adolescent-friendly reproductive health facilities established in schools or in public health facilities could provide such information services.

5. ADOLESCENT REPRODUCTIVE HEALTH – LEGAL, SOCIO-CULTURAL AND ECONOMIC CONSTRAINTS

In this chapter, some of the significant barriers to progress in adolescent reproductive health in Cameroon will be presented. While some of these barriers have already been discussed above, the following sections will detail further how Cameroon's written laws combine with socio-cultural and economic factors in a way that may affect adolescents' ability to obtain certain sexual and reproductive health information and services.

5.1. Cameroons written laws – consequences for reproductive health choices

Before the 1980s Cameroon was firmly pro-natal, with a law prohibiting sale of contraceptives and a ban on any form of family-planning advertising in the media (Center for Reproductive Rights 2003, 70–78). Even though the government has repealed these strict laws, the status of reproductive health is still governed by some by-laws that remain in effect. Cameroon's legal code can be considered a challenge to the adolescent reproductive health situation and also a hindrance to adolescents making healthy life choices and having reproductive autonomy. The sale of contraceptives is regulated by the government; act No.90/035 of 1990 states that "birth control propaganda is still prohibited". These laws mean that pharmacists are the only ones authorized to sell contraceptive products (except condoms), making contraceptives difficult to obtain for many Cameroonian adolescents, especially those in rural areas (Ngeve 2008, 4, 14; Katzive et al. 1999, 3).

Given that birth control propaganda is prohibited in Cameroon, adolescents have in general limited access to information and knowledge about the contraceptive methods available, resulting in negative reproductive health outcomes. According to WHO (2011), one of the key determinants of adolescent pregnancies is insufficient access to contraceptives and low contraceptive use. Legal codes that obstruct or challenge these determinants will have an enormous effect on the reproductive health outcomes for adolescents. As stated by Cook, Dickens, and Fathalla (2003), laws and policies can improve reproductive health, but can also impede women's autonomy and options regarding their sexual and reproductive lives. Chandra-Mouli, Camacho, and Michaud (2013), in line with WHO (2011), recommend that policymakers enact laws and policies that facilitate adolescents' ability to obtain information about contraceptives.

Unwanted pregnancies – the root of unsafe abortions

As stated in chapter 3.2, many adolescent girls faced with unwanted pregnancies in Cameroon turn to the option of abortion. Research confirms that these abortions are often performed unsafely, given that Cameroon has a strict law against induced abortion, stated in article 337 of the New Cameroon Penal Code of 2006 (Ngeve 2008, 11; UNFPA Cameroon 2012, 14). Cameroon's abortion law only permits abortion for medical or mental therapeutic reasons, or if the woman has been a victim of rape or incest; these restrictions have serious consequences for adolescent girl's reproductive health (Schuster 2010, 137). In her study, Schuster (2010) reveals that if a woman undergoes an illegal abortion, she is at risk of been punished with a fine equivalent to around 4,200 US dollars, and up to a year imprisonment. Even if safe abortions are available in Cameroon, these abortions often take place in private clinics and are only available to women who can afford the high medical costs of such a procedure. As a consequence of these high costs, accessible only to a very small minority, most adolescent girls who need an abortion turn to illegal unsafe abortion services. Research indicates that these unsafe procedures contribute significantly to the high rates of maternal mortality and morbidity in Cameroon (Mbizvo and Zaidi 2010; Schuster 2010). Even if the strict laws against abortion are often justified on the grounds that these restrictions will result in fewer abortions, evidence suggests that legal restrictions on abortions neither in fact lower the numbers of abortions nor prevent young girls from turning to abortion when facing unwanted pregnancies. Rather, they increase the prevalence of unsafe abortions, given that safe abortions are not a viable option for many adolescent women (Kismödi et al. 2012, 34; Mbizvo and Zaidi 2010, 4; WHO 2012, 17).

Mitigation of abortion laws – religious challenges

Evidence suggests that the number of unsafe abortions, and their subsequent negative consequences may be reduced by making safe abortions services available and accessible to adolescents (Mbizvo and Zaidi 2010, 4; WHO 2012, 17). Several findings presented in this study indicate that the abortion law in Cameroon needs to be liberalised in order to protect the health of adolescent girls. Similarly, the WHO guidelines on "Preventing Early Pregnancy and Poor Reproductive Outcomes" strongly recommends that laws and policies enable adolescents to be given access to safe abortion services (WHO 2011, 7). Fortunately, discussions on changes in abortion topics have gradually entered the public debate in Cameroon, and Schuster (2010) asserts in her study that Cameroon has ratified the "Maputo Protocol", which includes an appeal to liberalise abortion laws in African countries. However, despite this progress, the changes to the regulations are strongly opposed by the Roman Catholic Church in Cameroon, which adamantly condemns abortion practices. Unfortunately, as often seen in several countries worldwide, moral and religious controversies regarding abortion tends to obscure its dimensions as a medical and a public health concern (Cook, Dickens, and Fathalla 2003, 26).

Similar tendencies are seen in Cameroon, a country were induced abortions are highly controversial among certain religious groups. Consequently, amending the law on abortion could be a daunting task in a society where religious leaders are key players in public debates. Likewise, Cameroon's political system is heavily influenced by ethnicity and traditional views. Different competing ethnic groups, each with their own views and sets of values, make up powerful decision-making factions at the national level. In this regard, Cameroon's ethnic and cultural situation is certainly exceptional, as strong and diverse ethnic, cultural and religious points of views influence any proposed policy or law consideration (Ngeve 2008, 2; Schuster 2010, 130).

The legal age to enter marriage – inhibiting factor for preventing early pregnancies

It may be surprising that the minimum legal age to get married in Cameroon, with parental consent, is 15 years for women and 18 years for men. This is the case despite the knowledge that early marriage appears to be a significant contributing factor for early pregnancies (Walker 2012, 237). As the law stands, it is most likely an inhibiting factor in efforts to reduce early marriages and early pregnancies in Cameroon. Chandra-Mouli, Camacho, and Michaud (2013), Walker (2012) in line with WHO (2011) guidelines, recommend that political leaders should be encouraged to enforce laws and policies to prohibit the marriage of girls before the age of 18 years, in order to prevent early pregnancies during adolescence. Even if the findings presented

imply that an alteration of this law would not immediately put an end to the deep-rooted traditions of early marriages in Cameroon, it is a feasible starting point from which one could achieve support among community and religious leaders. Early marriage and its influence on adolescent pregnancy in Cameroon will be elaborated further in the following section.

5.2. Access to reproductive health measures: socio-cultural and economic barriers

Determinants influencing reproductive health include factors beyond health care services per se, and we have seen in this study that barriers to improving adolescents' reproductive health are often grounded in socio-cultural, economic, or religious factors. In particular, traditional social norms, poverty, and gender inequality make adolescent girls vulnerable to early pregnancy and the ensuing health risks involved. These barriers in turn affect access to sexual health information, reproductive health services, and contraceptive use (Cook, Dickens, and Fathalla 2003; The World Bank 2011; WHO 2007).

In many parts of Cameroonian society the influence of culture and religion on gender equality is profound. Even though the Cameroonian constitution assures equality between men and women and several institutions are fighting gender inequality, women in many parts of the Cameroonian society are still perceived as being secondary to men (Hattori and DeRose 2008, 311; UNFPA Cameroon 2010, 21; UNFPA Cameroon 2013, 30). This state of gender inequality might also influence an unmarried adolescent girl's autonomy in obtaining health services and contraceptives. More research needs to be undertaken to identify precisely how Cameroon's state of gender inequality affects the unmarried adolescent girl's reproductive health choices.

However, the findings presented in this study show that the barriers to provision and utilisation of reproductive health services for Cameroonian adolescents are complex and interrelated. Access to reproductive health services and family planning very much depends on the standard of living, or the socio-economic background, and many adolescent girls are deprived of the opportunity to use family planning services due simply to poverty. In Cameroon, data and research confirm that early childbearing and low contraceptive use is more frequent among poor women in rural parts of Cameroon when compared to women that are more affluent and living in urban areas (The World Bank 2011; UNFPA Cameroon 2012). It has also been shown that social norms and religious values greatly influence adolescents' ability to protect themselves from unwanted pregnancies or other reproductive health hazards and also play a role in the level of care (UNFPA Cameroon 2012; WHO 2007). This moral constraint is also elaborated in

Schuster's (2005) article, where she argues that socio-cultural and moral values in Cameroon influence women's access to contraceptives, and she further asserts that these barrier help explain why unwanted pregnancies in Cameroon occur. However, Ngeve (2008) argues that the harmful stereotypes hindering progress in the area of family planning in Cameroon are gradually fading away. These findings clearly imply that multi-sector approaches, including poverty reduction and interventions to improve the status of women, are needed to advance adolescent's reproductive health situation and to prevent early age pregnancies.

Access to education – consequences for reproductive health

As mentioned earlier in chapter 3.1, young women's access to education is an important step towards improving the status of women. It is acknowledged that the literacy level and girls' access to formal education have an impact on their capacity to protect and enhance their reproductive and sexual health. They can also delay early marriage indirectly, by increasing an adolescent girl's freedom and options in life, including when or if to have children (Cook, Dickens, and Fathalla 2003; Tantchou and Wilson 2000). In spite of real progress in access to education, with a literacy level among women over the age of 15 at 68 %, recent figures show that Cameroonian women still have lower education in general than their male counterparts, with secondary school enrolment at 41 % for males and 33 % for females (Fauveau 2011, 58; The World Bank 2011). A lower degree of education has a negative effect on contraceptive use and adolescent fertility in Cameroon. As a result of dropping out of school, many young women in Cameroon are simply less likely to take the measures necessary to protect themselves from ending up pregnant at an early age (Soh 2007, 7; The World Bank 2011; UNFPA Cameroon 2012, 13). As shown in chapter 3.1, the Cameroonian government has instituted the policy "Education for All and the Promotion of the Girl-Child" in an attempt to increase school enrolment among girls. However, despite the policy, studies show that school drop-out rates in Cameroon are high as a consequence of poverty or other financial constraints and cultural norms and traditions in which many young women are expected to get married at a young age, forcing them out of school and into family life (Hattori and DeRose 2008, 312; Ngeve 2008, 11).

Early marriages jeopardise girls` health and socio-economic prospects

A large number of the adolescent pregnancies in low- and middle-income countries involve young women who are in a union or legally married. In fact, one of the key contributing factors to adolescent pregnancies, include early marriages, defined as marriage carried out when the girl or boy is under the age of 18 (WHO 2011, 12). Several studies have showed that there is a strong correlation between early marriage and adolescent pregnancies in Cameroon (Soh 2007; Tebeu

et al. 2010; Walker 2012). This may indicate that many adolescent girls have limited autonomy and decision-making authority to obtain contraceptives after they get married, or are under social and familial pressure to bear children. Likewise, various cultural norms could also explain why early pregnancies ensue in certain regions of Cameroon.

A recent study reported that almost 47 % of adolescents girls in Cameroon get married before their 18th birthday (Walker 2012, 231- 232; WHO 2007, 41). Furthermore, Tebeu et al. (2010) show in their study that 97 % of the adolescents who gave birth in the Far North region of Cameroon were married at the time of delivery (see Appendix A, for map over all regions). Evidence suggests that the Far North region, together with the North and Adamaoua region, have the highest rates of early marriages in Cameroon. Unsurprisingly, the Far North region also has the highest concentration of births by adolescents in health facilities, with an adolescent birth rate of 26 % compared to 8.6 % in the Centre region (the capital Yaoundé) (Tebeu et al. 2010, 3; UNFPA Cameroon 2012, 13; Weiner 2010, 136). These findings provide indicators showing the areas with the greatest need for attention in efforts to reduce adolescent pregnancies. It is however important to stress that many births in Cameroon occur at home, so the numbers of births by adolescents might even be higher than data presented here. Tebeu et al. (2010) and Ngeve (2008) indicate that socio-cultural values, traditions, and economic constraints contribute to the high fertility rates and many early marriages among adolescents in the North part of Cameroon. Subaiya and Johnson (2008) further assert that the marital pattern in Cameroon varies with ethnicity and cultural traditions associated with specific geographical areas.

In short, the results presented in this chapter indicate that improving adolescent health requires changing the social norms and traditions that promote negative health outcomes, including and perhaps especially cultural expectations for women to marry and bear children in early adolescence. However, as expressed by Ngeve (2008), the traditions of early marriages are deeply rooted in Cameroon, meaning that changes in these cultural practises are strenuously opposed by certain ethnic groups. Even though the government has run numerous awareness campaigns in order to convey the message of the risks and drawbacks of early marriages, they are still a common occurrence among certain ethnic groups in Cameroon (Ngeve 2008; Walker 2012). Achieving change in these longstanding traditions and norms will thus be a long-term process, involving the entire community where these practices take place. Another side of the matter, and perhaps one of the most important, is the fact that many adolescent women in Cameroon are married off in arranged marriages. This is chiefly due to poverty, where arranged marriages in poor rural regions have significant economic motivations. In the latest report from

The World Bank (2013a), it is actually shown that chronic poverty is a rural phenomenon and wide-spread in the Northern regions of Cameroon (Adamawa, East, North and Far North), areas where early marriages and adolescent pregnancies are prevalent. Given the strong correlation between poverty and poor sexual and reproductive health outcomes, and when large parts of the Cameroonian population live below the poverty rate, it goes without saying that combating poverty is one of the major issues needed to be addressed.

6. CONCLUSIONS

This study set out to examine what the Government of Cameroon and the main NGOs in Cameroon are doing with regard to the country's health polices and sexual health programs, in order to discourage early pregnancies in adolescents. The objectives were to assess if adolescents in Cameroon have the means available to make informed and healthy decisions concerning their reproductive lives, and to attempt to understand the main barriers to improvements. These goals have been met by reviewing existing literature and data, collected from several sources in the field of adolescent sexual and reproductive health, with reference to Cameroon or similar countries in sub-Saharan Africa.

The result of this study show that despite some progress that has been made since Cameroon's 1994 International Conference on Population and Development (ICPD) commitments to standards for reproductive health policies, the country's efforts have been insufficient to reach desired goals, in particular regarding sexual and reproductive health measures targeting adolescents. Since the "Declaration of National Population Policy" was developed in 1992, several policy iterations have specified early and unwanted pregnancies as health concerns, leading in theory to a greater emphasis on initiatives to prevent adolescent pregnancies. However, the subject of adolescent reproductive health remains as sub-sections of existing policies and no official separate adolescent reproductive health policy has yet been put forward. Challenges related to lack of structural and financial resources to implement any proposed health policies appear to be a major part of the explanation for this failure. Based on findings emerging in this review, it is recommended that a stand-alone policy on adolescent sexual and reproductive health should be developed. It is contended that a specific policy targeting adolescent sexual and reproductive health would result in a higher political commitment to these issues in Cameroon.

Several NGOs, in collaboration with the Cameroonian government, have in the past decades employed social marketing and peer education in sexual and reproductive health programs in

response to the worrying trends of early pregnancies, low contraceptive use, and unsafe abortions among adolescents in Cameroon. The outcomes of these programs have shown promise, but all, with one exception, have been short-term programs with limited geographical scope. This implies that several of the completed programs completed did not reach out to where they are arguably needed most, i.e., adolescents living in areas other than Cameroons main cities.

The government has recognised the need to make sexual and reproductive health education available to its citizens on a continuing basis, yet national guidelines for that education in public schools have not been fully developed. Sexual health education remains a taboo subject among the general public and consequently information regarding sexual and reproductive health is dangerously inaccessible for many of the adolescents. These findings confirm that there is a need for comprehensive sexual and reproductive health education in Cameroon, either implemented as a part of school curricula or provided in nationwide health facilities so as to reach both in-school and out-of-school adolescents. Earlier studies in similar settings point to the necessity and benefits of these educational programs being developed in collaboration and dialogue with a variety of community actors: religious leaders, teachers, health professionals, parents, and above all the adolescents themselves. By taking into consideration and giving space to the ruling social norms, these programs will be better adapted to the needs and wants of, and more likely adopted by, the dominant community.

This study also reveals that the Cameroonian government has made efforts to advance women's access to family planning services, but is still far from meeting the needs of adolescent-oriented reproductive health services. Reproductive health services in Cameroon in general are of poor quality, lack qualified health personnel, and are unequally distributed between urban and rural areas. Family-planning services are being introduced in health facilities across the country, but these offer services where adolescent women most often are mixed with older married women and adolescent-friendly health services are almost completely absent. The establishment of dedicated centres with specially trained health workers is therefore recommended in order to lower the barriers for adolescents to access and actually utilise family-planning services. Cameroon's strict regulations concerning induced abortions and birth control propaganda could further complicate adolescents' reproductive health choices but more research is needed in order to get a better understanding of the impacts of these regulations. It could be that the high number of unsafe abortions amongst adolescents can be reduced by deregulation, making safe abortions services more available and accessible. However, given that induced abortions are highly controversial among certain religious and conservative groups in Cameroon, an amendment to

the laws on abortion could be opposed. This review has shown that the cultural and religious diversity within Cameroon's population presents complex challenges for policymakers and government officials in their effort to create measures preventing early pregnancies and unsafe abortions in adolescence.

One of the significant conclusions to take away from this study is that preventing adolescent pregnancies is a complex issue influenced by many external factors. An improvement in the adolescent reproductive health situation in Cameroon needs action beyond measures in the health sector per se, where simply expanding reproductive health services is not enough to make a difference for many of the most disadvantaged adolescent girls. This group needs comprehensive multi-sector investments to improve its reproductive health situation. Improving adolescent health and preventing future pregnancies requires changing or working around a number of socio-cultural norms that promote negative health outcomes. Changes are needed in the areas of gender inequality and gender discrimination, norms that restrict contraceptive use, and the cultural expectations to marry and bear children in early adolescence. Prevention of early pregnancy and its outcomes must be considered at several structural levels, from the government to the communities, in religious institutions as well as in families.

Various researchers have demonstrated that poverty, early marriages, and low level of education are indirect determinants of adolescent pregnancies in Cameroon, and this review shows that these barriers are closely interrelated. Early childbearing and low contraceptive use are more frequent among low-education women living in poverty and rural areas, when compared to higher educated women that are more financially stable and living in urban areas. It is acknowledged that girls' access to education has an impact on their capacity to protect and improve their sexual and reproductive health. However, as it stands, many adolescent girls in Cameroon drop out of school as a result of poverty or getting married and compelled by social pressure to bear children at a young age. Hence, it goes without saying that combating poverty and improving adolescent girls' socioeconomic prospects are two of the major issues that must be addressed to improve the adolescent reproductive health situation in Cameroon.

During the review of existing literature, it became clear that much further research on determining factors for adolescent pregnancies in Cameroon is desirable. When it comes to sexual and reproductive health issues, it is especially important to produce research examining the viewpoints, attitudes, and levers of knowledge of the adolescent themselves, an area where there is a significant knowledge gap. Prioritizing the health challenges is not always an easy task

for a government with limited financial resources. Further research should produce the data and knowledge needed to provide a good background for policymakers and governments officials determining resource priorities and developing policies in their efforts to prevent future pregnancies in adolescence.

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Appendix A: Map of the Republic of Cameroon