SEXUAL AND REPRODUCTIVE HEALTH NEEDS AND SERVICE UTILIZATION AMONG ADOLESCENTS IN NEPAL

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

By
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Nepal

Declaration:

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Signature:

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Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ASRH	Adolescent Sexual and Reproductive Health
ART	Antiretroviral therapy
ANC	Antenatal Care
BCC	Behavior Change Communication
CBS	Central Bureau of Statistics
DANIDA	Danish International Development Agency
FPAN	Family Planning Association of Nepal
GoN	Government of Nepal
GDP	Gross Domestic Product
IPPF	International Planned Parenthood Federation
MDG	Millennium Development Goals
MoHP	Ministry of Health and Population
MoUD	Ministry of Urban Development
NAYS	Nepal Adolescent and Youth Survey
NCASC	National Centre for AIDS & STI Control
NCD	Non Communicable Disease
NDHS	Nepal Demographic Health and Survey
NGOs	Non-Governmental Organizations
NHP	National Health Policy

STI	Sexually transmitted Infection
PHC	Primary Health Care
PNC	Post Natal Care
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children's Fund
YFRH	Youth-friendly Reproductive Health
WHO	World Health Organization

Abstract

Background: Adolescents can experience various sexual and reproductive health (SRH) challenges. It is crucial to make sure that adolescents use SRH services and information to protect them from any complications such as early and unwanted pregnancy, sexually transmitted infections, HIV and psycho-sexual problems.

Objectives: The aim of study is to explore the SRH needs and service utilization of adolescents and factors influencing the utilization of SRH services among adolescents in Nepal and to provide recommendations for the optimum improvement and use of existing SRH services

Study Method: This is a descriptive study which is based on a review of the literature according to the "*WHO framework for understanding adolescent help-seeking behavior and use of social supports*" was adapted to in this thesis.

Findings: In Nepal adolescents are concerned about of sexual development and reproductive health. However, current health programs are not completely addressing these issues. Limited knowledge, social and cultural associated with SRH services, health staff competencies to address adolescent SRH, and friendliness of health facility staff influence health seeking and SRH service utilization among adolescent in Nepal.

Conclusion: Despite of all the efforts from the government and non-government sectors utilization of SRH services by adolescents is low in Nepal because of various factors that are often interrelated. There is a need to further improve the adolescent friendliness of services, promote these (free) services, and strengthen the positive legal environment help to increase use of SRH services in Nepal.

Recommendations: Expansion of youth-friendly services, involvement of adolescents in sexual health programs and intervention, activities for demand generation through schools, community, and mass media would be necessary to increase SRH service utilization among adolescents in Nepal.

Key Words: Adolescents, Sexual and Reproductive, health seeking, utilization

Word Count: 12, 022

Glossary

Adolescents: individuals between the ages of 10-19 years (7)

Youth: individuals between the ages of 15-24 years (7)

Young people: adolescents and youth, between the ages of 10-24 years (7)

Sexual Health:

According to the WHO working definition Sexual health is *"a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled."(8)*

Reproductive Health:

"Reproductive health implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so." (9)

Introduction

According to the World Health Organization (WHO) the term 'adolescents' refers to individuals between the ages of 10-19 years and the term 'youth' refers to individuals between the ages of 15-24 years, while "young people" covers the entire age range, from 10-24 years (7). Adolescence is the transition period from childhood to adulthood and is commonly associated with a period of physical, psychological and social change and maturity(10). Because of these changes, adolescents can experience various challenges in reproductive and sexual health status. For instance, issues related to self-identity, relationships, and sexual experimentation and physical development can escalate sexual, menstrual, mental and behavioral health problems(11). Furthermore, adolescence is a transition period of conventional parent controlled health seeking behavior to self-determined health seeking behavior(10, 11). Therefore it is crucial that adolescents make use of health services during this period to improve their health, adjust risky behaviors, and promote healthy habits. However, health care services are sometimes unable to respond to the unique circumstances and needs of adolescents(12). Sexual and reproductive health is crucial for the wellbeing of adolescent people(13). For this, age appropriate services targeting adolescents, which address needs such as counseling for sexuality, bodily changes, relationships, family planning, voluntary counseling and testing, and treatment of sexually transmitted infections is necessary. Most importantly, these services must maintain adolescents' rights to privacy, respect, and informed consent, while respecting cultural and religious values (12, 13).

In Nepal adolescents account for nearly a quarter (23.62%) of the population(14). Various studies show that a significant proportion of adolescents are involved in sexual activity at an early age. For instance, although premarital sex and extramarital sex is not socially and culturally acceptable, both adolescents and young people are involved in such activities. The Nepal adolescent and youth survey 2011 reported that 63% of youth have experience in masturbation, 48% of adolescents experience kissing and fondling (15). In addition, 17% of unmarried adolescents and youth ever fell in love, 44% said they have had non-penetrative sexual experiences such as kissing, hugging and founding and among them, and 13% had sex before marriage (16). Various adolescent sexual and reproductive interventions are implementing in Nepal. These interventions are broadly categorized into three areas, namely information and skills, health service and counseling, and building a safe and supportive environment(17). The government of Nepal and other organization are providing safe abortion, contraceptive, antenatal and other SRH services for adolescents through their respective health facilities.

Having worked as a young people's sexual and reproductive health advocate for more than four years, as well as a training officer for a year at the Multipurpose Society Development Organization, I felt that the current health services are not addressing young people's sexual and reproductive health needs properly. With this thesis I try to systematically expand my understanding about young people's perspective on their sexual and reproductive health (SRH) needs, underlying issues why the current health system is unable to respond to young people's needs, and what can be done to better improve this, so that young people enjoy their SRHR.

Organization of the thesis

Chapter one provides a brief background information about Nepal, which includes basic information such as geography, social economic status, the health system and health situation of Nepal. The second chapter describes the problem brief and tailors the objective for the thesis. Furthermore, it explains the methodology and conceptual framework adopted for this thesis. Chapter three explains the major findings of the thesis. At first it shows major sexual and reproductive health services used by adolescent Nepal, followed by adolescent perceived needs and factors including for perceiving needs among adolescents. Furthermore it explains various individual, exogenous, and social supports and which influence service utilization among adolescents. Chapter four explains the various programs and policy related factors which effect SRH service utilization among adolescents in Nepal. Chapter five explain the major findings and issues. Lastly, based on findings and discussion Chapter six concludes and puts forward some recommendations.

Chapter One:
1. Background information of Nepal

1.1 Geography and Population

Nepal is a small mountainous landlocked country with an area of 147,181 sq. km located in southeast Asia (18) . Geographically Nepal is divided into three regions, namely; Mountain, Hill and Terai. According to the 2011 census, the Nepal population is estimated to be about 26.6 million with an annual population growth rate of 1.35% (14). According to the Ministry of Urban Development (MoUD), in 2014 about 38.26% of the Nepalese population lived in urban areas while 61.74% residing in rural areas (19, 20). Currently, Nepal is experiencing subsequent change in the age structure of the population with 57% of population being aged between 15-59 (19, 20).

1.2 Socio cultural situation

Nepal consists of a diversity of racial, cultural and linguistic groups, broadly divided into the Indo-Nepalese, Tibeto-Nepalese, and indigenous Nepalese categories (14). According Central Bureau of Statistics (CBS) 2011, there are 125 ethnic groups where 123 languages are spoken as a mother tongue (21). The majority of the people in Nepal are Hindu (81%) followed by Buddhist (9%) (14). Nepalese society is deeply patriarchal, where gender inequality is high. Nepal is ranked 110 on the gender inequality index in 2015, out of total of 188 countries in world (22). This indicates that in Nepal significant inequality exists in three important aspects of human development, namely; reproductive health, empowerment, and economic status compared other countries in the world. One of many examples of gender inequality in Nepal is, Nepalese girls have to help their mother in household work while their boy counterparts are not expected to do any domestic works (23).

1.3 Economy

Nepal is one of the least developed countries in the world and is highly dependent on foreign aid (24). The Nepal Gross Domestic Product (GDP) was estimated to be US $21 billion in 2015 (25). The main sector of the economy is agriculture, which accounts for 33% of GDP followed by remittances (24). In 2014, Nepal was ranked 145 out of 188 countries in the human development index (HDI) with value of 0.548, which is attributed to lower advancement on per capita income, life expectancy, and literacy level. This lower progression puts Nepal in the low human development county category (26).

1.4 Political Division

In September 2015, Nepal promulgated its new constitution ending a long political transition and this firmly established Nepal as a federal democratic

republic with secular values. The new constitution divided Nepal into seven states; ending the unitary system. It adopted a multiparty democracy system (27).

1.5. Urbanization trends

Nepal is going through rapid urbanization with around 38% of the Nepalese population currently living in urban areas. In 2011, 17.7% of the people resided in urban areas, but this was doubled in 2014 with the addition of 131 municipalities (19). This urbanization trend is higher in the Hill area compared to Tarai and Mountains, accounting for 21.7%, 15.1%, and 2.8% respectively. The major reason behind the huge increase in the urban population is migration (20). In 2011 37.7% people living in urban areas were either born in other district or foreign born (14).

1.6 Health System

The health system of Nepal is characterized by a network of health facilities and community health workers and volunteers (28) . The Ministry of Health and Population provides overall leadership to the health and wellbeing of the Nepalese population. Under the leadership of the ministry, the department of health service provides preventive promotive, diagnostic and curative health services all over Nepal (28).

The Alma Ata declaration had a significant influence in the overall health policy development process (29). It highlighted the provision of community oriented preventive, promotive, and curative health services. The constitution of Nepal recognizes that health is a fundamental human right and states that every citizen has a right to basic health services free of cost (30). The Government of Nepal provides 70 drugs free of cost from the national essential medical list (29). Similarly, the government of Nepal provides most of the SRH services such as contraception, maternal health and treatment and management of sexually transmitted infections free of cost (29). However, there is still huge disparity in the access to health services, for instance only 61% of all households have access to a health facility within 30 minutes distance with substantial differences between urban (85.9%) and rural (59%) areas (28).

In 2013, Nepal spent 6% of its GDP on health which is below the international standard of 15%. The government contributes only 40% of the total health expenditure and the remaining 60% is covered by the private sector. Because of this, people have to spend out of pocket for their health expenditure which further exacerbates inequality in health care service and jeopardizes health and wellbeing of poor and marginalized population.

1.7 Health Situation

Currently, Nepal faces a double burden of disease where people are suffering from both communicable and non-communicable diseases, which is further aggravated by existing poverty. However, Nepal has shown significant

improvements in the health condition of its population in recent years. For instance, Nepal achieved its MDG target for the reduction of maternal mortality from 539 to 170 per 100,000 live births (31). Furthermore, Nepal also has shown substantial accomplishment in decreasing under-five and infant mortality rates from 91 to 39 per 1,000 live births and 61 to 33 per 1,000 live births respectively between 2001 and 2011 (15, 32) Moreover, the immunization coverage in Nepal is good with vaccine coverage rates for BCG, DPT3, OPV3 and measles vaccine of 97%, 97%, 92%, 93%,and 88% respectively (33). The NDHS 2011 shows that there is universal knowledge of family planning methods in women aged 15-49 years. Nevertheless, the contraceptive prevalence rate decreased slightly from 44.2% to 43.2% between 2006 and 2011 (32, 33). In addition, still 27% of married women have unmet family planning needs (21).

Non communicable diseases (NCDs) in Nepal show an increasing trend, the WHO estimated that deaths related to NCDs have increased from 51% to 60% between 2010 and 2014 (34) .With the increase in life expectancy, the proportion of elder population increased from 6.5% to 8.5% between 2001 and 2011. NCDs are the major health problem followed by chronic disease such as HIV and AIDS and disabilities (35).

Moving to adolescent health, in Nepal adolescent childbearing is common: there is an adolescent fertility rate of 87 per 1,000 live births(33). The contraceptive prevalence rate is low among adolescents, where only 14% and 24% of married adolescent girls aged 15-19 and 20-24 use modern contraceptive respectively(36). Though the legal age for marriage in Nepal is 20 years for both boys and girls, Nepal ranks 7th among the top 20 countries which are identified as hotspots for child marriage (37). The prevalence of adolescent marriage is high with 28.8% in 2011 (33, 37). In Nepal about 34 % of the all new marriage involve child under 15 years (44). In addition, NDHS 2011 reported that about one fifth of young males have sex outside marriage, among them one fourth of the unmarried young males did not use a condom. This makes them and their partners more vulnerable to HIV and sexually transmitted infections.

1.8 SRH Policies and program in Nepal

Nepal has endorsed various conventions related to young people's sexual and reproductive health and rights; for instance those of the International Conference on Population and Development (1994), Fourth World Conference on Women in Beijing (1995), the Millennium Development Goals (2000), the Convention on the Elimination of all forms of Discrimination against Women (1979), the Convention on the Rights of the Child (1989) and the International Covenant on Economic, Social and Cultural rights (1966) (38). As a signatory nation of ICPD 1994 Nepal has initiated various sexual and reproductive health programs for different target groups including adolescents to achieve its national and international commitments.

Nonetheless adolescent sexual and reproductive health is a relative new program of the government of Nepal. The National Adolescent health and development strategy was adopted in 2000 to address the specific health and developed needs. However, only after 7 years the adolescent sexual and reproductive health guideline was develop to operationalize ASRH strategy in 2007. Currently the Ministry of Health is partnering with other sectorial ministries such as the Ministry of Education and Culture, and Ministry of Children and Women for all reproductive health services including adolescent sexual and reproductive health services. In 2008, a draft of the national adolescent sexual and reproductive health program was developed with the support of GIZ which later on was successfully piloted in 23 health facilities in Nepal. In addition, the Nepal Health Sector Plan II (2011-2015) is formalized by the ministry of health and population. The aim of NHSP II was to introduce 1,000 youth-friendly facilities at the end of 2015 which has been accomplished with the support of various national and international organizations (39, 40). As a result, in 2015, 1,140 health facilities in 63 districts were providing adolescent-friendly service. The government of Nepal provides free contraceptives services such as condoms, oral contraceptive pills, and IUCD through various level health facilities. Though abortion services have been legal in Nepal since 2002 (41), many poor, marginalized, and adolescents cannot access them for financial reasons. For this reason the Ministry of Health and Population in 2015 started the free safe abortion care services for all women to increase access of poor, marginalized, adolescents, and hard to reach women (42). There is no legal age for abortion services however adult consent is needed when the women is aged below 16.

The globally accepted eight standard components of reproductive health are incorporated in the Nepalese reproductive health program. Among them, adolescent sexual and reproductive health have an important position. The National adolescent strategy of Nepal has recognized information, education, communication, counseling, and services about contraception, safe motherhood, safe abortion, STIs, HIV and AIDS, and life skills as major sexual and reproductive health services for young people (43).

Chapter Two:
2. Problem Statement, Study Objectives, Study Method and Limitations of the Study

2.1 Problem Statement

In Nepal, the mean age of the first menstruation is 13.5 for female adolescents and the mean age of the first ejaculation is 14.5 for male adolescents, which indicate that adolescents need information about these issues early in their life (33). It is reported that 19% of adolescents drop out of school and this proportion is higher among female adolescents. About 35% of the adolescents drop out because of marriage (15). In Nepal, the mean age of marriage for males and females is 19 and 17 respectively. This results in an early mean age of first birth which is 19 years (16). Adolescent marriage is declining but is still high with 28.8% in 2011 (44). Though the legal age of marriage is 20 years for both boys and girls NAYS 2011 shows, marriage before the age of 15 years is 1% for boys and 5% for girls (15). NDHS 2011 shows that 17% of girls aged 15-19 either previously gave birth or are pregnant. As presented in the previous chapter, the adolescent fertility rate in Nepal is 87 births per 1,000 women aged 15-19, which is high compared to other southeast Asian countries (33). As mentioned in Chapter One abortion is legal in Nepal and NAYS 2011 reported that about 2% of young people have terminated a pregnancy. The major reason for abortion at a young age is pregnancy before marriage which accounts for 13% (16). These aforementioned issues as well as limited education and poor employment opportunities make young people more vulnerable to higher maternal morbidity and mortality (45). Especially young girls will have to leave their school when they become pregnant and they rarely return back to school (46). Furthermore, about 6% of young boys aged less than 15 were engaged in sexual intercourse, which makes them and their sexual partners vulnerable to STIs and HIV. For instance, in 2015 Nepal the adult (15-49) HIV prevalence was 0.20% but the age group (15-24) accounted for 14.7% of new HIV infections (47).

The reproductive health services utilization rate remains low in Nepal. An institutional-based quantitative study conducted among 338 adolescents aged 15-19 in Bhaktapur district shows that 9.2% of school going adolescents ever utilized sexual and reproductive health services and the service utilization rate is even lower among female adolescents (48). The unmet need for family planning in Nepal has been estimated to be highest (42%) for married girls aged 15-19 years, as only 14.4% of adolescents use modern contraceptive methods (33). Adolescents have problems with sexual behavior, the use of contraception, early and unwanted pregnancies. Sexually Transmitted Infections (STIs) are common among adolescents who practice unprotected sex or engage in risky sexual activities, have multiple

partners, abuse drugs, and lack information on ASRH. NDHS 2011 shows that 11% of females and 7% of males aged between 15-24 who had ever sexual intercourse reported having STIs (36).
In addition, Nepalese adolescents have difficulties in accessing ASRH due to inaccurate, insufficient information, and existing societal boundaries (49). Nepalese society believes that family planning services should only be used by married couples which creates difficulty for unmarried adolescents to use contraceptive services (50).

2.2 Justification

Adolescents in Nepal do not have adequate access to information and access to services which is further exacerbated by the little sex education in schools and hardly open discussion about sex and sexuality in families and society (51). Currently, the government of Nepal recognizes that services should be youth-friendly. Furthermore, the government of Nepal and external partners are scaling up adolescent sexual and reproductive health programs to address these issues. However, little information exists at the national level regarding what Nepalese adolescents perceive as their SRH needs, their service utilization patterns and factors which act as barriers or facilitates use of existing services. For instance, social cultural values, adolescents' individual characteristics, program and policy have significant influence on SRH service utilization. Global evidence shows that programs such as comprehensive sexuality education and youth-friendly services have a positive influence on SRH service utilization (52). In addition, poor sexual and reproductive health knowledge, the lack of youth-friendly services, lack of confidentiality of services, experiences of shame, and health care provider attitudes also have an influence on SRH service utilization by adolescents (53).
Correct evidence is crucial to properly plan SRH services for Nepalese adolescents. Amongst the many means to measure adolescents' needs, their own reports of health behaviors and lifestyles and utilization of health services are especially valuable. This data allows adolescents to be heard, as opposed to adult professionals making judgments on them. The information obtained can inform health policy, resources, and availability that can determine individuals' health service use. In addition to this it is very important to explore the apparent sexual reproductive health needs of adolescents for effective provision of SRH services for young people and making these accessible to all. This thesis focuses on adolescents, however, evidence and experiences of young people are also taken into consideration while explaining adolescents' sexual and reproductive health issues.

2.3 Objectives

2.3.1 General objective

- To explore the sexual and reproductive health needs and service utilization of adolescents and factors influencing the utilization of SRH services among adolescents in Nepal and to provide recommendations for the optimum improvement and use of existing SRH services

2.3.2 Specific Objective

1. To describe the sexual and reproductive health needs and service utilization among adolescents in Nepal
2. To explore the individual factors which influence sexual and reproductive health services utilization among adolescents in Nepal
3. To explore the exogenous factors and source of social support influence in the utilization of sexual and reproductive health services among adolescents in Nepal
4. To discuss the role of policy and program efforts in improving utilization of sexual and reproductive health services in Nepal
5. To provide recommendations to the Ministry of Health and Population and other stakeholders to accommodate adolescent sexual and reproductive health needs and improve the service utilization

2.4 Methods

2.4.1 Study Design

This is a descriptive study which is based on a review of the literature. The reason for choosing to conduct a literature review is that it helps to access the current ASRH issues of Nepal in detail. In addition, it helps to synthesize the evidence from various studies which focus on SRH issues of adolescents(54).

2.4.2 Search Strategy

The literature was been searched through PubMed, Google Scholar and Google search engines, by using different key words and their combinations, which are further elaborated in Table 1. The VU library date base, Science Direct, and Elsevier were also used to search for scientific articles. In addition to this, World Health Organization (WHO), UNICEF, UNFPA, IPPF, and Department of Health Service of Nepal reports were accessed through their respective websites. Similarly, various social science journals are also looked into to find articles related to adolescent SRH issues and perceptions. Moreover, reference lists of the selected articles have been checked for relevant articles. Then titles and abstracts have been carefully read to assess whether they met the following criteria;

1. Gray literature articles and published peer-reviewed articles published between 1990 and 2015

2. Studies conducted among young people in Nepal
3. Studies which incorporated qualitative, quantitative or mixed method approach
4. Studies which are published in English
5. Documents which contains information about adolescent sexual and reproductive health

At the end, the articles and reports obtained from the search were compiled in Endnote library.

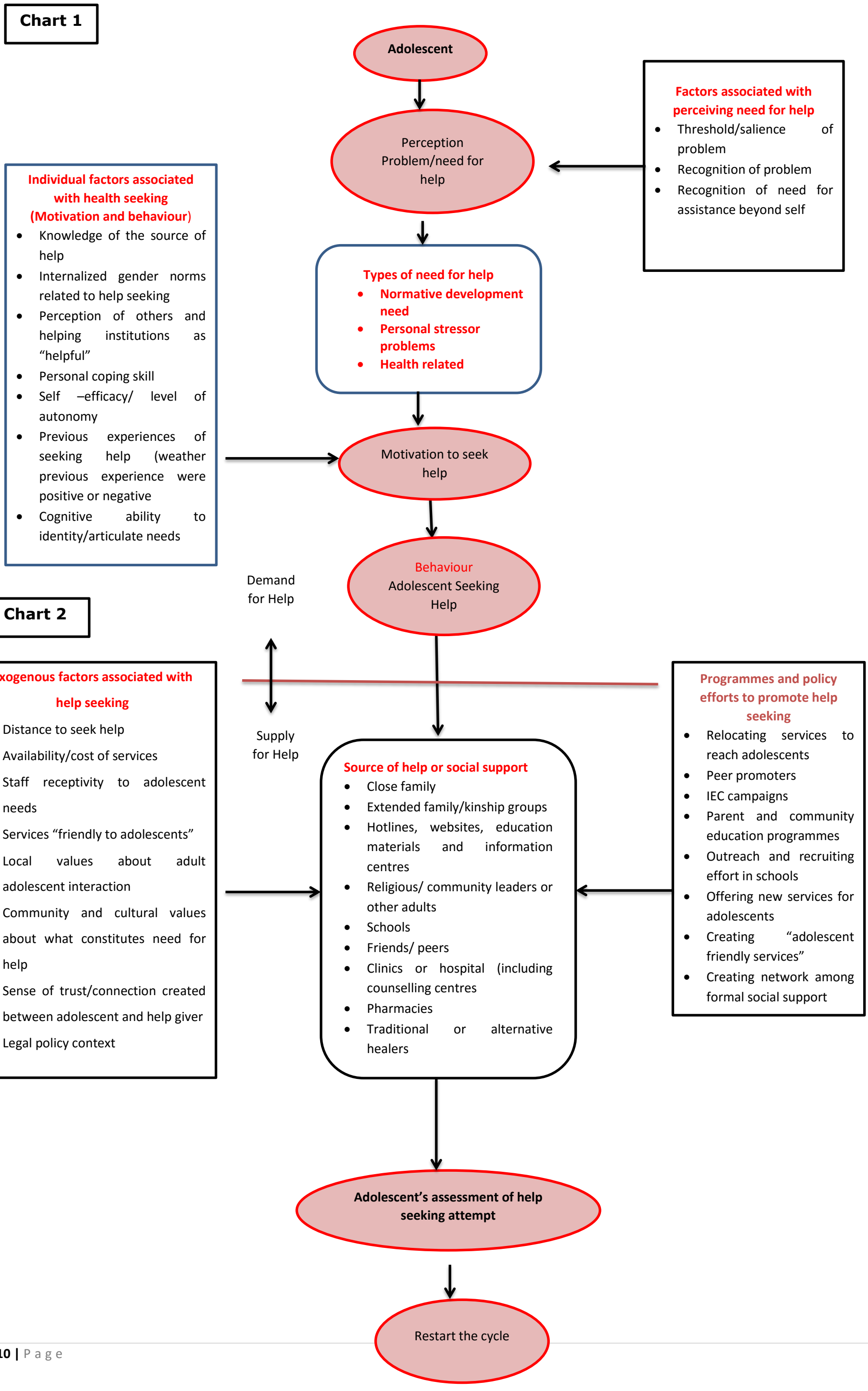
Table 1 Literature Search Strategy

Sources	Key words use to search literature			
	Objective 1	Objective 2	Objective 3	Objective 4
Central Bureau of Statistics Nepal website MOHP website Department of Health Services Website Vu e-library UNFPA website WHO website PubMed Google Scholar	Utilization Sexual and Reproductive Health Youth-friendly Services Contraceptive use, MCH services, Adolescent, young people Contraceptive services ANC, safe abortion, counseling, sex education	Perceived needs Recognition of problem, Health related needs, emotional and psychological needs, Adolescent, young people Sexual behaviour	Knowledge, Personal coping skill Health care provider attitude Distance, Social norms and value related to SRH, family supports, Availability of services, Source of information	SRH policies, Best SRH practices Services provision Youth mobilization Peer education Adolescent and Youth-friendly services comprehensive sexuality education Adolescent, young people Sexual health services Barrier, Sexual health Safe Abortion policy Parent and community education

2.4.3 Conceptual framework for study

The conceptual framework used in this study is adopted from the "*WHO framework for understanding adolescent help-seeking behavior and use of social supports*". The framework is based on evidence in the literature, suggesting that there are various factors which are interrelated and influencing what adolescents perceive as needs and how this affects the utilization of sexual and reproductive health services. The framework shows how adolescents perceive certain problems as their needs and identifies various factors that influence adolescents help seeking behavior. The first part of the framework (Chart 1) shows an individual decision model in a given social context which includes individual perception for needs and individual factors associated with help seeking. This is associated with the demand side for need that means the factors which encourages or motives adolescents to use services. The later part (Chart 2) includes exogenous factors, social supports, programmer efforts and policy initiatives to promote adolescent help-seeking (3). These are linked to the supply side and show how appropriately adolescents' needs are addressed. In this thesis the term "help seeking" and "health seeking" used interchangeably and refers to seeking formal support, which are defined as support provided by health facilities, youth centers, formal social institutions, or professional care providers, either in the public or private sector, for issues related to address adolescent sexual and reproductive health (3). The advantage of using this framework is that it is able to incorporate factors associated with needs and service utilization in a single model. In addition, it also addresses issues related to the individual environmental and health behaviors which are also addressed by the Anderson model of service utilization (55). Moreover, it captures the all the variables of the ecological model.

Figure 1 Conceptual Framework for Adolescent Help- Seeking(3)



Chapter 3

3. Results

This chapter describes the major sexual and reproductive health services which are utilized by adolescents in Nepal. Thereafter, the chapter focuses on SRH issues which adolescents perceive as their needs, and factors which influence help seeking or using SRH services. Furthermore, it provides insights into current interventions and programs to address adolescents SRHR issues and challenges. The findings presented are based on the conceptual model presented in Chapter Two.

3.1 Sexual and reproductive health services utilization among adolescent in Nepal

SRH service utilization in Nepal is poor and there is huge disparity in access and resource distributions within 75 districts(48). A mixed method study conducted among 680 males and 720 females aged 15-24 in Kathmandu valley in 2015 shows that 20% of adolescents ever visited a health facility or doctor for SRH information and services (5). Among them two thirds of the young people sought sexual and reproductive health information. The study further shows that the majority of young people's last visit for SRH service was in government health facilities followed by the private sector, with pharmacies and non-governmental sector accounting 8.5% 7.5% and 0.6% respectively. However, during focus group discussions when adolescents were asked about where they preferred to visit for SRH services and why, most of preferred private health facilities because they think they have greater privacy and confidentiality, and greater safety and quality of services. Furthermore, women are more likely to seek sexual and reproductive health services and information than men (5). The utilization of major sexual reproductive health services which are recognized by the National reproductive health programs are described as follows:

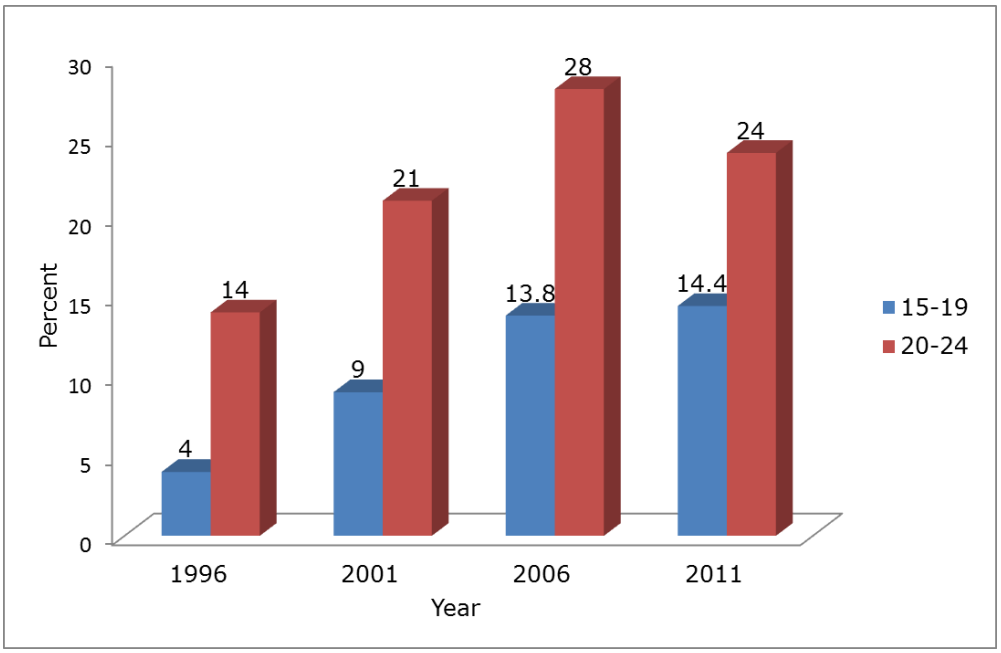
3.1.1 Contraceptive Use

In Nepal most of the men and women of the reproductive age know about at least one method of contraception (14, 15). However, the use of contraceptives among younger women aged 15-19 is low, accounting for only 5.1% out of all women of reproductive age. The NDHS highlighted that many adolescents are in the early stage of family building; this could explain this low use (33). As presented in Figure 2, there was no significant increment in the use of modern contraceptives among married female adolescents aged 15-19 between 2006 and 2011 in Nepal with 13.8% and 14.4% respectively (32, 33).

The National adolescent and youth survey 2011 shows that knowledge on condoms is universal; however knowledge on other modern methods varies

according to age group, urban-rural, region and ecological region (15). For instance, knowledge about emergency contraceptive pills is higher among urban male adolescents than their rural counterparts accounting for 18.11% and 28.82% respectively. In addition, the adolescent age group of 14-15 has a low level of knowledge compared to the adolescent age group of 15-19. About 85% of female adolescents aged 15-19 know about pills as contraceptive methods, compared to only 62% female adolescents aged 10-14 (15).

Figure 2 Current use of modern contraceptives among currently married adolescent and young women



Source; NDHS 1996 2001, 2006 and 2011

Condoms are the most common method used for contraception among female adolescents currently using contraception, accounting for 44%, followed by contraceptive injections and pills; 36% and 12% respectively (15). NAYS 2011 further shows that 33% and 40% of male aged 15-19 and 20-24 do not use contraceptives at their first sexual intercourse, for females this is 59% and 72% (16). Tamang et al., 2006 highlights that lack of information, with access to contraception and social norms of early childbearing are causes behind the low use of contraception among Nepalese young people (49). The NDHS 2011 shows that about 41.5% of currently married adolescents have an unmet need for family planning; among them 37.5% and 4% have an unmet need for spacing and limiting respectively. Similarly, NAYS 2011 shows that the unmet need is highest among the adolescents aged between 15-19 followed by age group 20-24 with 47% and 37% respectively.

Data on contraceptive use among unmarried adolescents is rare; however small scale studies show the low level of contraceptive use among unmarried sexually active adolescents. For instance, Adhikari et al. 2010 reported that only 48% of unmarried adolescents had used condoms during their first sexual intercourse (56). Similarly, Regmi et al. 2008 reported that the use of condoms was irregular and inconsistent when adolescent boys engaged in sex with non-regular partners (57). The unexpected opportunity is the major reason behind this risky sexual behavior(58). However an institutional based cross-sectional study in Pokhara in 2011 showed that more than 80% of adolescents used contraceptive devices during their sexual contact (59).

3.1.2 Safe Abortion Services

In 2014/2015, 15.3% of safe abortion service users in Nepal were adolescents(39). The proportion of adolescents who receive safe abortion services varies in different development regions. The Midwestern development region of Nepal has the highest number of safe abortion service users with 26.4% followed by the central development region with 18.2% (39). The far western development region has the lowest number of safe abortion services users accounting for only 8.7% of the total safe abortion service users. Lack of access of safe abortion services in rural and higher staff turnover are the major reasons behind this variation (42, 60, 61). For instance in certain districts of the far western region safe abortion services are only available in district hospitals and which are a three or four hour walking distance from many villages (61).

Table 2 Proportion of adolescents safe abortion service use among total Safe abortion service users by Region(39)

Indicator	National	Regions				
		EDR	CDR	WDR	MWDR	FWDR
Total safe abortion service users	78,611	-	-	-	-	-
Proportion of adolescents' safe abortion service users	15.3% 12030	12.1% (1848)	18.2% (4825	12.6% (2617)	26.4% (2007)	8.7% (733)
Proportion of adolescents medical safe abortion service users	13.9% (5541)	11.4% (1009)	18.2% (2301)	11.5% (1163	16.4% (635)	10% (433)
Proportion of adolescents surgical safe abortion service users	16.7% (6489)	13.2% (839)	18.2% (2524)	13.5% (1454)	36.5% (1372)	7.4% (300)

Source: Annual Report 2014/2015

An interventional study conducted in Kailali district between 2012 and 2014 in the far western region of Nepal shows that 36% of abortion services users were aged below 24 (42, 60). This figure is high compared to current national data on safe abortion services. This relatively high number is

associated with interventions such as making service youth-friendly, and training of health staff to address SRH issues of young people. An institutional based study conducted in 2006 among 304 women receiving safe abortions shows that about 6% were aged from 10-19 (60). According to the national adolescent and youth survey 2011, 2% of female adolescents reported that they terminated their pregnancy which might be underreporting. Data on adolescents using safe abortion services show quite a variation, which could be because abortion is a sensitive issue and still associated with shame and stigma (42, 60).

3.1.3 Maternal Health

In 2015, out of all first antenatal checkup visits as national protocol (i.e. first ANC visit within three month of pregnancy) 19.7% were adolescents however this percentage decreased for the fourth ANC visit and only 16.7% of adolescents visited for the fourth ANC (39).
The NDHS 2011 data shows that about 63.5% of mothers aged below 20 received ANC services from a skilled health care provider compared to 59.8% for age group 20-34. Similarly, 41.2% of adolescent mothers aged below 20 delivered their child in a health facility compared to women age between 20-34 with 35.2% (33). This variation is because of the perception of lower risks for preceding pregnancies if there are no complications during their first pregnancy (62).

3.1.4 Sexual and reproductive health education

Currently, Nepal is the only country the has formally introduced sexuality education in its secondary school curriculum and teacher training(63). Various age-appropriate comprehensive sex education topics were included from grade 1-10. However, the majority of the concepts related to sexual behavior and sexual and reproductive health are covered in lower secondary and secondary levels, i.e. grades 6-10. A study conducted to evaluate the school based education curriculum argued that sex education is introduced in too late a school year which increases the risk that young people acquire misconceptions from other sources(64).

About 16% (3,686 out of 22,863) of lower and higher secondary schools run a peer education program to provide sex and sexuality education in Nepal(39). However, a study conducted in four districts of Nepal reported that less than half (47.4%) of the adolescents received information on bodily change and puberty from school books and only 46.1% received SRH information from school teachers (57).

3.1.5 STI and HIV and Counseling services

Currently, STI service utilization data amongst adolescents is scare. In 2015, among the 26,702 total reported HIV cases, adolescent cases represented 4.6%, with 1.6% and 3.0% among age group 10-14 and 14-19 respectively.

The ART coverage rate in Nepal is 26.5% in 2014 with 10,407 people currently on ART treatment. There is no adolescent specific data for ART coverage but among people who are in ART 92% of people are adults aged between 15 and 49 (65).

There is little information on the utilization of counseling services in Nepal. However a small scale study conducted in four districts of Nepal among 2,970 adolescents showed that one third of the study participants visited a health facility for sexual and reproductive health services and among them, half of the adolescents sought counseling for sexual and reproductive health issues and problems (51).

3.2 Perceived Sexual and reproductive health needs of adolescents in Nepal

Very few studies have been conducted to explore the perceived needs and preferences towards sexual and reproductive health of adolescents in the context of Nepal. In 2014, a descriptive cross-sectional study was conducted among 388 adolescents aged 15-19 in three government run higher secondary schools. The study asked adolescents whether they ever felt need for sexual and reproductive health services; 15% adolescents said they had ever a need felt SRH services. Of the total who felt a need, only 9.2% were able to utilize sexual and reproductive health services. The majority of adolescent girls (60%) felt they needed services for problems related to menstruation. Half of the study participants (51.2%) felt a need for psycho-sexual problems, the majority of them were male. Both adolescents girls and boys felt a need for help for problems related to masturbation (50.6%), information related to physical change (54.8%), information on intimate relationships (54.8%), or STI counseling (53.3%) as their major needs (48). In 2015, Magdalena et al. conducted a study among 160 students at four schools in Kathmandu. The study showed that for both male and female young people, protection from pregnancy is much more important than other SRH problems such as protection from STIs (66). This is because being pregnant will have much more negative social consequence than having STIs in Nepal (66). Furthermore, this also can be associated with low level of knowledge of sexual and reproductive health issues. For instance, in that study only on third of 160 students were not aware they can become pregnant having sexual intercourse only once. The study further shows that some of the students reported that they can use a condom multiple times (66).

3.3 Factors associated with perceiving need for help

There are various factors which influence on how adolescents make the decision to seek sexual and reproductive health services. Adolescent perception to seek SRH services depends on how they perceive the severity of certain problems. A mixed method (quantitative and ethnographic) study

conducted among unmarried adolescent girls aged 14-19 in six districts of Nepal in 2006 shows that adolescents girls do not perceived reproductive health problems as severe (49). For instance problems related to menstruation and white discharge are considered as normal and they think those are usual for girls and believe to be happening by weakness. This perception is higher among Tarai region ethnic groups (Tharu and Rajbanshi) compared to hill region ethnic group (Gurung and Tamang) (49). These perceptions about the severity of reproductive health problems have a negative influence in service utilization. The quantitative part of the research further verifies the finding that only 7%, 17.2% and 12.2% of the adolescent's girls age 14-15, 16-17, and 18-19 seek any action about their menstrual problems (49). In addition, adolescents' perceptions about recognized sexual and reproductive health needs by their surroundings have an influence on service utilization. A qualitative study conducted in Kathmandu and Chitwan district in 2010 shows adolescents often take suggestions provided by their peers seriously (4). For instance, the following statement present in focus group discussion shows that adolescents are willing to listen their peer suggestion.

"Once, I had a pain in my "younanga" [penis]. My friend advised me to visit the health post when I dared to share my problem, the health service provider shouted at me. Later, I went to another hospital for check-up (a rural unmarried male aged 18 years)(4)".

3.4 Factors influencing the utilization of sexual and reproductive services among adolescents in Nepal

3.4.1 Individual factors

As shown in the conceptual framework various individual factors, such as personal ability, awareness of needs, accepted gender norms and self-agency have significant influence on the sexual and reproductive health seeking behavior and SRH service utilization by adolescents. This section will explore which factors and how these factors have effects on adolescents SRH services utilization in the Nepalese context.

- **Knowledge of sexual and reproductive health and services**

Adolescents' knowledge about sexual health services has a profound influence on service utilization. An interventional study conducted among 2,970 adolescents in four district of Nepal shows that half are aware that ASRH are available at health facilities of their area (51). Similarly a small scale qualitative study conducted in and Arghakhanchi district in 2016 shows

that most of the study participants were aware about some components about SRH services such as contraception, or abortion but the majority were not aware about services which are provided by government health facilities (67). This is similar to national data; NDHS 2011 shows that about 60% of adolescents aged 15-19 do not know about the safe abortion services however knowledge about HIV STI and contraceptive is common (33). Another mixed method study conducted among 3,041 adolescents of four districts in 2011 shows that there is gender difference in level of knowledge on sexual and reproductive health. For instance, male adolescents have a higher knowledge of HIV and AIDs compared to their female counterparts. On the other hand, female adolescents have the better knowledge about contraception (51). A qualitative study conducted among urban and rural young people in Kathmandu and Chitwan in 2007 shows that younger adolescents lack comprehensive sex education (68). Similarly, P. Regmi et al.2008 reported that because of poor knowledge on sexual and reproductive health especially in rural areas, young people do not utilize the SRH services (4).

- **Internalized gender norms related to help-seeking**

Nepalese social rules and regulations about how adolescent girls and boys need to behave have huge implication on seeking and utilizing adolescent sexual and reproductive health services (69). In the Nepalese context it is not expected to have sexual relationship before marriage and girls' virginity is associated with girls being simple, naïve, and innocent (70). However girls who are sexually active before marriage are often classified 'sluts' (70). For this reason, sexually active girls deny sexual knowledge and experiences. This value makes them reluctant to seek sexual information and suggestions such as contraception or condom use for their protection. During focus group discussions of a qualitative study conducted among 11 male and 12 female adolescents in Kathmandu, an 18 year old adolescent girl mentioned that "…*other might think I am learning unnecessary things"* when she wanted to learn about condom use (70). In addition, cultural norms such as obtaining permission from their husband or an elderly person at home often hinder SRH service utilization. For instance, Upadhyay et al. 2014 shows that 90% of teenage mothers reported that their husbands and mothers in law are the most influential person and make decisions regarding utilization of ANC services(71).

- **Perceptions of others and helping institutions as helpful and trustworthy**

It is important for young people that they trust other people such as parents, peers or other adults and health institutions to utilize sexual and reproductive services (3). However, this is not the situation in the Nepalese context. A qualitative study conducted among urban and rural young people in Kathmandu and Chitwan in 2007 shows that most adolescents feel

uncomfortable to share their sexual and reproductive health problems with their parents, teachers and community leaders. They further mention that there is huge generation gap, where senior people in their community and family do not listen to them (4). In addition, adolescent perception towards health institutions also plays a significant role. P. Regmi et al.2008 in his qualitative study conducted in Kathmandu and Chitwan reported that they do not want to visit health posts because they feel they will not get the services they need and heath post staff will refer them to hospital if they have a serious sexual and reproductive health problem (6).

- **Perceived stigma associated with the need for help**

There is still stigma associated with certain sexual and reproductive health services such as use of contraceptives and abortion services. Use of contraceptives especially by unmarried young boys and girls is stigmatized as sexually promiscuous, or irresponsible and dirty(72). For instance, Mathur S, et al., found that adolescents are hesitant to seek contraceptives from clinics and pharmacies because of the negative connotation of being associated as sexually active and fear of recognition in society (73).

- **Previous experiences with health facilities**

Adolescents' experiences with health facilities and health care providers have a significant impact on SRH help seeking and service uptake. Though there has been a substantial improvement in attitudes of health care providers, they are often still unable to recognize the special needs of unmarried adolescents (40). An analysis of community base sexual and reproductive programs which was implemented in Kathmandu and Nawalparasi district reported that health care providers often feel reluctant and uncomfortable while interacting with young girls regarding sexual and reproductive health. The participatory and quantitative data of the study shows that adolescent girls feel that they were poorly informed about physiology anatomy and sexuality (74). Adolescents do not seek support if they do not get proper support and services in their previous encounters with health facilities. A study conducted among 388 higher secondary school adolescents in Kathmandu reported that 30% of participants feel that currently available services are inadequate to meet their SRH needs. However, the study does not say anything about why adolescents feel the service is inadequate (48). This is because currently available services do not take heterogeneity and adolescent preferences into consideration. For instance, PR. Regmi et al., 2007 in their study reported that current sexual and reproductive health services do not cover whole range of SRH services which adolescent need and they need to refer higher level health facility as mention in following statement (6).

> "*I really do not like to go there [health post] because I know that I cannot get all services there. If we have a serious problem, we go to the hospitals in the town because we know that health post staff eventually transfer us there (a rural married male aged 23 years*) (6)."

- **Identity and other specific characteristics of the young person**

Studies have shown that young peoples' characteristics such as sex, education status, and marital status influence sexual and reproductive health service utilization (5, 48). For example, male and married adolescents tend to utilize SRH services more compared to female and unmarried adolescents. More freedom and less social control for male is one of the reasons behind this higher utilization (68). However, some of studies show girls seek SRH services more than male counterparts (5, 67, 75). For instance, in a mixed method study 1,400 young people in Kathmandu were asked about their health facility or doctor visits for SRH services (5). The study found that more females than males with 32% and 22% respectively visited health facilities. The qualitative part of study shows that contraceptive use is considered as women job which might be associated with this difference (5). In addition, the difference in SRH service utilization is associated with the fact that most of the young girls need maternal services (67).

- **Personal beliefs about what constitutes a need for help**

Most young boys and girls do not realize they need any sexual and reproductive health services. This might be because of lack of information and appropriate knowledge about sexual and reproductive health issues (49). A focus group discussion on R. Regmi et al. 2007 reports that a 15 year old girl did not seek any health care when she had pain and lumps in her breast. The girl explained that she thought it was normal and would disappear in a couple of days. Such belief and wrong perceptions about the severity of health conditions have negative effects on service utilization (6).

- **Self-efficacy and self-agency and personal coping skills**

The person capacity to look for health care services and that service makes a positive difference in health of that person is referred as self-efficacy and self-agency. In Nepalese society mobility of the adolescent girls is limited. Adolescent girls need to obtain permission and inform their parents, husband or in-laws if they need to seek health services. Because sexual health is considered a taboo unmarried adolescent girls cannot express their need to their parents to seek for SRH services. Such conditions hinder adolescents' ability to seek SRH services. In addition adolescents are economically dependent on their parents' so adolescents cannot seek health services on their own (49, 76). In addition, adolescents often share their problems with and take advice from their peers if they have any sexual and reproductive health problems. However, studies show that Nepalese adolescents have limited knowledge about SRH which hinders finding appropriate suggestions and support (51, 73).

3.4.2 Exogenous Factors

Exogenous factors are defined as issues related to community, family, and culture which have significant influence on the help seeking and thus service utilization among adolescents. These issues are further categorized as presented below.

- **Distance to seek help**

The distance to a health facility plays an important role for the utilization of sexual and reproductive health services among adolescents. Long travel distances hinder the utilization of SRH services (36, 75). An evaluation study of the national ASHR program finds that adolescents need to manage time from their school and household chores, which makes it difficult to access health facilities when they are far from their house or school (40). Similarly, a school-based study conducted among 388 adolescents in Bhaktapur district in 2015 in its multivariate analysis found that distance to health facility is significantly associated with service utilization. The study further reveals that the closer the distance higher the utilization. Furthermore, the study reported that students were seven times more likely to utilize SRH service when SRH services were within an emergency health service department. However the study does not mention explicitly what are the services are provided under emergency health service departments (48).

- **Economic constraints**

There has been some research conducted to explore the relationship between the financial situation of young people and sexual and reproductive health service utilization (50). Studies show that a lack of financial resources influences SRH service utilization (6, 50, 68). Young people in the PR. Regmi et al. 2010 study mention that economic problems act as a barrier to accessing health services. They further mention that young girls face more economic problems than boys (68). Similarly, a review study conducted by Gubhaju in 2002 shows that a lack of financial resources limits the ability to buy contraceptives or other SRH services in private health facilities (76).

- **Staff receptivity and youth-friendly health services**

Health care providers' receptivity towards adolescents' needs is one of the factors which has an extensive effect on SRH service utilization. Negative behavior of heath care providers includes rudeness, unfriendly behavior, blaming, and sometimes scolding, which deteriorates adolescents' willingness to seek health services when they are in need (77). Parkhanel K. 2016 reported that most of the adolescents are not treated properly in various health facilities (67). Similarly a mixed method study conducted among 1,400 young people aged 15-24 in Kathmandu shows that health care staff behavior was not friendly (5).

> *Health workers like nurses or other staff do not treat clients well. For example; if a girl goes there to abort her pregnancy then the nurses will start criticizing her which is bad practice and this adversely affects the client's psychological wellbeing'. —Unmarried male, aged 24 years.(5)*

The criteria to be adolescent-friendly in Nepal includes ”the availability of trained staff as well as information materials on adolescent sexual and reproductive health, the delivery of services in a confidential way, adolescent-friendly opening hours, the display of the AFS logo as well as the inclusion of two adolescents in the Health Facility Operation and Management Committee (HFOMC)” (39). In Nepal, many adolescents perceive that sexual health education and services are not sufficient or youth-friendly (50). For instance, especially in rural areas, condoms are not easily available and young people are always in fear about other people knowing when they buy condoms. Although urban young people have easier access to condoms they still fear other people’s reaction and this is a barrier to buy and use condoms (68). Though there are private clinics which provide sexual and reproductive health services, most adolescents depend on government facilities because of costs associated with private services. The opening hours of the government run health facilities coincide with school opening hours. Though government health facilities are labeled as adolescent-friendly however opening hours for hospitals is 10 am to 2 pm and 10 am to 3 pm for heath posts, which is inconvenient for adolescents (40). Training of health staff about adolescent needs and communication skills have positive influence in service utilization. Midterm evaluation study of National ASRH shows that the majority of adolescents were satisfied with the way health staff respond to their needs and health staff also feel this training helps them to change their attitudes towards adolescents’ needs (40).

- **Local values about adult adolescent interactions**

Sex and sexuality is a taboo in Nepal and is not discussed openly in families and communities. Studies show that teachers, family and health care workers are reluctant to discuss sexual and reproductive health with adolescents (6, 48, 50, 78). In relation to this, most adolescents fear to share their sexual and reproductive health issues with their parents, guardians or other elderly people (49). However, some of the studies in urban settings show that some parents, brothers, and sisters provide suggestions about sexual health issues such as relationships or condom use (68). It is seen that adolescents who have positive integration with adults in their surroundings feel more at ease to discuss sexual concerns. Another study shows that am urban young girl was able to take her boyfriend to her home because of positive interaction between her parents (68).

- **Community and cultural values about what constitutes need for help**

Various social and cultural values discourage young people to look for sexual and reproductive health services in Nepal (48, 50, 75). Nepalese society still has a negative opinion about the use of family planning and obtaining information related to sexual health, which hinders adolescents from seeking services. According to adolescents and health care providers, many people in Nepal think SRH information will spoil their children and contraceptives are only meant for married people (40). There are no youth-friendly special clinics for adolescents in Nepal and the community and family does not approve on the use of family planning methods by unmarried adolescents (79). Health workers use Sanskrit- and English-derived work instead of everyday Nepalese language while talking about SRH issues. This is because Nepalese culture associate sexual terms with dirt, and as inappropriate and vulgar (6, 49, 70, 74).

- **Sense of trust/connection created between adolescents and health providers**

Various studies show that provider-related factors are linked to whether adolescent will look for services or not. For instance, adolescents do not feel comfortable while speaking with a provider who they feel they is much older than them (4). The statement presented below shows the how adolescent feel disconnected with a service provider.

> *"I do not think that most young people go there for services because there are very few young service providers. How can we express our feelings to the people who are similar to our parents' age? (Urban unmarried male aged21years)" (6).*

Adolescents often do not trust health service providers of the opposite sex. For instance PR. Regmi 2010 reported that adolescent girls do not want to show their body parts to male doctors (6). Kiran B. et al. 2015 study shows that 71% of adolescents reported that lack of confidentiality is one of the major reasons for low utilization of sexual and reproductive health. services, which is also acknowledged by other studies (6, 40, 48, 49, 75). For example, adolescents who have not visited health facilities are often afraid that their issues would be discussed with others and they have to face embarrassment (40).

- **Legal policy context**

Legal policy refers to which services can be provided to the adolescent with parental consent or sometimes spousal consent (3). In the Nepalese context

there is no legal obligation which hinders unmarried adolescent access to contraceptives and other SRH services (48, 80). In principle, adolescents can easily access contraceptive services. In addition, safe and legal abortion is recognized as a sexual and reproductive health right. The government of Nepal is working on making abortion centers youth-friendly (17, 42). However, there is a special provision of informed consent needed from the nearest relative in case a women less is than 16 which could hinder access to abortion services for adolescents (41). This is similar to the global practice where countries permit parents to make important decisions about their children. For example, parental consent is needed in the United States if a girl aged below 16 wants to abort her pregnancy (81, 82).

- **Gender inequality**

Though gender inequality is not explicitly mentioned as an exogenous factor in the conceptual model, it has a considerable influence on adolescent SRH service utilization. Various studies show that young boys get more freedom and access to education, other opportunities, and even in health care.(5, 67, 68). In 2015 a qualitative study conducted by UNICEF in 12 districts exploring the current utilization of AFHS shows that girls often face restrictions to leaving home which hinders SRH service utilization(2). The statement presented in the box below further explains the gender difference.

> "Family members scold if a girl goes out of house without parental consent but they don't care if it's a boy in the family, he can go anywhere he wants."-FGD with parents, Kaski(2)

However, studies also report that in urban areas young males and females are treated much more equally than in rural areas (1, 23, 68, 69).

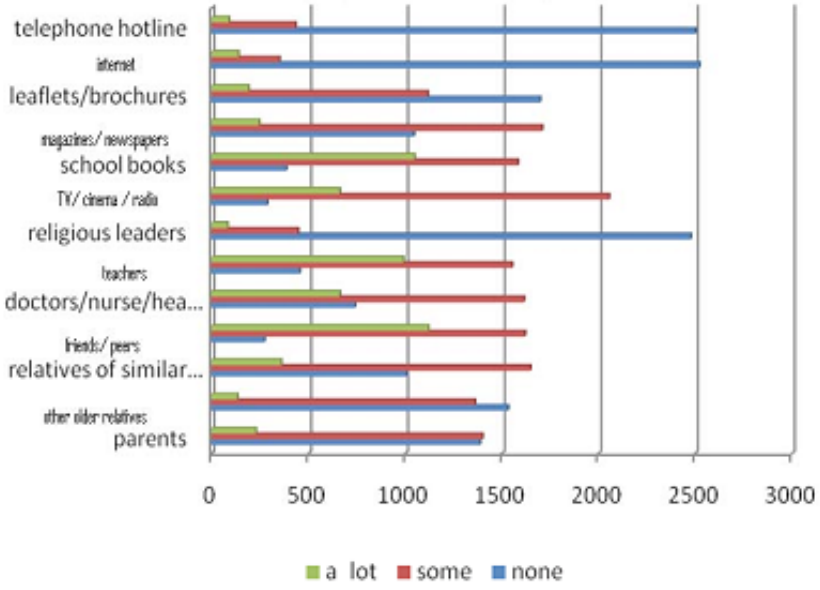
3.4.3 Factors related to social support

The support adolescents get from their close family, relatives, friends and peers and other members of society is crucial in their help seeking and utilization of sexual and reproductive health services. In Nepal urban and rural differences exist in how adolescent get support (36). This is because adolescents in urban areas have easier access to services such as the internet, newspaper, and health facilities than in rural areas (15, 36). In addition, being an educated or uneducated member of society also make substantial difference. A recent case study shows that young people felt that educated members of the community are supportive of young people realizing their sexual and reproductive health rights (SRHR) which helps them to seek information about sex and sexuality easily compared to being non educated member in society, The support of peer groups can be important for the use of sexual and reproductive health services (1). The

study further emphasizes the support of peer groups can be important for the use of sexual and reproductive health services.

A study conducted in four districts of three regions Central, Far western and mid far western region in 2012 shows that peers, friends, and school seem to be more important sources of sexual and reproductive health information than telephones, hotlines, internet, or religious leaders (as shown in Figure 3) (51).

Figure 3 Sources of information on SRH(51)



Chapter 4

Adolescent Sexual and Reproductive Health Interventions and its Challenges in Nepal

The current major adolescent sexual and reproductive interventions can be categorized as (i) information and skills, (ii) health services and counseling and (iii) safe and supportive environments (17).

(I)Information and skills

The Government of Nepal recognizes the importance of the correct and age-appropriate sexual and reproductive health information for adolescents to protect their health and wellbeing. It gives equal importance to information for parents, teachers, and social workers for adolescent health development. Currently the government of Nepal is implementing population education programs, information education and communication activities as well as FM radio and television programs (83). Various health facilities under the Ministry of Health and Population are disseminating adolescent sexual and reproductive health information through printed IEC/BCC booklets, ASRH posters, and ASRH comics, etcetera (39). In addition, every health facility needs to conduct at least four school health education classes which cover a range of topics on adolescent sexual and reproductive health. In addition, the government of Nepal organizes various campaign and rallies in various days such as World Population Day, International Youth day, National Family Planning day, etcetera to educate and advocate adolescents sexual and reproductive health (84). In addition, the government of Nepal broadcasts an adolescent sexual and reproductive health radio program with the technical and financially support of UNICEF (85). This program responds to various adolescent queries on their sexual and reproductive health, which receives more than 2,000 letters per month from adolescents throughout the country (85). Furthermore, the Ministry of Health and Population in collaboration with Ministry of Education is implementing a population education program which includes various sexual and reproductive health topics in the lower and higher secondary school curriculum. Various components of comprehensive sexuality education are now part of the health and population curriculum in grade 6-10. This program is supported by the UNFPA (67, 85).

(ii) Health service and counseling

Under this initiative the government of Nepal is trying to make sexual and reproductive health services adolescent-friendly, affordable, accessible, confidential, and non-judgmental (2, 85). The Ministry of Health and Population services develop adolescent-friendly criteria which includes ”the availability of trained staff as well as information materials on adolescent sexual and reproductive health, the delivery of services in a confidential way, adolescent-friendly opening hours, the display of the AFS logo as well

as the inclusion of two adolescents in the Health Facility Operation and Management Committee (17). At end of 2015, 1,140 health facilities in 63 districts were providing adolescent-friendly services in Nepal (39). A midterm evaluation of National ASRH program conducted in Doti and Banke district shows that health facilities were upgraded as adolescent friendly health facility. In order to make health facilities adolescent friendly-health workers are provided two days of orientation about adolescents' needs, in which education and communication materials are provide and a small amount of financial support of NPR 10,000 to is given to buy curtains make a private counseling area and benches for a waiting room.

However, the research further said that some staff do not use curtains though they are available at the health facility to maintain privacy. Health facilities also provide oral contraceptives, condoms, antenatal checkups, and HIV and STI services free of cost. In addition, in 2015 the government of Nepal announced free abortion services to remove the financial barrier which hinders the utilization of abortion service by the poor, marginalized and adolescent (86). In addition to this the government of Nepal is providing free maternity services with a transport incentive and free family planning services throughout in Nepal (29, 62).

(iii) Safe and supportive environment

The government of Nepal is working to make a conducive environment for adolescents by various activities so they can access and utilize sexual and reproductive health information and services. At the national level parliamentarians were oriented about the need for policy and legislation about adolescents. Efforts are made to include adolescents in decision making. For instance, it is mandatory to include one girl and one boy in the Health Facility Operation and Management Team. Furthermore, various non-governmental organizations working on adolescent sexual and reproductive health are implementing initiatives to promote the service utilization. In contrast, to government work most Nepalese NGOs working on adolescent sexual and reproductive health are engaged at the grass root level. The major organizations working for adolescent sexual and reproductive health in Nepal are UNFPA, Nepal Family Planning Association Nepal, IPAS, Marie Stopes International, and Sunaulo Pariwar Nepal. Organizations like the Nepal family planning organization and IPAS are implementing peer education program in various districts. For instance, the Family Planning Association is implementing peer education programs in 34 districts. Similarly, "Didi-Dai" peer education program is one of the effective programs to that involve education and promotion of adolescent sexual and reproductive health. Moreover, organizations like UNFPA and FPAN have young people networks throughout the country and they provide important platforms to engage young people in various levels such as implementation of programs to decision making process. Involvement of young people in sexual and reproductive information and service provision health not only

helps to increase the service use but also help to change social and cultural values regarding sexual and reproductive health. The following statement highlights the young peoples' efforts to convince their families and community and change the social believes regarding sexuality.

"We may not be able to change cultural beliefs but at least we can edit them…"- Young peer educator(1)

Challenges for Adolescent sexual and reproductive health programs

Various challenges exist to implement adolescent sexual and reproductive health programs in Nepal. The most important challenge is existing belief and values related to sexual health which makes it difficult for health providers and teachers to deliver sexual and reproductive health services and messages to adolescents. For instance, because of teacher hesitance and lack of preparedness to teach sexuality, often students' expectations on sex education are not met in their school (78, 87). Moreover, inadequately trained human resource on ASRH in health facilities, low resource allocation for programs at the central and local level, inadequate linkage with other programs (FP, SM, and HIV etc.), and inadequate IEC/BCC materials are identified as major issues for the ASRH program in Nepal (39). Recent operational research conducted to evaluate the effectiveness of the ASRH program shows that lack of training to health care workers to address adolescent issues is an important challenge in government run health facilities. Health workers highlight the importance of the training of all health staff in the facility to handle adolescent sexual and reproductive health issues to ensure that absence or transfer of the trained health staff does not jeopardize the quality of health service. Furthermore, a policy project prepared for the government of Nepal in 2003 identified existing gender norms as a major challenge for the ASRH program in Nepal. In the current social cultural and gender norm setting girls have less freedom and decision making power than boys. This acts as a barrier for girls to realize their human rights and access and utilize SRH services.

Chapter 5
Discussion

The literature review shows that adolescents are concerned about their mental, emotional, and behavioral aspects of sexual development. However current health programs are not completely addressing these issues. There are various factors which have profound effects on the limited utilization of SRH services by adolescents in Nepal. Some small scale studies shown that adolescents do not prioritize their sexual and reproductive health. The reason behind this is a low level of knowledge among adolescents about SRH which makes them think SRH issues are less importance. Social and cultural factors associated with sexual and reproductive health such as gender inequality, or unwillingness of parents and teachers to talk about SRH issues with adolescents often hinder the health seeking and SRH services utilization. In addition, health staff competencies to address sexual and reproductive health also influences help seeking and thus service utilization among adolescents. The government of Nepal has developed policies and strategies which aim to promote sexual and reproductive health of adolescents, but these needs to be better implemented as they are intended in those policy papers. Some current Nepalese sexual and reproductive health programs have good initiatives, such as involvement of young people in SRH programs, peer education program, and inclusion of comprehensive sexuality education in the school curriculum. These programs could be expanded.

In Nepal, most adolescents depend on the government health facilities for sexual and reproductive health services. However, study findings show that they prefer to go to private health facilities, because of issues related to privacy and confidentiality. Findings also show that adolescents would prefer government health facilities for SRH services, if they are made friendlier. The reason behind this is that the government health facilities provide the majority of adolescent sexual and reproductive health services free of cost. The global experience shows that training of health workers to address young peoples' issues is necessary to make services acceptable and accessible to young people. In addition, programs which focus on schools and peer groups are crucial for demand generation (88, 89). The training of health staff on adolescent sexual health could have a positive effect on SRH service utilization, however the limited number of trained health staff often makes it difficult to provide effective and quality services (40). Studies show that Nepalese adolescents trust their peer groups on their sexual and reproductive issues and seek support and suggestions from them. However, government run national adolescent sexual and reproductive health programs do not have any components which involve adolescents in the development and implementation of the programs. Therefore, the government of Nepal can learn from experiences and practices of FPAN,

IPAS, UNFPA and other organizations' practices of involving adolescents in sexual and reproductive health programming. Their experiences show that involving young people helps to develop built trust and acceptability of programs and services among adolescents (1, 73).

It is interesting to see that a study finding shows that adolescent girls do not perceive reproductive health as serious. However, this study finding might not applicable to wholes Nepalese adolescent girls as it includes only four ethic group from Tarai and Hill region. This less importance for reproductive health is partly because adolescents have limited knowledge of sexual and reproductive health. In some studies it is shown that adolescents have limited knowledge about sexual and reproductive health services that are available in health facilities. It is also important to note that social cultural taboos or shame associate with sexual health often hinder to access sexual and reproductive information. This is because there is limited program and which address the social and cultural issues. In addition, these customs and values are deeply rooted and entrenched in Nepalese society, and would be difficult to transform by an effort of a program, and needs multi sectorial approach and collaborations. Global experience shows that a school base SRH education is one of the best strategies to inform adolescents about SRH services and information. However in Nepal teachers are unable to teach sexuality content effectively in class. This may be caused by the fact that they feel reluctant and may be shy because of social norms and values. The rare discussion about sexual and reproductive health with parents further limits adolescent accessibility to sexual and reproductive services.

In Nepal social norms and cultural values related sex and sexuality such as linking sexual terminologies with dirt, badness, or immorality often hinders adolescents to discuss and seek sexual and reproductive health information and services. Unacceptability of premarital sex hinders use of contraceptives among Nepalese adolescents. However, the study of Niranjan S.et, al. conducted in Pokhara shows a high rate contraceptive use among adolescents which, is quite opposite to other studies without any explanation (59). The focus was on in school adolescents and it might be that they had a better knowledge about contraception than Nepalese adolescents in general. Furthermore, existing gender inequality, such as restriction on mobility and decision making power hinders adolescent girls use the SRH services especially among unmarried adolescent girls. Furthermore economic restraints among adolescents act as barriers for SRH services utilization.

The global evidence on how to integrate of sexual and reproductive health services in the school settings would be an important aspect to explore in the Nepalese context (52, 88). Kiran B. et al. 2015 shows that students are seven times more likely to use SRH services if they are school based (48). However, the study does not mention which services and how they were

provided to adolescents. It is also important to highlight that Nepal is making some positive efforts such as inclusion of various adolescent sexual and reproductive health topics in school curriculum, liberalization and provision of free abortion and contraceptive services, and initiation of adolescent friendly health to promote sexual and reproductive health of young people which can serve as good example for other neighbouring countries in South East Asia.

The framework adopted for this thesis is based in various international experiences on adolescent SRH. Factors mentioned on conceptual frameworks, such as making services youth-friendly, involving young people in SRH intervention can positive influence on sexual and reproductive health service utilization (88, 89),also in Nepal . There is limited evidence about the perception of adolescents' influencing them to seek sexual and reproductive health services and their needs should be explored in more depth in the Nepalese context. In addition, it is important to explore how sexual and reproductive health services can be made more effective outside health facilities like in schools, how adolescents can be involved them to act as agents of change and how financial barriers can be reduced. Furthermore, other issues such as the formation of formal support networks such as youth clubs, peer groups also need to be explored more.

The major limitation of this thesis is most of the studies in Nepal are focused on the age group 15-19 or from 15-24, which makes it difficult to make a concrete conclusion about adolescents aged between 10 and 15. This may be because of social norms values where it is considered inappropriate to talk and ask about sexual and reproductive health issues of younger age people. In addition many papers were small scaled studies so there is limited nationwide data on adolescent sexual and reproductive needs and utilization patterns. Furthermore, the limited research on out of school adolescents makes it difficult to generalize findings in a broader context. A strength of thesis is that it presents data from was able include both qualitative and quantitative studies, which helped to explore the factors which are influencing SRH service utilization among adolescent in Nepal. In addition, data from the National demographic health survey and the national adolescent and youth survey are used for analysis.

Chapter 6
Conclusion and Recommendations

6.1 Conclusion

The review of literature shows that utilization of the sexual and reproductive health services by adolescents is low in Nepal, where variation can be seen according to gender and urban or rural residence. It is also seen that though adolescents' look for services and information related to bodily changes, intimate relationships and psycho-sexual problems, the current sexual and reproductive health services are not responsive to their needs and are more inclined towards provision of reproductive health services. In the Nepalese context, adolescents' individual factors - predominantly knowledge related to sexual health and knowledge about and earlier experiences with services and adolescent experience about health facilities - have profound influence on SRH service utilization. Social and cultural norms about SRH issues and long distances also reduce health seeking and service utilization. On the contrary, provision of adolescent-friendly services, free services, and the positive legal environment help to increase use of SRH services in Nepal. The legalization of the abortion law and provision of contraceptive service irrespective of marital status are some positive initiatives to promote SRH service utilization among adolescents in Nepal, but this needs to be further materialized. Government initiatives such as provision of sexual and reproductive health education in schools, IEC campaigns, and NGO initiatives to involve young people in various SRH programs, advocacy, and peer education help to promote sexual and heath wellbeing of adolescents. The review of literature shows various initiatives that could needed to promote an adolescent-friendly social environment where they can use and seek SRH services without any fear, prejudice, or hesitation so they can protect and promote their sexual and reproductive health.

6.2 Recommendations

Based on the research findings the following recommendations are suggested for various stakeholders to undertake further actions.

For policy makers and ministry of health and population

- The Ministry of Health and Population should make sure to involve of young people in policy development planning, and, implementation of SRH programs
- The Ministry of Health and Population needs to work in collaboration ministry of education and other stakeholders to train teachers so they can deliver sexual and reproductive health information and services easily and effectively
- There should be experience sharing or knowledge exchange mechanisms between the Ministry of Health and Population and

bilateral agencies and NGOs working in sexual and reproductive health of adolescents
- It is important to work in the areas of generating demand for SRH services by creating awareness through schools, communities, and mass media

Heath service provision

- The government of Nepal should work towards making sexual and reproductive health services adolescent-friendly throughout the country.
- It is important to use a variety of providers including public, private, formal, and informal to provide for sexual and reproductive health information and services for young people
- NGOs also need to expand their sexual and reproductive health services in rural areas.
- The government of Nepal needs to train more heath workers on adolescent sexual and reproductive health needs, including and their counseling and communicable skills

For community and parents

- Parents and community members should help to make adolescent-friendly families and communities where they can easily access sexual and reproductive health services and information.

For researchers

- Researchers need to explore in detail adolescents' perceptions about their sexual and reproductive health issues.
- It is important to explore integration of the adolescent' sexual and reproductive health services on schools.
- More research is needed to explore the out of school and community adolescents' sexual reproductive health needs and perception.

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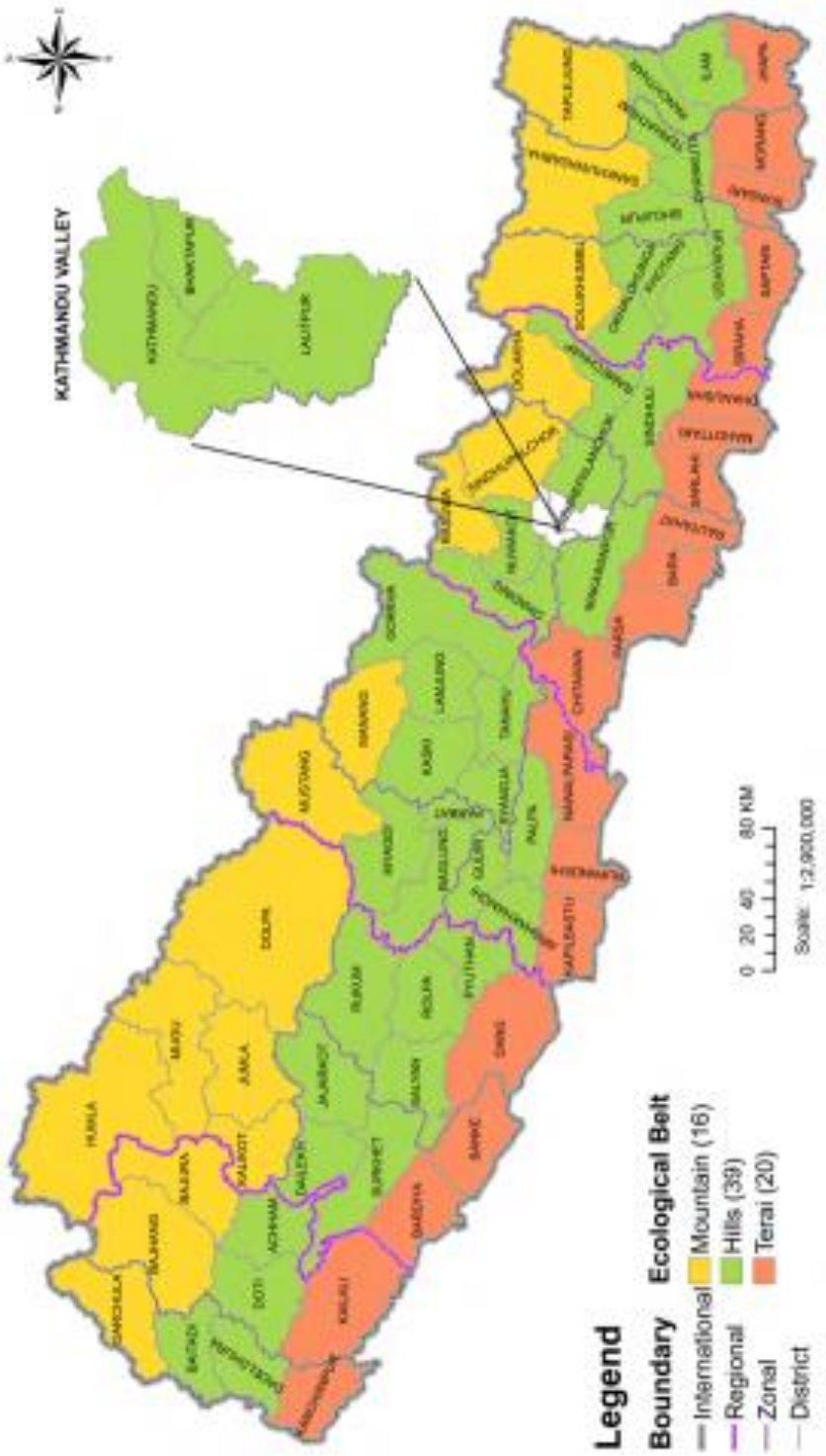
1. Appendices

Annex 1. Research Table

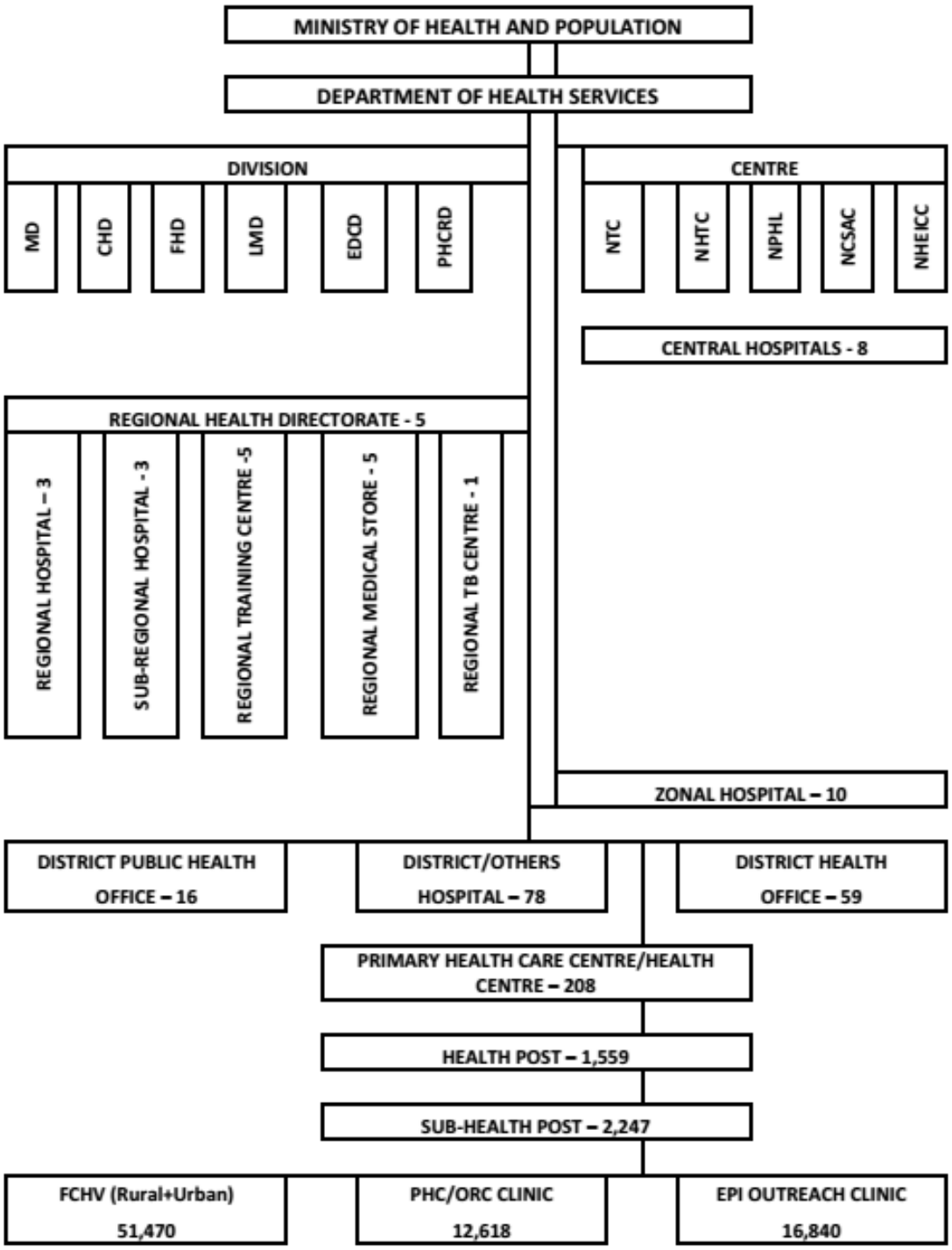
General Objective			
To explore sexual and reproductive health needs and SRH services utilization pattern among adolescents in Nepal and provide necessary recommendation for the optimum use and improvement of existing SRH services			
Specific Objectives	Issues	Method	Type of study
1. To discuss the sexual and reproductive health services utilization among adolescent in Nepal.	Access, affordability, quality	Literature review	Quantitative study
2. To identify the sexual and reproductive health needs among adolescent in Nepal	Perceived need, Existing needs	Literature review	Quantitative study and Qualitative studies
3. To explore the individual and exogenous factors which influence the utilization of sexual and reproductive services among adolescent in Nepal	Social cultural, social support, availability of services of services, realization of needs	Literature review	Quantitative study and Qualitative studies
4. To compare existing SRH policies and interventions in Nepal with those of neighboring countries and identify ASHR best practices	Human resources, infrastructure, financial resource, cultural values	Literature review	Policy and program reports
5. To provide recommendations to the Ministry of Health and Population and other stakeholders to accommodate adolescent sexual and reproductive health needs and improve the service utilization	-	-	-

Annex 2: Nepal Administrative Division



Source: DoHS Annual Report 2014/2015

Annex 3: Organogram of Department of Health Services (DoHS)



Source: DoHS Annual Report 2014/2015