IMPROVING ADOLESCENT SEXUAL BEHAVIOUR IN GHANA- A REVIEW

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GHANA

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IMPROVING ADOLESCENT SEXUAL BEHAVIOUR IN GHANA- A REVIEW

A thesis submitted in partial fulfilment of the requirement for the degree of Master of Public Health

By

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Ghana

Declaration:

Where other people's work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.

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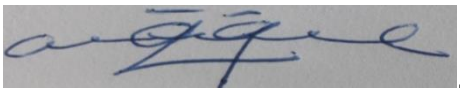
Signature……  …….

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ABSTRACT

Study Background: Adolescents constitute 20% of the world's population, yet, until recently they have been neglected as a distinct group and have been subsumed under the heading of child, family or women's health and welfare. There has been growing recognition of challenges relating to adolescent sexual behaviour.

Objective: To review the factors influencing adolescent sexual behaviour in Ghana and strategies from other countries for adoption by GHS.

Methodology: A literature review analysing the existing knowledge on successes, challenges, contradictions and controversies in the field of adolescent sexual and reproductive health in Ghana between the year 2000 and 2015 using UNICEF's social ecological framework.

Results: The individual opportunities, interpersonal relationships and community norms ultimately shape adolescent sexual behaviour and impacts on their health. There remains a lot of opposition on sex education in spite of the evidence of its effectiveness and low acceptance for adolescent contraception. The inconsistent laws, conservative and occasionally harmful religious and traditional beliefs/practices have contributed to poor adolescent sexual health outcomes.

Conclusion and Recommendations: Adolescent sexual behaviour and its effects on their reproductive health is an issue that needs to be addressed with a multi-sectoral approach to reduce risks and improve health outcomes. The laws on legal ages for sex and marriage should be harmonized, adolescent services enhanced, while interventions targetting street adolescents implemented.

Key Words and Combinations: Adolescent Sexual risk behaviour, early sexual debut, Sex education and Knowledge, Teenage pregnancy, Adolescent contraception.

Word Count: 12,866

LIST OF ABBREVIATIONS

ABC	Abstinence, Be faithful and **C**ondom use
ADHD	Adolescent Health Development
CDC	Centre of Disease Control
CHAG	Christian Health Association of Ghana
CHOs	Community Health Officers
CHPS	Community base Health Planning and Service
DHS	Demographic and Health Survey
EPI	Expanded Programme on Immunisation
GAC	Ghana Aids commission
GFATM	Global Fund for AIDS, TB and Malaria
GSS	Ghana Statistical service
HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
IPPF	International Planned Parenthood Federation
JSS	Junior Secondary School
MoH	Ministry of Health
NGOs	Non-governmental Organisations
NHIA	National Health Insurance Authority
OMT	On-Line and Mobile Technology
SRH	Sexual and Reproductive Health
SSA	Sub-Sahara Africa
SSS	Senior Secondary School
STIs	Sexually Transmitted Infections
UNAIDS	United State Agency for International Development
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Education Fund
WHO	World Health Organisation

INTRODUCTION

My work as a Technical Officer with the Ghana Health Service exposed me to several instances when adolescents expressed challenges and limited knowledge on puberty, sexuality and reproductive health. I came across adolescents who seemed ignorant of sexual behaviours which resulted in unplanned pregnancies and sexually transmitted infections.

A few of them had a history of sexual coercion and abuse from peers and older people in their community. I found this deeply disturbing and developed a passion for adolescent sexual behaviour. I had the opportunity to counsel adolescents within the district I work and give them information on where to seek adolescent reproductive health services.

My experience working with them gave me insight into some of the difficulties they face even when they are provided with counselling. Notable challenges were the scarcity of adolescent reproductive health facilities, leaving adolescents with the unpleasant task of travelling long distances to access such care. This to me was a regrettable yet avoidable situation.

These experiences gave me a desire to probe into issues bordering on adolescent sexual behaviour and gain an in-depth understanding on the subject by identifying influencing factors and strategies which can improve their sexual behaviour.

1 CHAPTER ONE: BACKGROUND

This section gives the context and setting within which adolescent sexual behaviour is situated. It provides a description of the characteristics including demographic features of the Ghanaian population as well as a brief summary of the adolescent health policy and planning.

1.1 Profile of Ghana

1.1.1 Geography and Demography

The Republic of Ghana is located along the West African coastline. It has a total land area of 238,537 square kilometres. Ghana has three neighbouring French-speaking countries namely: Togo in the east, Burkina Faso in the north and northwest and Côte d'Ivoire in the west. The Gulf of Guinea on the south forms the coastline. There are 10 administrative regions with the capital Accra located in the Greater Accra region. The other regions are: Western, Central, Volta, Eastern, Ashanti, Brong Ahafo, Northern, Upper East and Upper West (GSS, 2008). Figure 1 shows the map of Ghana.

Figure: 1 Map of Ghana.

Source: Maps of the World 2015.

1.1.2 Demography

Ghana's population as recorded in the 2010 population and housing census was approximately 24,700,000 and was projected to increase to 27,000,000 by the end of 2014 (GSS, 2010). In 2014 the country had a total fertility rate of 4.2 with higher rates documented in the rural areas compared to the urban counterparts (GSS, 2014). The age structure is typically a young one and is characterised by high fertility. This population structure imposes a heavy burden on the socio-economic assets of the country. In the year 2008, 41% of the population was under 15 years (GSS, 2008).

1.2 Socioeconomic and Socio-cultural Environment

Agriculture is the most important area of economic activity contributing 34% of the Gross Domestic Product (GDP). It employs an estimated 50% of the population who are engaged in crop farming or livestock farming. The service provision and manufacturing sectors are the next major economic activities in the country. The service sector, with its 10 % growth rate is the fastest growing sector of the economy. The industrial sector contributes an estimated 26% to the country's GDP. The country's leading export commodities are cocoa, gold and timber. In recent years, the economy has increased its non-traditional commodities to include export of pineapples, bananas, yams and cashew nuts (GSS, 2008).

1.2.1 Education

The current formal education system was introduced in 1989 and is based on a three-tier system. This includes six years of primary education, three years of junior secondary school (JSS) and three years at the senior secondary school (SSS) level. Upon completion of secondary education, a student can opt to pursue education at either a tertiary or non-academic institution. The non-academic programmes available include vocational and technical training. Females are disadvantaged compared to males at all levels of the Ghanaian education system with the median number of years of schooling completed higher for males (5.4 years) than females (3.7 years). Fortunately, there has been a reduction in the proportion of females without education from 37% in 2003 to 31% in 2008. Similarly, the proportion of males without education dropped from 26% to 22% within the same time period (GSS, 2008).

1.2.2 Marital Status

Results from the 2008 Demographic and Health Survey revealed that approximately 43% of the Ghanaian population aged 12 years and older were married while 42% had never been married. Approximately 10% of the population had been previously married but at the time of the census

were separated, widowed or divorced. Females are more likely to be married (44%) compared to males (42%). The Northern region was documented as the region with the highest proportion (54%) of the married population. An estimated 94% of the population of males and females between the ages of 12-17 years have never been married. Also, an estimated 5% of boys and 6% of girls within the ages of 12-17 are married (GSS, 2010).

1.2.3 Religion

Approximately 71% of the population are Christians while 18% of the population are Muslims. An estimated 5% of the population either adhere to traditional religion or are atheists. With the exception of the Northern region where Islam is the dominant religion (60%), greater proportions of the population in the other nine regions are reported to be Christians (GSS, 2010).

1.3 Ghana Health Sector

1.3.1 Health Organisation in Ghana

The Ghana Health Service (GHS) was established in 1996 as an autonomous Executive Agency of the Ministry of Health (MoH) in Ghana. It is responsible for the implementation of all national health policies. The independence of the GHS is primarily to maintain a great degree of managerial flexibility to perform their responsibilities than would be possible if they remained within the civil service. Besides the Ghana Health Service, there are a number of Teaching Hospitals, Private and Mission Hospitals (GHS, 2013).

There is also the Christian Health Association of Ghana (CHAG), Private providers, as well as the National Health Insurance Authority (NHIA) and numerous governmental and regulatory entities at various levels of Ghana's highly decentralised health system (Schieber *et al*., 2012). CHAG facilities provide an estimated 35% to 40% of health services within the country with most of their facilities situated in rural areas (CHAG, 2010).

1.3.2 Health Financing and Financial Arrangements

The inflow of funds to support the expansion in service delivery at the operational level has persistently been erratic and below par. The key contributing factor has been the delays in reimbursement of service providers by the National Health Insurance Authority. This has resulted in high levels of indebtedness in regional and district health facilities to suppliers. Also, the drastic and sudden reduction in resources from the Global Fund for AIDS, TB and Malaria (GFATM), especially within the last year, has hindered service delivery. This is partly due to the re-

structuring of the Global Fund Secretariat for Global Fund programmes which has led to the late disbursement of funds. This sums up the funding allocation gaps needed for infrastructure development, service delivery and maintenance (GHS, 2013).

1.3.3 Health Challenges

Efforts at tackling the social determinants of health that lie outside the scope of the health sector have been made ineffective owing to inadequate communication and limited intersectoral collaboration between Ministries, departments and agencies whose activities contribute to the health status of Ghanaians. The poor coordination and lack of synergy in the planning and priority setting processes at all levels often results in competing programmes and acute time constraints in implementation.

Peculiar bottlenecks in supply chain and logistics management have also delayed the implementation of planned activities within regions and districts. Again, the absence of an efficient transport system in many regions and districts along with the poor road network in rural areas has greatly hindered the smooth implementation of the scheduled commodity delivery system.

Furthermore, service delivery activities have been critically affected by the inadequate frequency of guideline production and delays in prompt dissemination of these guidelines for utilisation.

At the community level, the bulk of health service delivery in many public health facilities is provided by the Community Health Officers (CHOs) and volunteers. However, ineffective management and weak coordination of duties for the volunteers has resulted in burn out and high attrition rates of these key community players (GHS, 2013).

Advocacy to promote increased community involvement and uptake of public health interventions remains inadequate at the sub-district and community levels. This has resulted in weak community participation in routine health activities, especially Expanded Programme on Immunisation (EPI) and Community-based Health Planning and Services (CHPS). The net result has been declining immunisation coverage rates and slowing of the CHPS implementation.

1.4 Adolescent Health

1.4.1 Adolescent Reproductive Health Policy

Ghana's adolescent reproductive health policy was formulated in the year 2000 with 3 key motives. Firstly, the government realised the importance of adolescent sexuality and its management in population control. The policy highlights the implications of adolescent attitudes, knowledge and sexual development on overall fertility rates and population growth rates.

Secondly, the policy emphasises that the promotion of responsible adolescent sexual and reproductive behaviour through delaying sexual debut and increased safe sex practices are important and should be delivered in a timely fashion. This is expected to translate into responsible parenthood as well.

Lastly, the policy requests continual linkages with other national policies and agencies to effect action plans which address the needs of all adolescents. The notable policies include the National Population Policy, the National Youth Policy and the National HIV/AIDS policy. Also linkages are prescribed between the policy, national laws and existing by-laws passed by District and Metropolitan Assemblies including those on teenage pregnancy, early marriage and child abuse (National Population Council, 2000).

1.4.2 Adolescent Reproductive and Sexual Health Planning

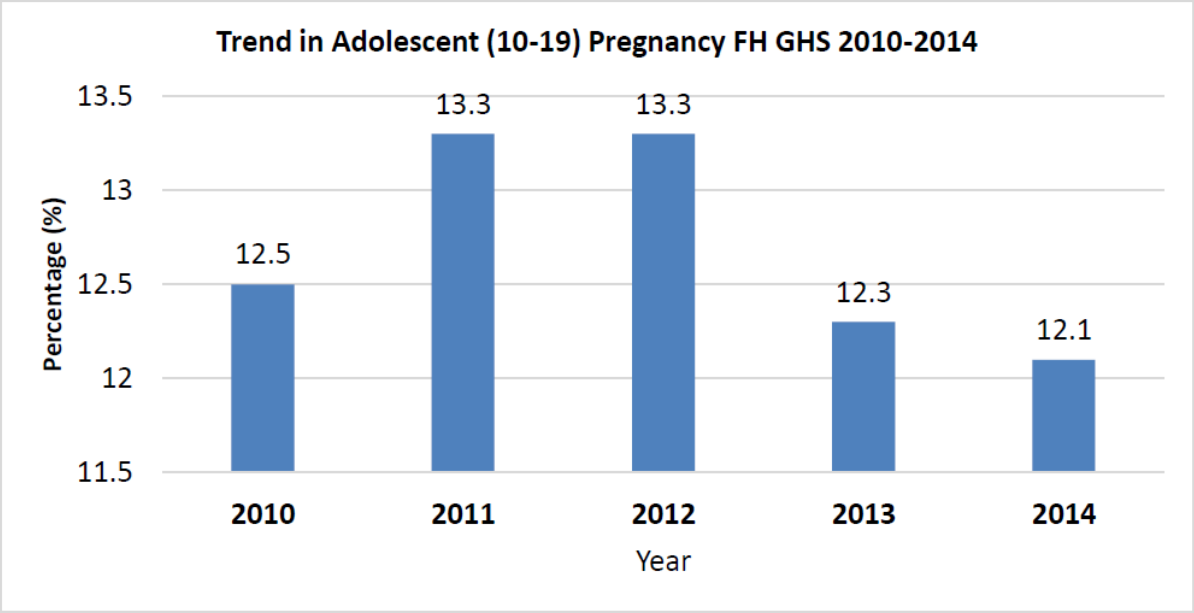
Ghana's National Strategic Plan for the Health and Development of Adolescents and Young
People (2009-2015) was developed and disseminated in 2013. The review of the Plan was performed twice at the national level with key stakeholders from the public sector and non-governmental organisations in the Greater-Accra Region. Similar reviews were conducted in the Brong-Ahafo and Volta Regions.

A training programme was subsequently organised for 708 service providers on the Adolescent Health Development (ADHD) programming, and a total of 264 adolescent health corners were established throughout the country. Out of these, 246 corners were situated in the public sector and an additional 18 in the private sector. In total, 202 institutions have adolescent health corners with some districts having more than one. Training of 1,247 peer educators was carried out on adolescent health advocacy and communication. An estimated 290 adolescent health clubs have been instituted with 239 clubs in the public sector and 51 clubs in

the private sector. Eight (8) new posters were created to aid the programme and four existing information leaflets have been revised.

To further augment efforts on adolescent health, the GHS initiated the development of a Parent-Adolescent Communication brochure in 2013 and conducted a field test of a WHO checklist for assessing the adolescent health component of pre-service curricula of health training institutions in four (4) selected countries including Ghana. In total, 53,700 young people were counselled on various topics such as reproductive health (23,554), mental health (3,884), substance abuse (5,926) and nutrition (20,335) (GHS, 2013). Figure 2 shows the 5 year trend in adolescent pregnancy between the years 2010 and 2014.

Figure 2: Trend in Adolescent pregnancy (10-19) between 2010 and 2014



Source: GHS, 2014

2 CHAPTER TWO: PROBLEM STATEMENT, JUSTIFICATION, OBJECTIVES & METHODOLOGY

2.1 Problem statement

WHO defines adolescents as persons between the ages of 10 and 19 years (WHO, 2008). They distinguish between early adolescence and late adolescence. Adolescents between the ages of 10-14 years are classified as early adolescents whereas those between the ages of 15-19 years are classified as late adolescents (WHO, 2010).

Adolescents constitute 20% of the world's population, of whom 85% live in developing countries. Yet until recently they have been neglected as a distinct group and have generally been subsumed under the heading of child, family or women's health and welfare. This has been so because adolescents were initially considered to be a relatively healthy age group, without a heavy "burden of disease", compared to new-borns, infants or elderly adults. There has been growing recognition in recent years among policy-makers that adolescents have special health-related vulnerabilities including sexual and reproductive health issues, suicide, road accidents and substance use (including tobacco use) (WHO, 2001).

There is an increased demand for an expansion of sexual and reproductive health programmes for adolescents in developing countries. However, there is little documentation on the successes of such programmes, in terms of their attractiveness, quality and impact on adolescent sexual health outcomes (WHO, 2012).

In the year 2008, 8% of Ghanaian adolescent girls and 5% of adolescent boys had their sexual debut by age 15. By their 18th birthday, 44% of adolescent girls and 26% of adolescent boys had their sexual debut (GSS, 2008). Similarly, 5.2% of boys and 5.6% of girls within the ages of 12-17 were married in 2010 (GSS, 2010).

Furthermore, according to the 2014 Ghana Health Service Annual report, contraception acceptance for early and late adolescence was approximately 1% and 12% respectively (GHS, 2014). The unmet need for adolescent contraception was estimated at 62% in 2011 (GSS, 2011). Also, recent reports on teenage pregnancy suggest that approximately 12% of adolescent girls in Ghana were pregnant in 2014. In 2012, the figure was recorded as approximately 13%. In 2014, approximately 17% of abortions were in adolescent girls compared to an estimated 19% in 2012 (GHS, 2014). The number of maternal deaths recorded in 2013 was 9 and 84 respectively for early and late adolescents in Ghana (GHS,

2013). Late adolescents are twice as likely to die during childbirth compared to adult women whereas the risk is five times higher for early adolescents compared to adult women (UNICEF, 2001). Other pregnancy related complications associated with adolescence include anaemia, malaria, postpartum haemorrhage and mental disorders, such as depression. Approximately 65% of women with obstetric fistula develop this during adolescence and negatively impacts their lives both physically and socially (WHO, 2015).

Adolescents continue to be at considerable risk for Human Immuno-deficiency Virus (HIV) and other sexually transmitted infections (STIs). Over 35.3 million people were living with HIV worldwide and 2.1 million (5.9%) of these were adolescents in 2013. (WHO, UNICEF & UNAIDS, 2013) In 2013, the HIV prevalence in the 15-19 age group which is a proxy indicator for new HIV infections increased from 0.7% in 2012 to 0.8% in 2013 (GAC, 2013; UNAIDS, 2014)

The afore-mentioned poor indicators highlight the magnitude of the challenges Ghanaian adolescents face. This makes it critical to identify these factors from multiple perspectives. These range from individual, interpersonal, community, health sector and policy responses which have not adequately addressed adolescent sexual behaviour in Ghana.

2.2 Justification

The period of adolescence is marked by important physical, physiological, and emotional changes leading to the transition from childhood to adulthood (WHO, 2001). During this period, the ability to think critically and solve complex problems is increased. However, this period comes with its own challenges which include peer influences as well as risky behaviour which sometimes endanger their lives (Patton *et al*., 2004). In the absence of timely and right information for adolescents to inform decisions, risky behaviours become more likely and may lead to unintended pregnancy, unsafe abortion, STI/HIV, increased mortality/morbidity and increased school dropout. These ultimately lead to financial and economic losses to the nation and individuals as well as worsening poverty (Birdthistle *et al*., 2012).

A number of studies have been conducted on this subject in different regions of the country. However, few have reviewed the factors influencing adolescent sexual behaviour from multiple perspectives. There is a need for an updated review of barriers and facilitators of safe adolescent sexual behaviour. This study intends to identify the factors influencing adolescent sexual behaviour among adolescents in Ghana.

2.3 OBJECTIVES

2.3.1 General objective

- To review the factors influencing adolescent sexual behaviour in Ghana and strategies from other countries for adoption by GHS

2.3.2 Specific objectives

- To explore individual factors influencing adolescent sexual behaviour.
- To identify interpersonal and community factors influencing adolescent sexual behaviour.
- To assess health sector related factors influencing adolescent sexual behaviour.
- To study political factors influencing adolescent sexual behaviour.
- To evaluate adoptable strategies to improve adolescent sexual behaviour.
- To make recommendations to the Ghana Health Service for the improvement of adolescent sexual behaviour

2.4 Methodology

2.4.1 Study Design

This study utilises a narrative design to identify the factors influencing adolescent sexual behaviour in Ghana. A narrative design is ideal because it permits an analysis of the existing knowledge on successes, challenges, contradictions and controversies in the field of adolescent sexual and reproductive health and allows for the provision of evidence-informed solutions to the problems identified. This should lead to sound conclusions resulting from the findings of several studies which might not be possible in a single primary study.

2.4.2 Data Collection

The data collection processes employed in this study were classified into three broad categories. Firstly, a preliminary search of bibliographic databases was done to identify published and unpublished articles on adolescent sexual and reproductive health. This involved reading titles and abstracts of studies to find those relevant for use. Secondly, full text articles identified were subjected to the inclusion criteria and used to exclude those that were unsuitable for the study objectives. Finally, the relevant data from individual articles were extracted and synthesised narratively.

2.4.3 Search strategy

Search engines such as PubMed and Corpus were used in the search. The KIT library, websites of WHO, UNFPA, UNICEF, IPPF, GHS and Ghana Statistical Service (GSS) were also searched for literature. This elaborate search yielded electronic publications of articles, books, reports, facts sheets from Ghana, Sub-Saharan Africa and other lower-middle income countries. Literature from the year 2000 till date was reviewed. Data sets and reports from Ghana were accessed including annual reports from Ghana Health Service (GHS), Demographic and Health Survey (DHS) and peer-reviewed articles on adolescent sexual behaviour.

2.4.4 Key words

The key words and combinations used in this study are summarised in Table 1 below.

Table 1: Summary of key words used in search strategy

Objective	Key Words
Individual factors	Adolescent Sexual risk behaviour, Early sex debut, Education, Knowledge, Substance use,
Interpersonal factors	Adolescent peer influence, Africa
Community factors	Early marriage, Teenage sexual abuse, Adolescent contraception use,
Health sector factors	Adolescent friendly services,
Policies and Political factors	Adolescent policies, Ghana

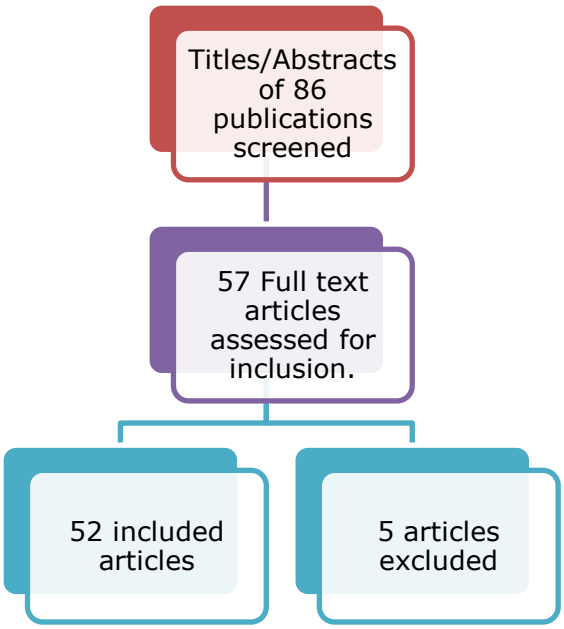
2.4.5 Study Screening

The study screening process involved several stages in which titles and abstracts identified in the literature search were screened. Studies that did not meet the inclusion criteria listed below were subsequently excluded. Figure 3 summarizes the study screening process in a flow chart. (See Figure 3)

2.4.6 Inclusion Criteria

- Studies on adolescent sexual behaviour in Ghana and Sub-Saharan Africa.
- Studies on adolescent reproductive health.
- Full text articles.
- Articles published in English.
- Articles published between years 2000 and 2015

Figure 3: Flow chart of studies screened

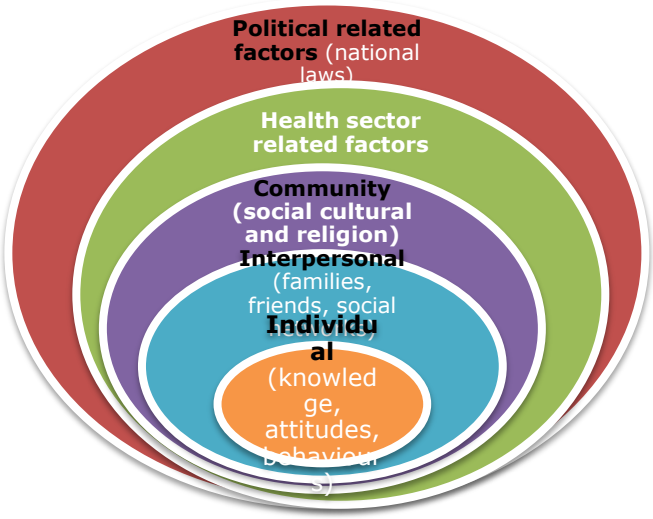


2.5 Conceptual Framework and Analysis

The social ecological framework of UNICEF 2004 was adopted because it is a tested model. Its multiple levels allow an in-depth analysis of the influencing factors. The framework is divided into five layers of increasing complexity namely: individual, interpersonal, community, health sector and political related factors (UNICEF, 2004).

To analyse the factors influencing adolescents sexual behaviour in Ghana the model was adapted and used to analyse the literature. The framework informed the study objectives and will be used to analyse the factors throughout the study. For the study purposes, interpersonal and community factors will be combined in the results section because they are intricately linked. Factors which are also related will be presented together. Figure 4 shows the Social Ecological framework.

Figure 4: Social Ecological conceptual framework



Source: UNICEF, 2004

2.6 Limitations

The study was limited to publications in English language which may have led to exclusion of useful information in other languages which could have been equally informative.

Certain studies included other age groups as well as adolescents and may have led to including results not entirely applicable to adolescents. This was addressed by using only segregated data for this study where possible.

3 CHAPTER THREE: RESULTS

This chapter presents the findings from the studies retrieved based on the study objectives. The individual factors will be presented first followed by the interpersonal and community factors. This will precede the health, political and strategies sections.

3.1 Individual Factors

3.1.1 Knowledge, Education and Self-Efficacy

A key factor that influences adolescents' sexual behaviour is the availability of credible reproductive health knowledge (Agyei *et al.,* 2000; Mmari & Sabherwal, 2013). In these studies, though most respondents reported that they had received information on reproductive health, there were serious doubts about the accuracy of the knowledge they possessed. An assessment revealed that approximately 20% and 30% of the adolescent respondents in peri-urban and rural areas did not know that a girl can get pregnant the first time she engaged in sexual intercourse. Also the main sources of such knowledge were friends, school and movies/videos. The study also revealed that the subject of sexual health is not offered to all students in all schools and the quality of instruction has not been assessed (Agyei *et al*., 2000). Mmari & Sabherwal's (2013) study also found that adolescents who had knowledge on condoms and condom negotiation skills with their peer sexual partner were more likely to use condoms.

Numerous studies have identified education and educational status as factors that contribute to safe sexual behaviour among Ghanaian adolescents (McLaughlin *et al*., 2015; Doyle *et al*., 2012; Agyei *et al*., 2000). These studies show that higher levels of education were associated with a later mean age of first sexual intercourse, increased condom use and reductions in teenage pregnancies. The study by Agyei and colleagues (2000) challenged the previously held view that education led to early sexual debut because it exposed adolescents to 'Western values' of early romance and eroded the traditional restraints to early sexual activity. The study demonstrated that this previously held view is now giving way to the realisation that education exposes adolescents to knowledge of safe sexual practice and on the consequences of unsafe sex (Agyei *et al*., 2000). However, a study from the Upper East region which evaluated an adolescent sexual and reproductive health programme showed that some elders in the study communities held a strong belief that educating adolescents will 'spoil them'. Also within those communities; local churches, school authorities and parents did not want

adolescents to receive sex education either. They questioned the relevance of SRH education and argued that such programmes encourage adolescents to have sex. This was found to be a great barrier to one of the programme objectives which was providing early adolescent students with sex education. (Geugten, 2015).

The consistent use of condoms by adolescents has been linked to the degree of an adolescent's self-efficacy. This reflects a person's level of confidence in his or her ability to control the environment and emphasizes the adolescent's individual ability to make sound judgements and choices based on the skills and knowledge on contraception that he or she may already possess. A person whose cognitive self-evaluation or judgement of their capabilities is high is also able to influence and negotiate safe sex in all situations (Asante & Doku, 2010). Another study revealed that the reason for low condom use by Ghanaian adolescents can be attributed to a lack of confidence in insisting on condom use in a relationship. In the same study, about one-third of both male and female adolescents said they could not refuse to have sex if their girlfriend or boyfriend did not want to use a condom (Hagan, 2012).

3.1.2 Adolescents' perceived susceptibility to adverse outcomes and perceptions on condom use

Unsafe adolescent sexual behaviour and inconsistent practice of safe sex is related to adolescent perceptions on susceptibility to adverse health outcomes. Some adolescents are reluctant to acknowledge their partner's sexual activity, believe that they are immune from the consequences of unsafe sexual intercourse or may be in a state of denial of the possibility of pregnancy. More than 82% of the sexually active respondents in one study were not bothered about using condoms because of their perceived low risk of susceptibility to adverse consequences (Hagan, 2012).

Some adolescents feel that a partner's use of a condom suggests that they are promiscuous or unclean. Adolescent girls fear being likened to commercial sex workers or considered to be engaging in multiple sexual relations (Hagan, 2012). Similarly, adolescents felt that possessing, purchasing or asking for condoms denotes great sexual experience. This association was found to be undesirable for young female adolescents, although sometimes desirable for young male adolescents (Marston & King, 2006). Also adolescents worry that asking their partner to use a condom implies that they think their partner is diseased; thus, condom-free intercourse can be seen as a sign of trust. This is confirmed by other studies from Uganda where the use of a condom meant that one was HIV infected (Nyanzi *et al*., 2001).

3.1.3 Substance Abuse

Substance use was revealed in the literature reviewed to be a gateway for risky sexual behaviours among Ghanaian youth and adolescents. Tobacco use, drunkenness and marijuana use among others were associated with early sexual debut, unprotected sex and an increased number of sexual partners (Doku, 2012). Similarly, substance use among street youth was independently associated in another study with unprotected sex and multiple sexual partners. The study suggested that substance use interferes with rational adolescent sexual behaviour, which made individuals more vulnerable to unsafe behaviours (Asante *et al*., 2014). Similar studies in Zambian adolescents confirmed the health compromising sexual behaviour among adolescents with a history of substance abuse (Siziya *et al*., 2008).

3.2 INTERPERSONAL AND COMMUNITY FACTORS

3.2.1 Coerced sex, Transactional sex and Sex for pleasure

In Ghana, studies have shown that approximately 25% of sexually experienced women in three regional capitals reported that their first sexual experience involved rape or forced sex, with others mentioning deceit and verbal coercion as reasons for experiencing sexual intercourse during adolescence (Glover *et al*., 2003; Tenkorang *et al*., 2013). Studies of in-school adolescent students have shown that adolescent girls engage in multiple sexual relations, often unprotected, with teachers and sometimes school administrators for favours related to their schooling. Such relationships are initiated for extra tuition, award of undeserved marks and leakage of examination questions. These relationships were found to exist mainly between female in-school adolescents and national service personnel, younger teachers and some heads of institutions. These relationships which were coerced in some instances were also hardly reported because of the involvement of some institution heads (Afenyadu & Goparaju, 2003).

In Ghana, the adolescent girls' desire for material wealth and financial support has compelled them to engage in a transactional type of sexual relation with older men called "sugar daddies". They exchange sex for material gains and such relations often begin in early adolescence when they have intercourse with their boyfriends in return for small gifts and presents (Anarfi, 2003). Another study in Kenya found that adolescent girls living on the streets engaged in transactional sex to enable them survive (Winston *et al*., 2015).

Sex for pleasure was raised by several focus groups in a study which included both community opinion leaders as well as male and female focus groups of adolescents. Some male and female adolescents stated they preferred unprotected sex to heighten sexual pleasure with their lovers. They prioritised the pleasurable experience of sex over any precautionary measures believing that such measures would diminish their pleasure (Awusabo-Asare, 2004).

3.2.2 Living arrangements, Family communication, Community resistance to sexual health information and Social injury

Two studies have demonstrated that adolescents who live on their own, with grandparents or other families are more likely to engage in unsafe sex and are at a higher risk of early sexual debut compared to those who live with their biological parents (Nukunya, 2003; Tenkorang, 2015). Orphan hood status and household economic constraints have been documented as some of the reasons for adolescents living with non-family members in Ghana (Moore *et al*., 2003). These studies suggest that adolescents are closely monitored by parents through parents keeping a close eye on their children and by the maintenance of strict formality and control in parent-adolescent relationships. Adolescents living with their grandparents had less strict relationships devoid of serious, overt authority and were less likely to encounter disciplinary measures from their grandparents. Such relative lack of supervision made adolescents more prone to engage in early sex and other risky sexual behaviour

Studies have ranked the family (parents, brothers and sisters) as the lowest source of information on sexuality for adolescents. The study revealed that in most typical African homes, sex and issues relating to it were considered as taboo subjects which were not broached. These studies found scanty or no communication on sex between parents and their adolescent children and these children were compelled to learn about sexuality on their own. Most parents were found to be uncomfortable talking to their children about sex. However, they believed that their wards will learn about it like they did (Odimegwu, 2002; Hagan, 2012). Another study highlighted the importance of family communication on sexual issues and safe adolescent sexual behaviour. The most important finding of this study was the association between family communication about HIV/ AIDS and adolescent condom use in Ghana (Adu-Mireku, 2003).

Studies have documented the resistance of communities in Ghana to sexual and reproductive health information for adolescents. The uncooperating attitude of community leaders has been shown to influence

access to information for adolescents on safe sexual behaviour. The perception in these communities as expressed by community leaders and some parents were that if adolescents were introduced to sexual and reproductive health issues they would engage in premarital sex. This apparent conflict emerged as one of the major factors affecting the provision of sexual and reproductive health education for adolescents in school. The study revealed that four out of ten community opinion leaders who participated in the study expressed their disapproval of contraceptive use by adolescents (Kumi Kyereme *et al*., 2014). This is consistent with another study on trends and patterns of adolescent sexual behaviour in SSA which found that in some West African countries there were decreases in the level of adult acceptance for condom education for early adolescents and suggested that the subject of condom use and education remains controversial within West Africa (Doyle *et al*., 2012).

A study introduced the concept of social injury which is an ideology that an adolescent's 'misconduct' or perceived deviant sexual behaviour affects the family or community in general. Parents in communities which hold on to this ideology have a fear that their children may engage in early sex or unsafe sexual behaviours and the consequences of such behaviour such as teenage pregnancy exposes their families and communities to shame and dishonour. Such communities therefore socialize children with moral virtues very early in life in the hope that it will influence adolescent sexual behaviour since honour or dishonour is shared (Osafo *et al*., 2014).

3.2.3 Religion

Religion is considered in Ghana as a regulatory moral mechanism over adolescents' sexual behaviour. In one study, parents perceived religion as playing two major beneficial roles in regulating the adolescents' sexual behaviours. The first was the inhibitive role whereby religious values deter adolescents from acts perceived to be immoral including adolescent premarital sex. Secondly, religion was perceived to play a facilitative role in which religious values, principles, ideals and beliefs instruct adolescents to make good choices regarding their sexual health (Osafo *et al*., 2014). Other studies reaffirmed religion as an important protective factor in which adolescents who strongly identify with religious teachings and traditions were found to be less likely to engage in risky sexual behaviours. However, these same individuals when they became sexually active were less likely to report 'safe sex' practices like condom use. Attachment to God which was described as an individual having a personal relationship and daily spiritual experience with God was the only religion related factor found to have a correlation with adolescent sexual

behaviour. Attachment to God contributed positively to adolescent sexual abstinence but negatively influenced use of condoms for sex. Adolescents with high attachment were less likely to use condoms once they do initiate sex. The study revealed that while religion can influence adolescent sexual behaviour, levels of religious belief often vary and some uncertainty remains about what adolescents do or will do in spite of their convictions, especially when they progress to boarding schools away from the scrutiny of parents or religious groups (Amoako-Agyeman, 2012).

Conversely, other studies have shown that certain religions such as traditional religion practiced in some communities in the Volta and Greater Accra regions sanctioned early sex in young female adolescents. Thus religion is not always protective. One of such traditional religious practices is 'Trokosi' which translates as virgin, slave. This practice requires that young female adolescents are offered as slaves to priests of specific shrines to appease the gods or spirits for crimes committed by their relatives. These girls are sexually exploited in the process. (Amoah, 2007; Tenkorang & Owusu, 2013)

> Trokosi in the Ewe language means "slaves of the gods." The trokosi practice calls for virgin girls to be sent to shrines of fetish gods to atone for crimes committed by one of their relatives. They become living sacrifices, protecting their families from the gods' anger. Some stay at the shrines for a few years; others for life. The bondage also involves sexual servitude (Ammah, Amos & Mahu 2013).

3.2.4 Peer pressure, network size and Social groups

Adolescent boys were more likely than girls to be pressured by their peers into sexual activity and to believe that they can derive status within peer groups through having multiple sexual partners. An association was found between an adolescent's number of friends and multiple partners and suggested that an adolescent's peer network could be a primary source of potential partners. Those who had more friends met more potential partners and had a greater opportunity to form multiple sexual relationships (Bingenheimer *et al*., 2015). Another study distinguished between close friends/peers and more distant friends/peers and assessed their influence on adolescent sexual behaviour. It found that adolescents' sexual behaviour was more strongly related to sexual behaviour of close friends than of distant peers. Also, adolescents' engagement in sexually risky behaviour was more strongly linked to risky sexual behaviours of more distant peers than of close peers. The study suggested that

adolescents may conform to peer pressure and engage in risky sexual behaviour in order to gain acceptance by distant, high-status peers who are often older (Van de Bongardt *et al*., 2014).

A multi-country study showcased the benefits, at the community level, of higher levels of adolescent involvement in social groups as a protective factor of safe sexual behaviour by reducing early sexual debut in Ghana and Malawi. The study suggested that communities with relatively higher levels of adolescents' involvement in such groups may be supportive of delayed sexual debut by having social norms that support adolescents as valuable members of their community and providing alternative social activities for adolescents (Stephenson *et al*., 2014).

3.2.5 Puberty rites and Early marriage

Puberty rites are very common in Ghana and are performed traditionally to initiate adolescents especially girls into adulthood. In the Ashanti region a common puberty rite performed is Bragoro (Kwankye *et al*., 2014). Dipo is another long standing traditional puberty rite conducted for female children between 14 and 20 years practiced among the Ga-Adangbe ethnic group in Ghana. The performance of these rites socially licenses adolescents for courtship by prospective men into marriage and are primarily intentioned to control the sexual and moral behaviours of the adolescent girls (Anarfi, 2003). Although boys do not go through most puberty rites in Ghana, the prohibitions and consequences of going against these norms are often strong enough to deter them from engaging in early sex and unsafe sex. Boys and adult men became aware of the consequences of pursuing and impregnating a girl who has not performed the Dipo rite. Hence they abstained from initiating relationships with uninitiated girls. These cultural practices delayed adolescent sexual activity until adulthood when they are ready for marriage (Osafo *et al*., 2014; Anarfi & Owusu, 2011).

Bragoro and Dipo are puberty rites performed in Ghana among the Akans and Ga in the Eastern, Ashanti and Greater Accra regions respectively. These rites of initiation are conducted at the onset of menarche. This is the initiation of adolescent into adulthood or womanhood. The activities include grooming by queen mothers for seven days during which they undergo lessens on child bearing and home maintenance. After the seventh day a ceremony is performed to outdoor them publicly and officially pronounce them as ready for marriage. In the olden days, girls who had premarital sex or pregnant before these rites of initiation were banished from communities or treated as outcasts along with the men who impregnated them (Agra & Gbadegbe, 2014).

Another study yielded contrary findings. This study found an association between participation in a puberty rite and increased odds of early sexual debut. It was suggested that in areas where these rites were performed, earlier sexual debuts were common because adolescents are either allowed or expected to engage in intercourse after passing a puberty rite. This may lead to unsafe sexual behaviour including unprotected sex with potential suitors (Stephenson *et al*., 2014).

In most developing countries the majority of sexual relationships for girls in their teen years occur within marriage. In boys, however, most sexual relationships during the teenage years are non-marital. Early marriage is considered to be the most common route to risky sexual intercourse for adolescent girls in developing countries. In many of these countries, married adolescent girls engage in more unprotected intercourse, have sex more frequently and are less likely to use contraception compared to unmarried adolescent girls (Bearinger *et al*., 2007). Studies in Ghana have shown that married adolescent girls automatically become sexually active since pregnancy and childbearing are expected immediately after marriage (Kumi-Kyereme *et al*., 2007).

3.3 Health Sector Factors

3.3.1 Linking information services with health facilities and limited effect of adolescent reproductive health services

Susheela and colleagues (2007) also documented that there was a gap between the provision of prevention information on STIs by school, media etc. and the actual facilities where the adolescents could access contraceptives and treatment for STIs. The study proposed the importance of linkages between health facilities and these information sources (Susheela *et al*., 2007). Studies have shown also that making clinical service youth-friendly on its own neither brings about increased utilisation of the services nor guarantees safe adolescent sexual practices. These studies all show that health provider-based services alone are unlikely to be sufficient in influencing adolescent sexual behaviour because of the effect of social stigma on their sexual practices (Mmari *et al*., 2003; Speizer *et al*., 2003; Fonner *et al*., 2014).

Another study proposed that since a one-dimensional health services strengthening approach was insufficient, school and peer-based approaches that increase environmental support and adolescent self-efficacy are also essential to complement facility-based initiatives

(Aninanya *et al*., 2015). Community-based adolescent health strategies such as peer distribution of condoms which were combined with education and communication of negotiation skills increased condom access and use among adolescents (Mavedzenge *et al*., 2014).

3.3.2 Access to adolescent reproductive health services

A study conducted on female adolescents found that there was limited availability of drug stores and health facilities which contributed to the low usage of contraceptives in the rural areas by female adolescents. Study regions that had the lowest levels of contraceptive use were shown to have limited number of health facilities (Marrone *et al*., 2014). Another study on male adolescents reported other dimensions of access that were lacking with respect to reproductive health services. Adolescent boys were unwilling to approach predominantly female staff and found the opening hours to be inconvenient. The study also highlighted poor staff attitudes as a barrier. Many boys in the study expressed that public health staff often were judgemental of them utilising these services. These adolescent boys thus resorted to pharmacists and chemists because they were friendlier, asked no questions, yet provided information on-demand. The respondents also felt that health facility workers were not responsive to their needs (Koster *et al*., 2001).

A multi-country study which included Ghana revealed that health provider related factors influenced adolescent use of contraceptives and services in health facilities. A major finding in this study was that adolescent privacy and confidentiality was not maintained. In the Ghanaian component of the study, 10-18% of females and 5-11% of males in Ghana reported that their privacy was not respected (Susheela *et al*., 2007). Another study on adolescent boys confirmed the lack of privacy and confidentiality in public health services as perceived by the majority of boys in urban and peri-urban areas. This hindered their utilisation of services and led them to adopt unsafe sexual practices. In the study many boys reportedly feared that staff would inform their parents about the purpose of their visit to the service (Koster *et al*., 2001).

3.4 Political Factors

3.4.1 Prioritisation of Abstinence message

In one study, the Ghanaian government's policy which encourages abstinence was identified as influencing unsafe adolescent sexual behaviour. The policy is based on the ABC approach, which stands for '**A**bstinence', '**B**e faithful' and '**C**ondom'. The study suggested that the Ghanaian government's prioritisation of abstinence through the ABC

approach has not had the desired effect in shaping adolescent sexual behaviour (Geugten, 2013).

3.4.2 Limited effect of sex education programmes and adolescent sexual health policies

Several governments have adopted strategies to address the specific sexual and reproductive health needs of adolescents since the 1994 International Conference on Population and Development (ICPD) in Cairo. The Government of Ghana similarly has developed policies to support adolescents through the Adolescent Reproductive Health Policy (2000) and the promotion of youth-friendly policies. A study revealed that in spite of these efforts, Ghanaian adolescents still avoid SRH services, with approximately half of unmarried sexually-active female adolescents and over one-third of sexually-active male adolescents not using contraceptives. This is because the policies have failed to address the stigma of premarital sex and adolescent contraceptive use (Aninanya *et al*., 2015).

The blanket nature of Ghana's Adolescent reproductive policy has been shown to influence adolescent sexual behaviour. This was revealed in a study conducted among 3 categories of adolescents; adolescents in schools, those in apprenticeship and those neither in school nor in apprenticeship described as unaffiliated adolescents. The study found that reproductive health policies and sex education programmes had focussed largely on adolescents in school with very few programmes targeted at apprentice adolescents and much less for unaffiliated adolescents. The lack of opportunities for these groups to benefit from reproductive health education programmes contributed to their limited knowledge and adoption of unsafe sexual practices (Glover *et al*., 2003).

Another study revealed that although sex education is theoretically covered at school, in practice few schools have a comprehensive programme on family life and sex education for adolescents. The study suggested that policy maker's fear of religious leaders and their unwillingness to rouse anger of religious opposition to such education have become ambivalent on issues concerning sex education. The study further highlighted that though it is part of the school curricula it is not effectively taught. This has been considered as an attempt at pacifying the moral and religious critics (Rondini & Krugu, 2009).

3.4.3 Legal ages for sex and marriage

The role of the state in influencing adolescent sexual behaviour has been weak and not provided the desired effect on adolescent sexuality. In a

study, the majority of the respondents were unaware that there were laws prohibiting sex and marriage to adolescents of certain ages. The mismatch between the age for sexual consent (16) and that for marriage (18) contributed to this weakness. It was also highlighted that these laws for adolescent sexual regulation were not strictly enforced (Anarfi & Owusu, 2011).

3.5 Adoptable Strategies for Improving Adolescent Sexual Behaviour

The criteria adopted for selecting proven strategies which can positively impact on adolescent sexual behaviour during the review of literature included:

- Applicability
- Feasibility
- Efficacy

3.5.1 Combined intervention approach- Tanzania

A programme conducted in Tanzania demonstrated the potential benefits of a combined intervention for adolescent sexual health. The goal of the intervention was to provide adolescents with the knowledge and skills to enable them to delay sexual debut and reduce sexual risk-taking. Sexual risk reduction included sexual partner reduction, promotion of consistent and correct condom use as well as the increased use of sexual health services (e.g. STI treatment, family planning). It combined four intervention types which consisted of a school, health facility, community condom promotion and community mobilisation components.

The school component was a participatory, teacher-led and peer-assisted, in-school programme, which comprised of a series of sessions per year, held within normal school hours in years 5–7 of primary school.

The health facility component required training of health workers within local health facilities in the provision of adolescent-friendly sexual and reproductive health services. In addition, provision of family planning services and improved case management of STI, were made available in the facilities with drugs and other supplies ensured.

The third component comprised of a community-based condom promotion campaign and distribution by adolescents. A number of adolescents per village were nominated by their peers and trained in the social marketing of condoms.

Finally, community-wide activities included community mobilization through annual adolescent health weeks focused around interschool competitions and performances by local adolescent groups.

The intervention resulted in substantial and statistically significant improvements in knowledge and reported sexual attitudes in both sexes with no evidence that the intervention resulted in increased sexual activity. On the contrary, young adolescent males reported delaying sexual debut and reducing the number of partners within the past year. The intervention also resulted in reported sexual behaviour change in males and females.

The major shortcoming of the intervention was that in spite of the improvement in knowledge, reported attitudes and behaviours, there was no consistent impact on biological outcomes, such as HIV incidence, the incidence of other STIs or pregnancy rates in the short term. The reason for this was that such impacts occur over a longer period of time (Ross *et al*., 2007).

3.5.2 Out-of-School adolescent programme-Mozambique

Mozambique, a country with approximately 70% of all adolescents out of school by the age of 13, found a need to develop a strategy for this category of adolescents given their limited sexual and reproductive health knowledge. They initiated an out-reach programme for such adolescents with the aim of improving their ability to make decisions that will lead to a positive and healthy reproductive/sexual life. Another objective was to empower and increase the ability of these adolescents, especially girls, to negotiate condom use as well as resisting sexual pressures.

The programme had three main components. These were performed concurrently and included:

- Linking out-of-school adolescents to adolescent-friendly services, gender-sensitive health and social services especially for counselling, contraception, prevention, care of STIs, as well as a livelihood improvement aspect.
- Empowering them with life-saving knowledge and skills related to the development and protection of their sexual and reproductive health.
- Strengthening the capacities of NGOs, adolescent sexual health advocates and service providers to implement adolescent-centred programmes to ensure reasonable coverage of hard-to-reach adolescent populations.

The programme was found to be a very effective way to reach out-of-school adolescents especially when working through local adolescent associations. Another benefit of the programme was that it allowed for a variety of approaches (Chandra-Mouli *et al*., 2015).

3.5.3 On-line and Mobile Technology

An ever-growing number of studies have assessed adolescents' views on digital tools for sexual health education and the feasibility of utilising on-line and mobile technology (OMTs) to influence adolescent sexual behaviour (Guse *et al*., 2012; Gold *et al*., 2011).

These tools can reach large numbers of youth and offer an opportunity to implement adolescent sexual health interventions. The relative ease and frequency of receiving important information about sexual and reproductive health topics as well as ensuring a level of privacy that is not offered through other forms of health communication or health education makes them very attractive to adolescents. The importance of preserving privacy stems from the fact that privacy is a key attribute of any reproductive health intervention especially for adolescents, owing to the sensitive nature of topics such as sexual health. The major limitation of such technology use is cost arising from cell phone service providers standard charges for text messages sent or received (Perry *et al*., 2012).

Surveys conducted in Ghana in 2012 revealed that 88% of Ghanaians use mobile phones and 76% own mobile phones (CDD 2012). In the year 2010, surveys on mobile phone ownership in urban areas showed that approximately 37% of adolescents aged 15-19 years owned mobile phones compared to approximately 15.5% in rural areas. In the 12-14 year group, approximately 9% of those in urban areas owned mobile phones compared to 2.3% in rural areas (GSS, 2013).

Evidence globally also suggest that technology is an integral part of adolescents' lives thus adolescents are receptive to seeking and receiving sexual health information through cell phones and computers in a variety of formats. Given the current advances made in technology, OMT-delivered interventions can increasingly be tailored to the specific needs of adolescent users (Guilamo-Ramos *et al*., 2015).

The likely success of such an intervention in Ghana is reflected in a study which found parents' acceptance of technological advances such as the electronic media as channels through which adolescents learn about sexual activities thus making parents' role of providing sex education dispensable (Asampong *et al*., 2013).

4 CHAPTER FOUR: DISCUSSION

This chapter will discuss the findings and highlight the inconsistencies and controversies. It will also show the linkages and opportunities for interventions to improve adolescent sexual and reproductive health.

4.1 Individual Factors

The role of knowledge as an influencing factor in adolescent sexual health behaviour needs attention. This is evident in the finding that in peri-urban and rural areas, up to 30% of adolescent respondents were ignorant of the possibility of pregnancy following one unprotected sexual encounter (Agyei et al., 2000; Mmari & Sabherwal, 2013). However, since there are challenges in having sufficient numbers of trained personnel to deliver sexuality information, adolescents resort to inaccurate sources of information and may rely on friends and movies to model their sexual ideas and practices. To this end, the current effort by the Ghana Health Service to establish adolescent health corners and adolescent health clubs is commendable and could make more impact if scaled up across all districts and towns in the country (GHS, 2013).

Similarly, formal school-based sex education or education in general can lead to delays in sexual debut since adolescents stay in school longer. The school effect reduces the tendency for early marriage and its attendant complications that may arise. There appears to be a certain level of denial by parents and teachers that adolescents engage in premarital sex. The absence of sex education and opportunities for education predisposes adolescents to early sex and risky sexual behaviours. Fortunately, this is giving way to the increasing realisation that education exposes adolescents to knowledge on safe sexual practices and on the consequences of unsafe sex so that they can make informed choices (Agyei *et al*., 2000). The education that adolescents benefit from also makes them more aware of their sexual and reproductive development, rights and presents an opportunity to counter traditional practices such as early marriage. The increasing presence of NGOs working on adolescent health could also be harnessed as they engage traditional leaders and community leaders to improve education for adolescents.

The finding of self-efficacy as an important factor influencing adolescent sexual behaviour is the next logical competency following education and knowledge acquisition on sexuality and reproductive health. The concept of self-efficacy goes beyond knowledge and sexual education to the confidence and ability to use such information to make sound judgments on sexual behaviour and choices (Asante & Doku, 2010). Self-efficacy is

very important since an adolescent's empowerment and capacity to use information is crucial in influencing their behaviour (Asante & Doku, 2010). The challenge remains for street adolescents and other categories of vulnerable adolescents especially girls who may not have adequate information on sexuality who are compelled to compromise in order to obtain and maintain their needs. Such adolescents may have to engage in commercial sex and other forms of transactional sexual relationships to meet these needs. Self-efficacy also demonstrates the significance and role of parents in child/adolescent upbringing so that their wards are neither short on confidence nor on self-esteem and thus can be able to resist coercive sex and negotiate safe sex at all times.

Adolescents experience a lot of stigma from communities, relatives and parents because they are not expected to engage in sex (Aninanya *et al*., 2015). Hence they have difficulty purchasing condoms for use during sex and this affects the consistent use of condoms by adolescents. Moreover, the decision to purchase and use a condom during intercourse has been perceived as connoting sexual experience and this may be desirable for adolescent boys who may wish to boast about their sexual experience to gain social standing among their peers even when they have no such experience. Conversely for girls, attributing sexual experience to condom use is undesirable since adolescent girls with premarital sexual experience are considered as promiscuous in communities because of societal attitudes (Marston & King, 2006). Again the perception that condom use signifies infection with an STI/HIV or lack of trust has come up as influencing adolescent choices (Hagan, 2012). The weight of these perceptions on adolescent's choices implies that they may forego condom use to avoid carrying any of these tags.

The perceived susceptibility described in the literature is reflective of adolescents' limited knowledge on risk factors. Hence some adolescents are unaware of their own risks of contracting an STI or becoming pregnant from unprotected sex. Some may be in a state of denial or perceive the magnitude of risk to be low even when they know the associated risks simply because they believe that they are exempt from them (Hagan, 2012).

The impact of substance abuse on adolescent sexual behaviour has been shown in a variety of contexts (Doku, 2012; Asante *et al*., 2014; Siziya *et al*., 2008). Substances such as alcohol and marijuana are mind-altering and can provoke risky sexual behaviour which adolescents would typically not engage in if sober. Tobacco use may be a confounder since

adolescents who smoke marijuana are also likely to consume alcohol, both of which are mind-altering and may lead to risky sexual behaviour. Street adolescents are more prone to substance abuse and it is fairly common to find adolescent boys especially, abusing such substance to boost their confidence in approaching girls.

4.2 Interpersonal and Community Factors

Other adolescents may engage in unprotected sex because they believe they will derive more sexual pleasure if they do so (Awusabo-Asare, 2004). Such beliefs are indicative of adolescents' inexperience as well as myths and half-truths they fall prey to. However, the increasing availability of condoms deliberately made to enhance sexual pleasure means that there is a possibility for increased condom use. Also, adolescents who perceive they are in a loving and trusting relationship may find condom use as a sign of unfaithfulness or mistrust. This makes the subject of addressing adolescent contraceptive use an important one deserving of attention to avert complications which are entirely preventable.

Studies have shown that adolescents in schools may be coerced into sex in return for academic favours and may decline reporting because of the stigma attached to premarital sex (Afenyadu & Goparaju, 2003). With as many as 25% of all women reporting sexual coercion in 3 regions during adolescence, coerced sex in Ghanaian society is a huge issue which needs urgent tackling (Glover *et al*., 2003; Tenkorang *et al*., 2013). Other studies have reported the existence of transactional sex in adolescents. Street adolescents are especially susceptible to transactional sex as they may be offered food and shelter in return for sex; exposing them to early sex and subsequent multiple sexual partners. Other adolescents may do so with the hope of getting lavish and fancy gifts from older men who offer these gifts in return for sexual favours (Anarfi, 2003; Winston *et al*., 2015).

Studies are increasingly showing that living with grandparents and other relatives besides biological parents influences adolescent behaviour because there is less monitoring of their activities (Nukunya, 2003; Tenkorang, 2015). The socioeconomic constraints faced by families and adolescent orphans imply that they have to live with other relatives or non-family members. Some of these children may be at risk for sexual abuse and their needs may not be catered for. This also often leads them to engage in sex for money and other favours.

The potential of family communication in shaping adolescent sexual behaviour and decisions has been documented in a number of studies (Odimegwu, 2002; Hagan, 2012). These studies also revealed the challenges parents and families come up with in terms of communicating with adolescents on sexuality. These studies re-echoed the fears that some parents may have believing that such communication gives adolescents a license to engage in sexual activity. Most parents have limited knowledge on adolescent reproductive health and development and may not have benefited from such communication from their parents themselves. Hence, they have the difficult task of deciding on the kind of information, the approach and the appropriate age at which they should hold such discussions with their children.

The community resistance to adolescent sexual and reproductive health information is perhaps proof of Ghanaian society's denial of the fact that adolescents engage in sex (Kumi Kyereme *et al*., 2014). This was clearly shown in one of the studies in Upper East region where 40% of community leaders opposed the dissemination of sexuality education to adolescents in schools (Kumi-Kyereme et al., 2014). Considering the poor indices earlier described; the sooner communities come to terms with this fact the easier it becomes to address these indices. However, a good number of the community leaders still believe that sexuality education for adolescents was relevant. Such leaders could be potentially engaged and lobbied to gain their support on such issues. Also the finding of decreases in the level of adult acceptance in some West African countries is reflective of religious beliefs and the culturally sensitive nature of adolescent sexuality in this region (Doyle *et al*., 2012). Perhaps the relatively greater acceptance of such information in Eastern and Southern Africa is because of the higher HIV prevalence and HIV-related deaths in those regions (Doyle *et al*., 2012).

The socio-cultural influences imply that actions of individuals including adolescents either bring honour or dishonour to their parents and families. This has been described as social injury (Osafo *et al*., 2014). To avoid disgrace and maintain family dignity, adolescents are thus taught from a young age to uphold moral virtues (Osafo *et al*., 2014). However, as long as adolescent sex communication remains a taboo topic, parents and relatives will not be able to communicate freely on such subjects.

The effect of religion as an influencing factor in adolescent sexual behaviour has been shown to be protective (Osafo *et al*., 2014). It is possible, therefore that without this influence in Ghanaian society, the

indices would be much worse than they presently are. In the Ghanaian society, religion is thought to shape behaviours and thus lessen the chances of adolescents engaging in premarital sex since it is not condoned. In spite of this and considering the experimentation, curiosity and sexual discovery associated with adolescence, those who hold on to such views might still succumb to these urges and pressure from peers. Also, because there are varying levels of religion, the counter pressures adolescents face ultimately have a neutralising effect on these religious ideals (Amoako-Agyeman, 2012). In Northern Ghana where the predominant religion is Islam, premarital sex is equally opposed (Amoah, 2007). However, in the Northern and Upper regions where a lot of early marriages occur, the impact of religion is thus limited to adolescent premarital sex and is subject to the same neutralising effects of peer pressure and adolescent curiosity. This means that even though religion is meant to be a social check of adolescent sexual behaviour, its effect remains very limited. Religion is however not always protective as seen in Traditional religion and the practices that accompany it such as Trokosi which exposes adolescent girls to sexual exploitation and early sex (Tenkorang & Owusu, 2013).

The strong influence of peers on adolescents (Bingenheimer *et al*., 2015) represents an opportunity to use them as peer counsellors and engage them meaningfully in shaping their own sexual behaviours and those of others. Adolescents usually succumb to such pressure as a means of gaining acceptance or status within these groups (Van de Bongardt *et al*., 2014). The finding that adolescent behaviour is strongly influenced by those of close peers is because they spend more time with them and are thus likely to discuss sexual behaviour among themselves. Similarly, risky sexual behaviours are more likely to be influenced by distant peers because adolescents may feel ashamed to discuss such behaviour with close friends since they may not approve of such behaviour. The behaviours of distant and sometimes older peers who may have attained popularity because of a certain lifestyle may appeal to adolescents especially girls. This shows that within close peer networks there are acceptable limits of sexual behaviour that close peers evaluate or condone and this can serve as a form of social check on adolescent sexual behaviour (Van de Bongardt *et al*., 2014) The presence of social groups in communities carry a huge potential since these groups present adolescents with alternate activities which keep them away from engaging in sexually risky behaviours. These alternative activities may include income-generating activities such as craftsmanship etc. Such groupings such as girls and boys clubs and scouts, can also be a platform for peers

to share their experiences both positive and negative on sexual health. These can be very beneficial especially for street adolescents who have little means of surviving on the streets.

Puberty rites and other rites of initiation for adolescents in Ghana have been described as regulating and moderating adolescent sexual behaviour in Ghanaian communities (Osafo et al 2014; Anarfi & Owusu, 2011). These invariably are for girls because Ghanaian culture pays a lot of attention on grooming girls for motherhood and also because of the economic benefits which come from the dowry. However, these cultural practices are increasingly fading out since the introduction of Christianity and Islam. Both Christianity and Islam perceive such rites to be fetish practices and parents are not allowing their children to partake in them. Another possible reason for the decline in such rites are the financial implications since these rites have now become expensive social events in which gifts and ornaments are bought for the adolescents (Agra & Gbadegbe, 2014). Hence families who do not have such financial capabilities will not involve their children. The decline of puberty rites may have contributed to the increasing teenage pregnancies because adolescent girls are missing out on the grooming that comes with these initiation rites. Though originally intended to shape adolescent sexual behaviour, a major drawback of these puberty rites as documented in studies is the early initiation in adolescent girls as young as 14 years. This makes such practices lose significance because after these ceremonies, the girls are considered mature for marriage (Stephenson *et al*., 2014). Hence the goal of controlling adolescent sexual behaviour then becomes unattainable. This is perhaps evidence that Ghanaian culture does not recognize adolescence as a distinct transitional period but only recognizes childhood and adulthood.

Early marriage is therefore a factor which affects adolescent sexual behaviour and is confirmed in reports in 2010 when 5.2% of boys and 5.6% of girls within the ages of 12-17 were married (GSS, 2010). Girls are more likely to be forced into early marriages and are often betrothed to older men for marriage at a very early age. Since child bearing is a social expectation in every marriage, these adolescent girls do not have the opportunity to negotiate contraception. These girls as a result of their physiological immaturity are more susceptible to complications during pregnancy and delivery including death as highlighted in international reports (UNICEF, 2001; WHO, 2015). This highlights the limited knowledge on adolescent reproductive development and ignorance on risk potential. The ignorance is displayed as parents may willingly allow their

daughters to be married to older men who are similarly unaware of these consequences.

4.3 Health Sector Factors

The access to STIs services is limited such that even when adolescents receive information on STI prevention and care, there are no available facilities which offer these services specifically for adolescents. The absence of linkages between provision of information on sexual health and facilities where these can be obtained remains a challenge. Other aspects of access are geographical and this is evident in rural areas which have a limited number of facilities (Marrone *et al*., 2014). This has contributed to the unmet need for adolescent contraception of 62% in 2011 (GSS, 2011).

In this regard, efforts at making reproductive health services more adolescent-friendly are welcome and in the right direction. Increasingly, a lot of emphasis is placed on making services adolescent friendly. However, it is clear that this emphasis is very much clinically oriented without a community component (Speizer *et al*., 2003 & Fonner *et al*., 2014). A community component is crucial if these services are to impact the lives of adolescents who are not using these services within the clinical setting. Peers can be engaged in communities to disseminate information, condoms etc. to adolescents in communities through social groups to complement the clinical component of these services. This can be a way of overcoming issues of opening hours of such facilities. This has been highlighted in studies which have shown that one-dimensional health services are ineffective in influencing adolescent sexual behaviour significantly (Mmari *et al*., 2003; Speizer *et al*., 2003; Fonner *et al*., 2014). This again will require lobbying and including religious and/or traditional leaders when possible in the promotion of these services to ensure increased community acceptance.

Access appears to be a factor which needs urgent attention. Nearly all aspects of access are below par with regards to adolescent sexual and reproductive health. Similarly, the limited availability of contraception both in quantity and variety within these facilities means that adolescents may resort to pharmacies and drug stores. Again these contraceptive methods have to be purchased by adolescents and can be expensive for adolescents. Moreover, the opening hours of health facilities most of which operate only on week days, are not conducive for adolescents who are in school. All these dimensions of access have to be borne in mind if adolescents are to gain effective access to these services.

Acceptability is another dimension of access which is limited as evidenced by boys being reluctant and feeling shy of receiving information or treatment from female providers and vice versa. Privacy and confidentiality is an issue which contributes to adolescents' acceptance of reproductive health services. Also, most units have the label Family Planning Unit inscribed on their doors and adolescents are unwilling to use such facilities since they do not have families to plan and also utilise the same services as adults. They may be worried about their confidentiality and privacy in such visible locations. The attempts therefore, at forming adolescent health corners are commendable (Susheela *et al*., 2007). However, attention has to be given to their citing since privacy remains an issue for adolescents. Studies have shown that they utilise pharmacies and chemical shops because they are more discreet and less judgemental (Koster *et al*., 2001). The preference for chemists and pharmacies means that the kind of information provided by these facilities has to be of sufficient, standard and quality to ensure that adolescents are not misled.

4.4 Political Factors

The prioritization of messages on abstinence was originally prompted during the era when the impact of HIV was at its peak. Abstinence in many SSA countries including Ghana became a prominent feature of the HIV prevention campaigns since heterosexual transmission is the greatest route of transmission. In spite of this, it has neither effectively addressed HIV nor teenage pregnancies (Geugten, 2013). As earlier mentioned, this is most likely because of other strong influences and pressures during the period of adolescence. Similarly, the message of being faithful has not gained the expected success, though it has been beneficial in limiting the number of sexual partners in a region where a major driver of STIs and HIV is multiple concurrent sexual relationships. Its propagation has had an effect on condom use and promotion messages since adolescents who perceive they are in a faithful, trusting and loving relationship may not see the need to use condoms. This unfortunately has reinforced the misconception held by adolescents that using condoms suggests unfaithfulness.

The religious opposition to sex education has hindered the implementation of comprehensive programmes on sex education in schools (Rondini & Krugu, 2009). Policy makers though recognising the need for these programmes in the school curriculum are unwilling to incur the displeasure of religious leaders and community leaders who are not in favour of such education. This is evident in the numerous mission schools in the country that may opt for an abstinence only sexual education focus

in line with their principles. Also, these subjects are taught by teachers who may have their own judgements and perceptions on the appropriateness of teaching sexuality in schools; hence it may not be effectively taught. Other points of consideration include the contents of the curriculum for early adolescents and late adolescents with respect to the limits of information given especially to early adolescents.

Another limitation of policy implementation is the seeming focus on formal sex education programmes for adolescents being held mainly within primary and secondary schools and largely absent in vocational schools (Glover *et al*., 2003). Sex education programmes for street adolescents who do not have the opportunity to attend school or have dropped out due to previous teen pregnancies is thus a critical element. This is important to prevent a recurrence of future unplanned pregnancies and STIs.

It is obvious that even though there is recognition on government's part of adolescent sexual and reproductive health challenges (Rondini & Krugu, 2009) their ability to ensure effective policies to address them is greatly limited because of religious opposition. This re-emphasizes the need for an urgent dialogue with community leaders given the unacceptable adolescent sexual health indices to avert preventable morbidity and mortality.

Another contradiction in the adolescent sexual health policy is the differing legal ages for sex and marriage of 16 and 18 respectively. Many Ghanaians are unaware of the existence of these laws on adolescent sexual regulation and their enforcement has been ineffective (Anarfi & Owusu, 2011). The mismatch between the ages for legal sex and marriage can be a potential source of confusion since people may not comprehend why the earlier legal age for sex and later legal age for marriage.

4.5 Adoptable Strategies for improving Adolescent Sexual Behaviour

The success of the combined intervention approach used in Tanzania (Rose et al., 2007) is a vindication of the limited effect of one-dimensional interventions in improving adolescent sexual behaviour. Combining four strategies via school, health facility, community condom promotion and community mobilisation in any programme can be a way of ensuring synergy and capturing adolescents in and out of school, including street adolescents. It is also interesting to note that the Tanzanian intervention had a participatory dimension even within school based programmes and

was not one-directional information flow from teacher to students. Also desirable was the fact that the intervention began in early adolescent classes and included multiple sessions per year which are more beneficial since it reinforces the message. The outcome of the intervention which led to statistically significant improvements in knowledge and reported sexual attitudes in both sexes (Rose et al., 2007) shows the replicability and feasibility of such an approach. Also noteworthy, was the finding that the intervention which included adolescent sex education did not lead to increased adolescent sexual activity. Rather, delayed sexual debut and reduced number of partners were reported (Ross *et al*., 2007). The finding supports evidence that giving adolescents' information on sex and on contraception does not lead them to sex. These outcomes will in the long term contribute to improving the poor adolescent health indices by reducing risky sexual behaviours and the adoption of safe sex practices.

The experiences of out-of-school adolescent programme in Mozambique offer a means of ensuring sustained focus on adolescents who are out-of-school and can be adopted and scaled up in Ghana. This is because out-of-school adolescents are often very difficult to reach, mobile, yet at high risk for poor reproductive and sexual health outcomes. It is a challenge to provide information and services for them. Also, adolescents may have some misconceptions and mistrust that prevent them from seeking services as well as low literacy levels which hinder the effectiveness of educational materials. Furthermore, such adolescents are a very diverse group including orphans, drop-outs, and street adolescents, and therefore require multiple interventions to target them with information and ensure behaviour change (Chandra-Mouli *et al*., 2015). While the programme successfully provided reproductive health information, such programmes hardly address social norms that are likely to contribute to poor outcomes. Moreover, the impact of such adolescent organisations in outreach activities needs to be measured against realistic expectations. This is because in Ghana, such NGOs and organisations are small and underdeveloped. They have very limited financial capacities and continually need support to sustain these activities to ensure their effectiveness on a large scale.

Technological advancements continue to play a big role in health promotion and prevention platforms being applied to a variety of public health interventions (Guse *et al*., 2012; Gold *et al*., 2011). On-line and mobile technology can therefore be harnessed and utilised as a means of accelerating and improving access to adolescent reproductive health messages and services. Such technology is preferred because privacy and

confidentiality are preserved and the services could be offered in local languages. They also improve accessibility thus removing the barriers of limited opening hours of health information services. This could be in the form of 24 hour call service and on-demand services tailored to individual needs and requests. The use of such technologies can help parents overcome barriers and discomforts of giving their children sex education. The increasing numbers of adolescents who have mobile phones especially within urban areas shows the potential of on-line and mobile technology (GSS, 2013). Considerations will need to be given to payment of these services as adolescents especially in rural areas may not be able to afford. However, some telecommunication companies are likely to be willing to provide such services at reduced costs or for free as part of their corporate social responsibility. Another point of note is the applicability of such an intervention in the rural areas given the relatively lower mobile phone ownership and coverage compared to urban areas.

5 CHAPTER FIVE: CONCLUSIONS

Adolescent sexual behaviour and its effects on their reproductive health is an issue that needs to be addressed with a multi-sectoral approach to reduce risks and improve health outcomes. The current situation is not desirable and suggests there is a lot of room for improvement since the present effort is inadequate. This is evident in the limited number of adolescent health corners in the country. It is therefore important that stakeholders in adolescent health conduct operational research, pilot test findings and scale up promising interventions at the various levels.

The factors discussed in this study from Ghana and other SSA countries demonstrate that if adolescents are empowered, it can lead to dramatic improvements in adolescent sexual health. Going forward, community and religious leaders' involvement can be critical to gain acceptance for issues such as adolescent contraception and sex education. Health sector responses and policies are also equally important in this regard.

The individual opportunities and circumstances of every adolescent ultimately shape his/her sexual behaviour and impacts on their health. Beyond personal determinants such as knowledge, attitude, self-efficacy and perceptions of risk, the role of interpersonal relationships and community norms are intricately linked to the choices that an adolescent will make. All of these personal determinants and environmental factors should be reflected in the policies and planning for adolescent health. However, there remains a lot of opposition on issues such as sex education in spite of the evidence of its effectiveness as well as low acceptance for adolescent contraception because of societal attitudes and stigma towards adolescent premarital sex. The inconsistent laws, conservative and harmful religious beliefs as well as negative traditional practices have all contributed to the current state of affairs. There is a critical need to engage all stakeholders and mobilise all resources to counter the poor sexual health outcomes of adolescents in Ghana.

The evidence supports multi-dimensional approaches as imperative to ensure effectiveness of interventions. The effectiveness of innovative strategies piloted in a variety of contexts show that these can be adopted, adapted and scaled up for implementation in Ghana if the country is to achieve desired results in the field of adolescent sexual and reproductive health over the coming years.

6 CHAPTER SIX: RECOMMENDATIONS

The following are recommended for action by the Ghana Health Service and NGOs to improve adolescent sexual behaviour in Ghana. They have been categorised into Policy, Interventions and Research

6.1 Policy

- Laws on the legal ages for sex and marriage should be harmonized to eliminate any confusion. These laws should then be made public to ensure that people are aware of their existence and interpretation. They should also be enforced consistently to ensure that they are effective. Adults found guilty of contravening these laws should be made to face the full rigours of the law. This should help limit the issues of adolescent sexual coercion in Ghana.
- Adolescent reproductive and sexual health education should be tailored to meet the needs of the different categories of adolescents in terms of age and educational status.
- Adolescent, community and religious leaders should be lobbied and meaningfully involved in the formulation of messages and policy relating to adolescent sexual health. This should be done through a stakeholder analysis aimed at changing opinions on adolescent sex education and contraception as well as engage these leaders to improve community acceptance.

6.2 Intervention

- Adolescent health corners and clubs should be scaled up across the country in every sub-district in the country to ensure increased coverage and access. Adolescents should also be engaged in counselling as peer counsellors and should be actively involved in the dissemination of sexual health information within communities as well as the distribution of condoms.
- Pharmacy shop and chemical shop attendants should receive training and subsequent refresher courses bi-annually on adolescent sexual and reproductive health information to ensure they provide quality information to adolescents who patronise their services.
- On-line and mobile technology should be piloted in urban areas to assess its acceptability, feasibility and effectiveness since it is an innovative strategy which has potential for use in the field of adolescent sexual and reproductive health. It can subsequently be scaled up if proven to be effective.

6.3 Research

- Further research should be conducted on a national basis using a variety of study designs to ensure regular production of evidence to inform policy and programme decision making. This should also include research and evaluation of intervention feasibility as well as impact to ensure adoption of effective interventions for scale up.

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