ADOLESCENTS KNOWLEDGE AND PERCEPTION OF SEXUAL AND REPRODUCTIVE HEALTH AND SERVICES- A STUDY FROM NEPAL

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February, 2016

ABSTRACT

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Prakash Khanal: Adolescents Knowledge and Perception of Sexual and Reproductive Health and
Services- A study from Nepal.
Master's Thesis, 78 pages, 2 attachments (4 pages)
Instructors: Dr. Sohaib Khan, MBBS, MPH, PhD
February 2016

Key Words: Adolescents, Sexual and Reproductive Health and Rights, Perception, ASRHR, Sexual and Reproductive Health Services

ADOLESCENTS KNOWLEDGE AND PERCEPTION OF SEXUAL AND REPRODUCTIVE HEALTH AND SERVICES- A STUDY FROM NEPAL

Every fifth person in the world i.e. around 20% of global population is adolescents and slightly more than this, in Nepal, adolescents comprise of 24 percent. Adolescents in developing countries including Nepal often face limited access to health information and services. Different factors like poverty, gender inequality, social economic status, social norms and tradition play crucial role in determining adolescent's access to sexual and reproductive health knowledge and available sexual and reproductive health services. This study aims to examine the knowledge of adolescent on sexual and reproductive health and also understand their perception towards available sexual and reproductive health services. The study was conducted in Kapilvastu and Arghakhanchi districts of Nepal. It used qualitative methodology and purposive sampling technique. In-depth interviews were conducted using the semi structured format. Total 20 participants were interviewed, 10 from each district where half of the respondents were female. The study found out that adolescents from both districts were aware about some of the common Sexual and Reproductive Health problems like HIV/AIDS, Syphilis and Gonorrhea and some issues like early marriage, teenage pregnancy and gender inequality were also mentioned. Course books, mass media (TV and Radios) and peers were the source of information. The culture of communicating SRH problems with parents was almost non-existing except girls getting information from mothers during menstruation. None of the participants were aware of the Adolescence Sexual and Reproductive Health services available in their community neither had they ever utilized any services. The most important reasons identified for not utilizing the services were social stigma, lack of information, service quality and service provider behavior.

ACKNOWLEDGEMENT

My sincere appreciation goes to my supervisors Dr. Sohaib Khan and Professor Jussi Kauhanen for their guidance throughout the study process. This study would not have been possible without the support and continues encouragement from my principle supervisor Dr Sohaib Khan who not only guided me from the inception of the research idea but also motivated me in going deep into the study and finding the clause that might be helpful for further studies.

My heart goes out to all who supported me during my field visit. I am grateful to the participants of my study from both Arghakhanchi and Kapilvastu districts. I am thankful to Mrs Bishnu Ghimire, Executive Director of Sakriya Sewa Samaj for her encouragement and advice during the data collection process and thanks to the district level staffs of Sakriya Sewa Samaj for their help in connecting with study participants in Arghakhanchi district.

Special thanks to my wife Anupa Thapa for her support, suggestion, and above all the love she shown on me. I am always indebted to my parents for their love, encouragement and enduring my absence during the duration of my study.

Thank you one and all.

Prakash Khanal

Kuopio, Finland

February, 2016

TABLE OF CONTENTS

ABSTRACT	i
Acknowledgement	ii
1. INTRODUCTION	9
2. LITERATURE REVIEW	10
2.1 Background	10
2.2 Defining the terms	11
2.2.1 Adolescence	11
2.2.2 Sexual health	
2.2.3 Reproductive health	
2.2.4 Reproductive health care services	
2.3 Situation analysis	14
2.3.1 Sexual and reproductive health: An international agenda	14
2.3.2 Regional scenario of sexual and reproductive health	15
2.3.3 National scenario of sexual and reproductive health	16
2.3.4 National adolescent sexual and reproductive health (ASRH) program	17
2.4. Adolescent knowledge on SRH and SRH services	19
2.5 Adolescent sexual and reproductive health issues	
2.5.1 Gender inequality	
2.5.2 Cultural and religious taboos	
2.5.3 Communication gap with guardians and adults	
2.6 Adolescent sexual and reproductive health problems	
2.6.1 Sexually transmitted diseases (STDs)	
2.6.2 HIV/AIDS	

	2.6.3 Early marriage and teenage pregnancy	27
	2.6.4 Menstruation related issues	28
	2.7 Sexual and reproductive health services available for adolescents	29
	2.7.1 Sex education at school	29
	2.7.2 Counseling	30
	2.7.3 Family planning and safe abortion	31
	2.7.4 Adolescents friendly reproductive health services	32
	2.8 Barriers to the utilization of available SRH services by adolescents	33
	2.8.1 Lack of SRH knowledge	33
	2.8.2 Accessibility of heath institutions	34
	2.8.3 Health worker's behavior	35
	2.8.4 Stigma related to sexual and reproductive health	35
3	OBJECTIVES OF THE STUDY	37
	3.1 General objective	37
	3.2 Specific objectives	37
4	MATERIALS AND METHODS	38
	4.1 Study sites	38
	4.2 Study design	38
	4.3 Selection of study participants	39
	4.4 Data collection methods	39
	4.5 Data management and analysis	39
	4.6 Ethical consideration	40
5	RESULTS	41
	5.1 Knowledge about SRHS	43

	5.1.1 Knowledge on sexual and reproductive health (SRH)	. 43
	5.1.2 Knowledge on available sexual and reproductive health services	. 44
	5.2 Adolescents sexual and reproductive health problems	. 46
	5.2.1 Socio-cultural issue	. 46
	5.2.2 Health related issues	. 49
	5.3 Perception of adolescents regarding existing SRH services	. 52
	5.3.1 School health program	. 52
	5.3.2 Adolescent friendly health services	. 53
	5.4 Barriers to SRH service utilization	. 55
	5.4.1 Availability of adolescent sexual and reproductive health services	. 55
	5.4.2 Accessibility to health facilities	. 56
	5.4.3 Health workers behavior	. 57
6.	DISCUSSION	. 58
	6.1 Discussion of the findings	. 58
	6.2 Strength and limitation of the study	. 61
	6.3 Validity and reliability	. 62
	6.4 Implication and further research	. 62
7.	CONCLUSION	. 64
8.	REFERENCES	. 65
9.	ANNEXES	. 75
	9.1 Annex I: In-depth interview guidelines	. 75
	9.2 Annex II: Informed consent	. 77

LIST OF TABLE AND FIGURES

Figures

Figure 1: Chronology of National Adolescent Sexual and Reproductive Health Program in	ı Nepal
	17
Figure 2: Geographical map of Nepal	38

Table

Table 1: Details of respondents	participated in the in-depth intervi	ew
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ABBREVATIONS

AFS	Adolescent Friendly Services
AIDS	Acquired Immune deficiency Syndrome
ANC	Antenatal Care
ARH	Adolescent Reproductive Health
ART	Anti-retroviral Therapy
ARV	Anti-retroviral
ASRH	Adolescent Sexual Reproductive Health
BCC	Behavior Change Communication
CDC	Centre for Disease Control
DHS	Demographic Health Survey
EC	Emergency Contraception
FP	Family Planning
FHD	Family Health Department
HIV	Human Immunodeficiency Virus
HP	Health Providers
ICPD	International Conference on Population and Development
IDI	In-depth Interviews
IEC	Information Education Communication
INGO	International Non-Governmental Organization
MCH	Maternal and Child Health
MOHP	Ministry of Health and Population
NGO	Non-Governmental Organization
NHSP	Nepal Health Sector Program

РНС	Primary Health Care
RH	Reproductive Health
RHCC	Reproductive Health Co-ordination Committee
SRH	Sexual Reproductive Health
SRHR	Sexual and Reproductive Health Rights
STI	Sexually Transmitted Infections
STD	Sexually Transmitted Diseases
UN	United Nations
UNDP	United Nations Development Program
UNICEF	United Nations Children Education Fund
UNIFEM	United Nations Development Fund for Women
UNFPA	United Nations Fund for Population Assistance
UNGASS	United Nations General Assembly Special Session
VCT	Voluntary Counseling and Testing
VDC	Village Development Committee
WHO	World Health Organization

1. INTRODUCTION

The World Health Organization (WHO) defines adolescents as the age group of ten to nineteen years. It is considered as a time of transition from childhood to adulthood where various biological, psychological and social transitions take place. Physical transition reflects in their appearances, voice and sexual activeness whereas psychological transition reflects in their individual thinking followed by social transition where individual starts thinking about their rights (Steinberg 1990). According to UN Department of Economic and Social Affairs, the population of people aged 10 to 24 years was 721 million in 1950 when the global population was 2.5 billion (UN Department of Economic and Social Affairs 2014). Today out of 7.3 billion of world population, the young people numbers little less than 1.8 billion (UNFPA 2014).

Adolescents in developing countries including Nepal often face limited access to health services and education followed by poverty and constricting cultural and sexual norms. Especially women in this context are more disadvantaged with regards to literacy, health and overall wellbeing. In Nepal adolescents comprise of 24 percent and young people comprise of 33 percent, which is a larger proportion to the global comparison (MoHP 2011). Though the government of Nepal has recognized adolescents and youth as under-served and vulnerable population with specific sexual and reproductive health needs, however only limited number for program has been implemented targeting these age groups (Khatiwada et al. 2013).

Various multilateral and bilateral organizations along with ministries, NGOs and CBOs have collaborated in identifying key strategies and approaches to reach adolescents with suitable sexual and reproductive health services. Though sexual activity starts fairly at early age, sex and sexuality is still not an openly discussed topic in Nepalese societies where there are strong traditional norms and beliefs (Mahat et al. 2001). According to the Nepal Demographic Health Survey of 2011, 4.6% of 15 to 19 years women were estimated having sexual intercourse by the age of 15 years and 40% of women aged between 20 and 24 had sexual intercourse by age 18 and 58% by age 20 (MoHP 2011). Acharya et al. reported that adolescents and young people have inadequate access to appropriate sexual and reproductive health information and the aim of this study is to further explore the phenomenon in qualitative methodology (Acharya et al. 2009).

2. LITERATURE REVIEW

2.1 Background

Adolescent sexual and reproductive health is listed as one of the fundamental components of reproductive health program in Nepal. As a signatory of Child Conference 1989 and ICPD 1994, Nepal is committed to improve reproductive health status of the people throughout the country. The ninth five year plan and second long term health plan (1997-2017) have stressed in developing special programs on population control and reproductive health of adolescents which was followed by development of National reproductive health strategy in 1998. (National adolescent health and development strategy 2000) This national strategy introduced integrated reproductive health packages at all levels comprising of activities like advocating for reproductive health; reviewing and updating Information, Education and Communication (IEC) materials & training; strengthening management systems at all levels; conducting reproductive health research; constructing and upgrading appropriate service delivery and training facilities; developing reproductive health programs for adolescents; supporting national experts and consultants; and promoting inter-sectoral and multi-sectoral co-ordination (Pradhan et al. 2008).

Similarly, the National Adolescent Health and Development Strategy (2000) have the objective of increasing the accessibility and availability to information on development of adolescent health. The strategy also aims at building skills among adolescents, educators and service providers, increase accessibility and utilization of health and counseling services by adolescents; and to create supportive environments for adolescents to improve their legal, social and economic status (UNICEF 2013). Nepalese young people get sexual and reproductive health information and education through radio and health education program (UN 1995). Young people gain sexual health care when they visit health centers, hospitals, or clinics. In rural areas, people hugely depend on primary health care centers run by governments for all kind of service including SRHS. However, majority of those service providers are not adequately equipped and already overloaded with work burden. Thus service seekers like young people and adolescents often suffer from inadequate access to sexual and reproductive health information and related services (Girard 1999).

2.2 Defining the terms

2.2.1 Adolescence

According to the categorization of the World Health Organization, adolescents are the persons aged between 10 to 19 years (WHO 2002a). This period of adolescence is further categorized into three stages namely early adolescence, mid adolescence and late adolescence. Early adolescence is the persons between the ages 10 to 13 years which is categorized by growth along with sexual maturation. Similarly mid adolescence is the persons between the ages 14 to 15 years which is categorized by the development of stronger sense of identity and late adolescence is the persons between ages 16 to 19 years and is categorized by the development of adult form (WHO 2006).

Adolescence is also referred as a phase of rapid physical and cognitive growth. This is a sensitive stage of life where both girls and boys experience hormonal changes in their body. Not only their body starts taking adult shape but also they become sexually mature. As a result adolescents at this age are often attracted towards opposite sexes which lead to intimate relationships. Moreover this is also the period where one develops their cognitive power making them capable of abstract and critical thoughts. Adolescence is the period where human starts experiencing sense of self-awareness and emotional independence (WHO 2002a).

Meanwhile adolescence is equally fragile phase because the recently acquired sense of awareness and emotional independence are still in liquid state which required favorable family and sociocultural environment to crystallize and take proper shape. In short adolescent is that crucial phase of human life where one develops and assume greater personal responsibility according to their exposure and experimentation.

The target group of this study is the adolescent between 15 to 19 years of age commonly referred as late adolescents. In comparison to early and mid adolescent, teenagers at this group are more composed and mature. Not only they have already acquired major physical changes, they have also obtained cognitive maturity. The typical adolescence features like risk taking, curious, anxious are less prevalent among late adolescent. Therefore late adolescence is also perceived as the period of opportunity. However they still have strong peer influence (UNICEF 2011).

2.2.2 Sexual health

According to WHO, sexual health is defined as "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 safe sexual experience, 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" (WHO 2006).

2.2.3 Reproductive health

The International Conference on Population and Development (ICPD) 1994 defined reproductive health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity in all matters relating to the reproductive system and to its functions and processes. Reproductive health therefore implies the people are able to have a 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. Implicit in this last condition are the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of their choice for regulation of fertility which are not against the law, and the right of access to appropriate health-care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant" (ICPD 1994).

2.2.4 Reproductive health care services

The United Nations Inter-Agency Task Force for the implementation of ICPD program of actions has prepared standard guidelines on sexual and reproductive health which includes global targets and encourages its member countries to devise program of action relevant to their country's situation and capacity (ICPD 1994). Based on this standard document, governments from different countries have derived their own policies and strategies on sexual and

reproductive health after conducting their need and resource assessment. Global analysis of reproductive health care services reflects common activities like family planning promotion and distribution of family planning devices, prevention, cure and management of sexually transmitted diseases, prevention and management of maternal and perinatal mortality and morbidity. While some countries had already adopted provision of safe abortion into its reproductive health program, in some other countries legalizing abortion is burning issue of discussion. The United Nations also recommends integrating cross cutting issues such as gender based violence, infertility, malnutrition and anemia, and reproductive tract cancers within national reproductive program (UN 2006).

In the context of Nepal, the population control program focusing family planning and safe motherhood were existent even before ICPD program of action but their coverage and effective implementation are matter of concern even today. However it is only after ICPD 1994, reproductive health got required attention in Nepal. As a signatory of ICPD program of action, Nepal for the first time introduced its National Reproductive Health Strategy in 1998 which constitute an integrated package of health service including family planning, safe motherhood and safe abortion program. Moreover family planning services in Nepal are listed as priority program under essential health care service and contraceptives are distributed by the public sector free of charge.

In concern to adolescent, the government of Nepal has formulated National Adolescent Health and Development strategy whose primary objective is to impart knowledge and skills among adolescents and motivate them for utilizing adolescent's health and counseling services through increasing service accessibility and creating supportive environments. In addition, adolescent health program of Nepal also provide nutrition education and micronutrient services. These activities are carried out in four different level – family and community level, school level, work place level and disadvantage group level. Basically Nepal's adolescent reproductive health services includes activities like reproductive health information sharing using standard information package, training to adolescent, service provider and educators, adolescent friendly health clinics, out-reach services and counseling, rehabilitation services for substance abuse and needy adolescents, establishing coordination between health facilities, schools, local clubs and parents to create enabling environment (FHD 2000).

2.3 Situation analysis

2.3.1 Sexual and reproductive health: An international agenda

The human right of the child under the age of 18 was addressed by the Convention on the Rights of the Child in 1989 which was one of the key conventions on international human right which addressed numerous provisions encompassing the reproductive rights of adolescents (University of Maryland 2011). This Convention declared that children (0-18 years) had the right to information and services to survive, and to grow and develop to their full potential. However a landmark regarding young people health was ICPD, which was held in Cairo in 1994. For the very first time in this forum young people's right to sexual and reproductive health was prioritized and taken as an international agenda. Participants of ICPD 1994 agreed to the program of action which emphasized on fulfilling the sexual and reproductive health needs such as sexual education, contraception use among unmarried young people, gender relation and abortion of all adolescents aged between 10 to 19 years and young people aged between 10 to 24 years (UN 1995, Pradhan et al. 2008). Later in 1999 ICPD +Five was organized as the follow up to ICPD'94 where the achievement towards its goals was evaluated. In spite of the agreements made during the 1994 conference, it was revealed that young people's sexual and reproductive health needs were still underserved in many countries.

Every fifth people in the world are adolescents who have their specific issues and problems like any other group of age (DoHS 2000). Though emphasized by ICPD, there still remains a significant gap between the realities of adolescent's health and the provision contained in convention document. Often governments are asked to take steps and ensure the rights of adolescents by the Committee on the Rights of the Child, and many concluding observations of government by the committee are stressed on adolescent's right issues (Gubhaju 2002).

2.3.2 Regional scenario of sexual and reproductive health

According to the World Bank, South Asia is the world's most crowded region with 1.7 billion populations as of 2014 (World Bank 2014). A significant percentage of the population in this region is deprived of basic human need such as food, shelter, clothing, health and education. With the average life expectancy of 67 years, this is the region of class, caste, gender and race, inequalities, political crisis, terrorism and turmoil. About 73 million women in South Asia are victims of social-economic discrimination and injustice. In some of the countries of the region the discrimination in the name of gender starts even before the birth of a child. Sex selective abortion particularly female feticides are largely existent in the countries like India, Bangladesh and Nepal (Abrejo et al. 2009). Early marriage is another issue that girls in this region have to deal with. Though the trend of early marriage is declining, it is still consider as normal and social responsibility in some of the South Asian countries like Bangladesh, Nepal and India where the percentage of women getting married by 18 years of age were 66%, 51% and 47% respectively (WHO 2011).

Sexual and reproductive health problems of women aged 15 to 44 are serious public health concern in the countries of South Asian region. Despite long history of intervention, maternal mortality is still alarming in this region with an average rate of 550 per 100,000 live births (ranging from 340 to 800). Likewise under nutrition and anemia are also widespread in South Asia. More than 80% of adolescent girls and 85% of pregnant women in this region suffers from some kind of anemia. Similarly contraceptive prevalence rate is low and unmet need for contraception is high. In the countries like Nepal, Maldives and India, the unmet need for contraception is found higher among women of 15 to 19 years age group. Moreover sexually transmitted infections are also equally common among young people of South Asian countries. For instance in Bangladesh more than half of the patients who seek STI treatment services through formal facilities were young people (WHO 2013).

2.3.3 National scenario of sexual and reproductive health

The adolescents age 10 to 19 and young people age 10 to 24 encompass larger proportion of Nepalese population. According to NDHS 2011, the percentage of adolescent and young people population were 24 and 33 respectively, thus more than half of the population of Nepal is young (NDHS 2011). This can be taken as a great opportunity for the country's economic prosperity; however scenario is different in case of Nepal. Not only adolescent and youth are deprived from their fundamental human rights like education, they are also suffering from different types of socio-economic injustice, health problems and substance abuse.

Especially adolescent girls in Nepal face harmful socio-cultural norms related to puberty and gender. The practice of early marriage is still common in Nepal with almost 29 % of 15 to 19 years women and 77% of 20-24 years women getting married. The reported median age for first marriage for women was 17.5 years and 21.6 years for men. The data itself speak the critical situation of Nepalese adolescents and youth because at this early age while same age groups people in western countries are involved in education, training and career development, Nepalese girls and boys are already burdened with responsibility of family making (NDHS 2011).

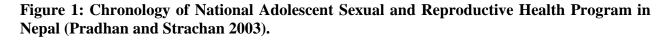
Meanwhile Nepalese society is also changing which has both positive and negative impact. The decreasing trend of early marriage and early pregnancy, increasing percentage of girl's education, employment etc are positive part of social change. At the same time problems of modern society are slowly increasing in Nepal. Traditional premarital sexual activities are considered unethical and unreligious in Nepal, however the involvement of adolescents and youth in such activities are increasing day by day. Sexual relationship in itself is not bad but the data shows that significant number of young people age 10-24 years in Nepal are involved in unsafe and unplanned sexual activities. Therefore the risk of sexual and reproductive health problems is higher among young people in Nepal.

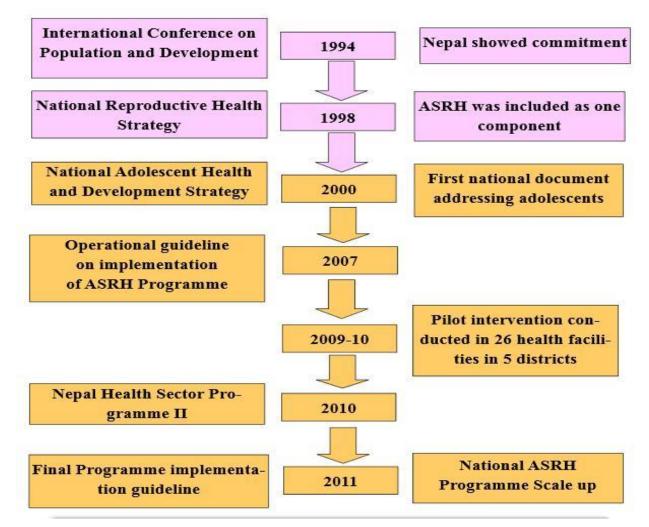
The knowledge of contraception is considered almost universal among young people in the country but their awareness doesn't reflect in their practice. The data shows only 14% of 15 to 19 and 14% of 20-24 years of currently married women use modern contraception. The situation is even worse if we consider the practice of contraception young people at their first sexual

intercourse. Almost 33% 15-19 years and 40% 20-24 years people don't use any kind of contraceptive at their first sexual intercourse (Pathak and Pokharel 2012).

2.3.4 National adolescent sexual and reproductive health (ASRH) program

Nepal as a signatory of ICPD 1994 has initiated several reproductive health program for different target groups including adolescent to fulfill its national and international commitment. In the year 2000, the government of Nepal adopted a National Adolescent Health and Development Strategy to address adolescent-specific health and development issues in Nepal. The sequential picture of Nepal's adolescent health program is shown below in the figure.





The main objective of National Adolescent Sexual and Reproductive Health program was to improve the sexual and reproductive health rights of adolescents through adolescent friendly services made available in public health facilities, information sharing and training adolescents, service and peer educator to enhance utilization of adolescents sexual and reproductive health services including family planning services. The strategy also recognizes the need to create enabling family and social environment so that adolescents can develop and practice safe and responsible behaviors and seek appropriate services. The priority area included in Adolescent Sexual and Reproductive Health Program of Nepal are as follows (FHD 2000):

- Issues of human sexuality such as puberty, marriage and sexual relationships.
- Family planning and contraceptive devices to prevent early and unwanted pregnancies and STIs among all sexually active adolescents.
- Safe motherhood, newborn care and responsible parenthood.
- Safe abortion and prevention and management of its complications.
- Prevention and treatment of reproductive health problems including HIV/AIDS and other sexually transmitted diseases and reproductive tract infections.
- Nutrition promotion especially focusing adolescent girls and their nutrients requirement.

To bring this strategy into action, the Nepal Health Sector Program (NHSP) II was endorsed by Ministry of Health and Population, with the aim of introducing 1,000 adolescents friendly services (AFs) by the year 2015. By the end of 2012, 516 health facilities in 36 districts were already covered by AFs. To success this program, the Ministry of Health along with different donor agencies are working human resource development, organizational development, cooperation and network development and system development in policy field. The district managers, health service providers and local stakeholders such as NGOs were given programmatic and technical orientation concerning sexual and reproductive health. Similarly upgrading the health facilities with equipment and standards for AFs were introduced. Nevertheless formations of Reproductive Health Co-ordination Committees (RHCC) in districts were carried on ensuring the meaningful participation of adolescents in as committee members.

2.4. Adolescent knowledge on SRH and SRH services

The term "Sexual and Reproductive Health" gained global recognition and popularity since 1994 International Conference on Population and Development held in Cairo. The holistic definition of reproductive health which also included sexual health was devised in the ICPD programme of action. This definition was endorsed by 179 participating countries and also they expressed commitment to promote sexual and reproductive health in their respective countries. Since then SRH programs had been implemented with high priority in different countries and substantial progress had been achieved within this 20 years. Basically the global initiation towards ensuring SRH rights of all individual was guided by ICPD programme of action according to which every government was entitled to provide essential SRH services as part of its primary health care (UN 1994). The essential SRH services recommended by ICPD programme action were:

- Family planning, ANC, Safe delivery and PNC services.
- Prevention and appropriate treatment of infertility, STIs, HIV and AIDS
- Prevention of abortion and management of its consequences
- Prevention and surveillance of violence against women as well as care of survivors.
- Strengthen referral system for further diagnosis and management of above problems.
- Promotion of human sexuality and RH using appropriate methods like information, education and counseling.

Nepal was one of the 179 countries who expressed their commitment towards ensuring SRH right among their citizens. To bring the commitment into action, Nepal formulated National Reproductive Health Strategy after 4 years since Cairo conference which included adolescent sexual and reproductive health as an important component. Later taking a step further after 2 years in 2000, it introduced separate National Adolescent Health and Development Strategy

which was in fact the first official documents addressing adolescent's concern. Then after an operational guideline was prepared based on which Nepal government conducted pilot ASRH program in some selected health centers of the country and finally on the success of the pilot project, the government had scaled up the program throughout the country. Some health centers from our study districts were also included in the national ASRH program. Therefore it will be interesting to explore how effective this program had been in imparting SRH knowledge among the target population.

Significant numbers of studies have been conducted to investigate adolescents' knowledge and perception towards SRH and its services in Nepal. A study was conducted among 3041 adolescents of age 15-19 years residing in the rural areas of 4 districts of Nepal in 2011 which concluded that the participants had moderate reproductive and sexual health knowledge. The same study revealed male respondents having better knowledge compare to female participants regarding SRH issues like HIV/AIDS. Regarding the source of SRH information, the participants mentioned their parents, friends/peers, school books/ teachers and media like TV, cinema and radio as their source of information. The most popular source which was mentioned by more than 90% of the respondents was media, after that was parents with around 53%. Likewise 50% also answered school book as their source of SRH information (Simkhada et al. 2012).

Next study was carried out in four randomly selected higher secondary school of capital city in 2007. In the study out of 417 respondents, more than 70% were found to have good practice of SRH. Good practice here implies participants have equal or more than 80% knowledge and practice of SRH. Like above mentioned study, this study's participants also listed multiple sources for SRH information. In this case also media received highest percentage (94.52%) followed by teachers (51.51%), friends (47.95%) and parents (43.84%). This study also revealed nearly one quarter of adolescents being involved in premarital sex and participants from joint family were more likely to perform unsafe sex practices (Paudel and Paudel 2014).

Likewise a further analysis of National Demographic and Health Survey 2011, found variation in the comprehensive knowledge of HIV/AIDS among adolescents based on their educational level, residence and marital status. For instance 53% of male adolescents with secondary and higher

studies had comprehensive knowledge about HIV/AIDS over only 1% of male with no education. Similarly 40% of urban adolescents were well aware about HIV/AIDS while only 33% of rural male and 25% of rural female had complete HIV/AIDS knowledge (Khatiwada et al. 2013).

2.5 Adolescent sexual and reproductive health issues

2.5.1 Gender inequality

Gender based inequalities mean that individuals face barriers deciding if, when and with whom to have sex; whether to use contraception; if, when and how many children to have; and how to seek health care (IPPF 2015). Gender considerations involve both men and women understanding opportunities and constraints as their decision effects both of their lives. Gender role and its definition are strictly stereotypical and also fail to resemble to external changes. The uneven expectations are the root of continuing gender inequality. Achieving Millennium Development Goal 3 requires guaranteeing women's and girls' sexual and reproductive health and rights however currently their reproductive health status is poor and their SRH rights are not fully realized in many countries (UNIFEM 2008).

The chances of women dying of pregnancy related complication in developing countries are as high as 50 times in comparison to that of developed countries, which obviously shows the higher rate of maternal mortality. One quarter of married women in Sub-Saharan Africa and one fifth of married women in North Africa and middle east have no proper access of contraception they need which makes them vulnerable toward sexually transmitted infections and HIV (UNIFEM 2008). Almost half of the infected populations worldwide age 15 to 49 are women and girls of which 60% hails from Sub-Saharan Africa. In regard to sexual and reproductive health, adolescent girls are particularly more disadvantaged. Having higher fertility rate among adolescents, the changes of suffering from complications at birth are more in young women and they also have higher unmet need of contraception and high HIV infection rate (UNFPA 2010).

In some regions of the world, the matter of life and death directly involves around the inequality between men and women. This inequality leads to more brutal form with unusual maternal mortality rates as a consequence of gender bias in health care and nutrition (Amartya 2001). The inequality in mortality has been observed and recognized widely in North Africa and in Asia including China and South Asian nations. The Human Development Report 2013 which focused on the countries from global south says "The rise of the south is fundamentally the story of the fast-paced transformation of developing world and its profound impact on diverse facts of human development." But dissimilar to the overall report, the gender inequality index from South Asia shows Afghanistan and India as the worst among south Asian countries. According to World Bank, gender issues in South Asia represent complex challenge. Though most of the countries have seen women experienced improved access to services however in spite of economic growth and changing social norms, striking gender inequalities still exists in South Asia (UNDP 2013).

2.5.2 Cultural and religious taboos

According to the ICPD program of Action, the gender roles are highly reinforced in cultural practices and beliefs. The sexuality, health practices and reproductive preferences are profoundly shaped by the social construction of femininity and masculinity. The social and economic roles of men and women are assigned according to the cultural values and beliefs in many countries and some of the assigned roles tend to harm the girls and young women in particular (Buvinic et al. 2007). In many societies, the gender norms portray boys and men as violent and risk takers while girls and young women are categorized as submissive in their sexual relationships (Greene and Baker 2011).

The communities internal factors such as socio cultural norms and community's own prioritization and external factors such as influence from other communities or societies are either constrain or supportive towards change. Social norms relate to social identities which influence young people's sexual behaviors and sexual and reproductive health promotions. Social norms play a particularly strong significant role in shaping young people's sexual behaviors and form a strong control upon the expression of human sexuality (UNICEF 2011).

In India, adolescent girls are becoming extremely vulnerable to HIV infections and have less comprehensive knowledge in comparison to their male peers (IFPS 2012). Gender inequalities in HIV prevalence are also seen in eastern and southern Africa, where girls are more at risk of

infection (UNICEF 2011). Additionally, many young men perceive condoms use as emasculate or powerless which leads them to engage in unsafe sexual practices (Karim et al. 2009). According to Blumberg (1989) "the greater a woman's relative economic power, the greater the likelihood that fertility pattern will reflect her own perceived utilities and preferences, and the greater her relative economic power, the greater her control over a variety of other life options, including marriage, divorce, sexuality, decision making." Chafetz (1988), one of the prominent feminist theorists, argued that the extent to which members in the society have unequal access to the scarce values of their society on the basis of their membership in the sex category, and the gender division of labor, by which women are more responsible than men for the care of infants and young children and other domestic tasks, which disadvantages women in achieving reproductive health.

Growing evidence has shown that the most important precondition for women to achieve reproductive health is a social and economic environment where women are able to obtain their claims to reproductive health and the ownership over the conditions under which they live (Hartmann 1987). In societies where women have little control over social and household resources, they tend to face difficulties in pursuing the need for their own health (Schwartz 2000). The relationship between social and economic status and health outcomes in a national sample of non-institutionalized people aged 52 or over in England suggested that wealth, education, and occupation are related positively to almost all health outcome indicators and it is particularly evident in women (Wang 2010).

In Nepal, due to the patriarchal family structure, mostly women are suppressed of decision making. Especially girls in rural areas have little or no to say about whom and when they marry, whether or not to bear children and or when and how many children to have (Puri 2009). Though legal age to get married is after 18 years, large numbers of marriages still happen before 18. Many girls in rural Nepal marry shortly after puberty and in some case even before. Traditionally, arranged marriage is common in Nepal where the parents from both side agree and make arrangements. But before marriage there are few things such as caste, religion, ethnicity and economic status, as well as the ties between the families in which both the family side need

to be agreed and satisfied. However, there is no any significant input from bride and groom side on this decision making process (CBS 2003).

Openly discussing sexual and reproductive health issues is still a taboo in Nepal (Simkhada et al. 2010). Friendship between a boy and a girl is still unacceptable in Nepal and mostly in rural places, parents even discourage their daughters talking or meeting with boys. Sexual activities before marriage or outside marriage are not accepted among the majority of Nepalese societies. Despite this, significant proportion of Nepalese young people are engaged and pre and extra marital affairs (Regmi et al. 2010). A study conducted in Kathmandu among the college students in 2009 shows that about 40% of young men had pre-marital sex (Adhikari et al. 2009).

2.5.3 Communication gap with guardians and adults

Studies in many developed and developing countries highlighted that, premarital sexual relations among adolescents are quiet common. Even in the countries where it is against social norms and ethics, these activities tend to occur secretly. The consequences of premarital sexual activities can be serious in the conservative society compare to liberal one as young people in conservative society often lack proper information on safe sex as well as they can't communicate their problems with other in fear of social stigma. Prior studies have shown that, the incidence of pregnancies is rising more frequently at an early age and most of them end up with abortions, which at times are unsafe with increasing chances of sexually transmitted infections and HIV (Awasthi et al. 2000, Alexander et al. 2006a and 2006b). Young people lack of information and poor understanding on sexual and reproductive health when coupled with their risk taking and experimenting desire make them vulnerable to sexual health problems.

In the meantime, socio-cultural and traditional norms make it almost impossible for young people and adolescents to talk about puberty and sex with their parents or teachers (WHO 2004). Parents-youth communication in sex issues, especially in global south, is believed to be socially and culturally unacceptable. Parent's lack of SRH knowledge, socio-cultural belief, faith, gender discrimination etc makes open discussion about sexual and reproductive health even more difficult (Taffa et al. 2002). Only 20% of parents accepted that they have discussed about SRH problems with their child in a study conducted in Ethiopia in 2002 (Taffa et.al. 2002). However,

situation is not similar in United States. Higher percentage (70% of male teens and 79% of female teens) told they receive at least some of the sexual and reproductive health information such as how to say no to sex, methods of birth control, STIs, where to get birth control, how to prevent HIV infection and how to use a condom from their parents (Martinez et al. 2010).

2.6 Adolescent sexual and reproductive health problems

2.6.1 Sexually transmitted diseases (STDs)

Sexually transmitted diseases continue to be the major and growing public health problem in many parts of the world especially in developing countries. According to the estimation made by WHO, nearly 333 million new cases of curable STDs occur each year worldwide out of which almost 151 million accounts in South and South East Asia only (WHO 2001). STIs are among the top five disease categories and about one third of STIs globally occur among people younger than 25 years of age. In United States, nearly half of the 20 million new cases of curable STDs each year are accounted among adolescents aged between 15 to 24 years (CDC 2014).

WHO classifies chlamydia as an adolescent infection while gonorrhea normally occurs in sub groups such as adolescent sex workers but it is less likely to be detected in the general population of adolescents (WHO 2004). Today four in 10 sexually active teen girls have had an STD that cause infertility and even death (Forhan et al. 2009). The spread of STDs is directly affected by social, economic and behavioral factors. Such factors may cause serious obstacle to STD prevention due to their influence on social and sexual networks, access to and provision of care, willingness to seek care, and social norm regarding sex and sexuality (CDC and World Bank 2005).

A rural population based study carried out in southeast Nigeria among adolescent girls aged 10 to 19 years found out STI prevalence of 19.4 percent with sexually active girls aged 17-19 having the highest prevalence of Chlamydia i.e. 10.5 percent, while trichomoniasis was common in girls less than 17 years i.e. 11.1 percent (Barbin and Kemp 1995). However discussions on STDs are less frequent and less popular as they are often overshadowed by HIV/AIDs discussion.

Another study again from Nigeria, conducted to determine the perception of sexual behavior and knowledge about sexually transmitted diseases among adolescents from Benin City, identified participants having more accurate knowledge about HIV/AIDS over other STDs. They were also not able to explain the casual relation between STDs and HIV/AIDS. Though few of the study participants identified STDs with local names, but they were not clear about their cause, sign and symptoms and their prevention (Temin et al. 1999).

Similarly an explorative cross-sectional study in Chinese university to assess student's knowledge and ideas of sexual behavior at a specific time, revealed huge difference in the knowledge of mode of transmission of HIV/AIDS and other STDs. While 96% answered sexual contacts as mode of transmission for AIDS, only 30% or even less identified sexual contact as mode of transmission for STDs like Chlamydia, Herpes and other STDs (Therese 2012).

2.6.2 HIV/AIDS

The World Health Organization estimates that globally more than 2 million adolescents are living with HIV. Over 35% of all reported cases of HIV are among young people of age group 15 to 24 years. According the estimation made by UNICEF, about four million children are affected by AIDS. Although the overall number of HIV related death is down by 30% since last decade, estimates suggest that HIV death among adolescents is still at rise. This increase which has been mostly in the Africa region may reflect the fact that although more children with HIV survive into adolescence, to prevent the transmission and maintain good health, they still lack proper care and support (UNAIDS 2013).

In sub-Saharan Africa approximately 10% of young men and 15 % of young women aged 15 to 24 are living with HIV. The HIV and AIDS concerning adolescent population needs to be handled separately and treated as a different epidemic. Among adolescents, certain sub-groups for instance street adolescents and slum dwellers are most vulnerable to HIV (UNAIDS 2013). In India, where 22% of total population constitutes adolescents, fifty percent of the girls are married by 18 years of age. Unmet need of contraception among the age groups of 15 to 19 years is 27% and 40% of the adolescents' start taking drugs between the age of 15 and 20 and become victim of substance abuse (Naswa 2010).

Commercial sex work, child trafficking, child labor, migration, childhood sex abuse, coercive sex with an older person and also psychological vulnerability are among various risk factors of HIV among adolescents. Clinically, the HIV infected adolescents present as physically stunted individuals with delayed puberty. Mental illness and substance abuse are important comorbidities. To halt the spread of HIV, global community is acting seriously with wide range of effective interventions like imparting comprehensive knowledge about HIV/AIDS, promoting healthy lifestyles & behaviors to providing effective treatment to victims.

As of March 2006, UNAIDS, UNICEF and the Ministry of Health and Population in Nepal reported that around 5% of the total population of Nepal is currently living with HIV/AIDS, that is approximately 130,000 people out of 26 million. It is estimated that of the 130,000 people, 60% of cases involve young people between the ages of 15 to 24. Most young people who are HIV positive in Nepal are either unaware of or unwilling to disclose their status and data regarding them is therefore scarce and difficult to acquire (UNAIDS 2006).

2.6.3 Early marriage and teenage pregnancy

Practices such as early marriage, teenage pregnancy, unmet family planning need and unsafe abortion are prevalent all around the world. The average global birth rate among 15 to 19 years age group was 49 per 1000 girls. Similarly about 16 million women aged between 15 to 19 years give birth each year which makes 11% of total global birth (WHO 2014). About 95% of adolescent births occur in low and middle income countries. The average adolescent birth rate in middle income countries is twice as high as in high income countries. This difference is wider when low and high income countries are compared with the percentage five times higher in low income countries. Globally adolescents birth among 10 to 19 years only accounts 11% of all birth but 23% of the overall burden of disease due to pregnancy and child birth.

Unmarried adolescents are the one to suffer more as their pregnancy and delivery are more likely to be unintended. Also unmarried women are more likely to seek induced abortion. Each year around 2.5 million adolescents have unsafe abortions. About 14 % of which occurs in low and middle income countries. Studies have shown that the risk of developing complication is much higher among adolescents compare to older women. Similarly the prevalence of stillbirth and

death of babies in the first week of life are also found 50% higher among mothers less than 20 years compare to mothers between 20 to 29 years (UNICEF 2012). Apart from posing threat to life and health, early marriage and pregnancy also impact on girl's education and empowerment. Many girls are not able to continue their school and work after marriage and pregnancy. It has already been proven that delaying adolescent birth could notably help in improving adolescent health, population control and ultimately economic and social growth (WHO 2014).

2.6.4 Menstruation related issues

Menstruation is the state of hormonal change occurring in the female body which is marked by the normal monthly bleeding. This physical phenomenon which gives women the power to create life is not always a pleasant experience for all women especially adolescent and young girls. The prevalence of different types of menstrual disorder is common among adolescents girl who had attain menarche. More than half of the respondents in one of the study conducted among 198 adolescent girls who had had menarche for at least one year complained of at least some sort of health problems during their period. The most commonly listed menstrual problem was Dysmenorrhea (67%) and Pre-menstrual syndrome (PMS) (63%) (Sharma et al. 2008).

In Nepalese context, a descriptive study was conducted in four different ethnic communities with the support of WHO which gathered both qualitative and quantitative information regarding sexual and reproductive health problems according to adolescent girl's perspective. In this study the participants identified around 78 different health problems experienced by adolescent girls out of which one quarter of the problems mentioned were related to sexual and reproductive health. Among the listed menstrual problem around 64% were related to menstruation. The most common menstrual problems recognized in the study were lower abdominal pain, irregular menstruation and excessive menstrual bleeding (Tamang et al. 2006).

Not only the physical health but also other aspects in young girl's life are affected by their monthly menstruation period. One aspect which is hugely influenced is their education and attendance in school. In a cross sectional study conducted in rural area of India among 740 adolescent girls, almost half of the respondents (43.2%) were found absent from their school during menstruation period. The significant number of the girls in the study pointed that the

reason behind their absenteeism during menstruation were menstrual problems as well as inadequate sanitation facilities in their school (Bodat et al. 2013). The adolescent girls are more vulnerable in the society where menstruation is still a socio-cultural taboo. Nepal is one of those countries where adolescent girls have to suffer different restrictions and discrimination in the name of menstruation ritual. This restriction includes from not allowed to eat certain foods, not allowed to enter kitchens and temples, not allowed to touch male members to as extreme as not allowed to enter into the house during menstruation period.

2.7 Sexual and reproductive health services available for adolescents

2.7.1 Sex education at school

Sex education, also referred as sexuality education is the process of getting information and developing attitudes and belief about sexual identity, sex, relationships and intimacy. Sex education helps in developing skills about informed choices and sexual behavior among young people and adolescents which makes them more capable about acting on these choices (Kirby 2001). Young people and adolescents can be exposed to various attitudes and beliefs concerning to sex and sexuality. For instance, some health message emphasizes the risk and danger linked with sexuality and some promotes the idea that being sexually active makes a person more attractive and mature. Research has identified that highly effective sex education and HIV prevention program affects multiple behaviors and can achieve positive health impacts (Kirby et al. 2005).

To make healthy decision about their behaviors in, young people and adolescents need more comprehensive sex education. Global evidence shows that these programs help young and adolescents refrain from or delay sex, reduce the frequency of unsafe sex and the number of sexual partners; increase the use of contraception to prevent unwanted pregnancies and sexually transmitted infections; and in turn, help delay the first birth to ensure a safer pregnancy and delivery (Nanatte 2009). The framework of action of sexual health developed by WHO says, the correlation between education level and sexual health outcomes has been well documented. One of the most effective ways to improve sexual health in the long-term commitment to ensuring that adolescents and young people are sufficiently educated to make healthy decision about their

sexual lives. Accurate, evidence based, appropriate sexual health information and counseling should be available to all young people, and should be free of discrimination, gender bias and stigma. Such education can be provided via schools, workplaces, health providers and community and religious leaders (WHO 2014).

2.7.2 Counseling

More than 50% of world population is below the age of 25, out of which 80% lives in developing world (UNDESA 2012). The world has experienced several changes within the last few decades. Some of the social changes that influence sexual behavior and relationship among young people are rapid urbanization, isolated life with less important to family institution, early puberty, increasing access and influence of mass media etc. These changes in behavior have caused new health problems arising from unprotected sexual behavior while traditional problems such as early marriage, pregnancy and childbirth are still exiting in some part of the world. Along with illness, injury and death among young mothers, unsafe abortions, infertility arising from STDs/STIs, HIV infection and the likelihood of subsequent death from AIDS etc. are distressing.

Every day, many young people and adolescents around the world face dilemma regarding sexual and reproductive health concern. Some lack information at all while others are confusing about their choices. For instance many young people nowadays know about at least some methods of family planning but they are not aware of how to use them, which methods best suit them, what will be the consequences. In the absence of adequate information and access to services, young people usually choose not to use any methods or even believe false information and develop negative views on FB methods. Many individuals are also not aware about their right to information and that they can get counseling from various service points.

Counseling is a professional service which enables client to explore their concern, identify problem and choose best available solution from the available options. The process of counseling gives a clear understanding of the experience that adolescents or the clients are going through and assist in identifying existing choices. It also helps in learning the skills that enables to take responsibility of choices and decisions of life. But in many societies counseling is highly directive where counselors tell adolescents about what to do and what not. Such counseling does not develop adolescent's skill to deal with other problems that may arise in future. In some cases it can be even counterproductive as adolescent may feels that they are not understood and taken seriously.

2.7.3 Family planning and safe abortion

Emphasizing ICPD agreement on adolescent's sexual and reproductive health that is to prevent early marriages and early pregnancies, increase access to contraception and reduce unsafe abortion, United Nations Population Fund (UNFPA) and WHO have jointly circulated guidelines in 2011 which appealed and recommended governments to take necessary action for strengthening family planning and safe abortion services. As a result of this global commitment different program related to family planning and safe abortion has been introduced in most of the countries. Therefore adolescent pregnancies in the past decades have been reduced to certain extent in many countries including South Asian countries (UNFPA 2013).

In Nepal, family planning movement was started much earlier around late 1950s through a national NGO named Family Planning Association Nepal (FPAN). A decade after this initiation, Government of Nepal commenced its own Family planning and maternal and child health project with goals to bound population growth and improve maternal and child health. Since then family planning program has been a priority program in Nepal. In coordination with several partners like UNFPA, USAID, FPAN, UNICEF, FHI-360, Marie Stopes International etc, government of Nepal has implemented different family planning intervention throughout Nepal which includes services like distribution of contraception, family planning counseling, permanent FP services, mobile FP camps, safe abortion services etc.

Knowledge of family planning methods is universal in Nepal but its utilization among all women of reproductive age- group was only around 38%. It also found that the use of contraception was very low among younger women with only 5% of all women age 15 -19 and 23% of all women age 20-24 years were found using some kind of FP methods. The use of FP methods among married adolescent of 15 -19 years was also comparatively low (only 17.6%) compare to other age groups. And this rate has been consistent for last few years. Likewise unmet need for family planning was also estimated high almost 70% among adolescents (NDHS 2011).

A study conducted to understand the low contraceptive prevalence rate and high unmet need for family planning among adolescents in Nepal concluded that social norms of early pregnancy, lack of practical knowledge on FP methods and access to FP methods as common factors influencing demand of FP services especially among adolescents (The World Bank 2015).

2.7.4 Adolescents friendly reproductive health services

The need to provide services that are specific and youth focused has been recognized by number of agencies. The program of action adopted by the ICPD highlights and endorses the right of young people to information and services to meet their sexual and reproductive health care needs. In 1995, WHO along with UNICEF and UNFPA agreed on a common agenda for action in adolescent health and development, and the agenda was to promote healthy development in adolescents and prevention of and response to health problems if and when they arise. It was a call for the implementation of package of interventions, tailored to meet the special needs and problems of adolescents which include the provision of information and skills, the creation of a safe and supportive environment and the provision of health and counseling services (WHO 1997).

Adolescents being the heterogeneous group have the expectations and preferences understandably different from each other. However, that different group of adolescents have key common characteristics that they want to be treated with respect and to be sure that their confidently is protected (WHO 2003). According to the consensus statement on global consultation of adolescents friendly health services, to overcome the barriers of health seeking behavior by adolescents, initiatives are being undertaken many countries to help ensure that (WHO 2002);

- Health service providers are non-judgmental and considerate in their dealings with adolescents; and they have the competencies needed to deliver the right health services in the right way.
- Health facilities are equipped to provide adolescents with the health services they need; and are also appealing and friendly to adolescents.

- Adolescents are aware of where they can obtain the health services they need, and are both able and willing to do so when needed.
- Community members are aware of the health services needs of different group of adolescents, and support their provision.

2.8 Barriers to the utilization of available SRH services by adolescents

2.8.1 Lack of SRH knowledge

To maintain sound sexual and reproductive health, every individual need access to accurate information and the safe, effective, affordable and acceptable contraceptive method of their choice. They must be informed and empowered to protect themselves from sexually transmitted infections. When young people and adolescents are healthy and their rights are fulfilled, they can go to school, learn and gain the skills and resources they need to be healthy, productive and empowered adults. In last decades, there have been enormous advances in girl's education at least to the primary level but still in most of the regions in developing world, girls lack education up to secondary level. A significant proportion of girls become pregnant during the time that they should be in school. About 19% of girls in the developing world become pregnant before age 18 and about 3% become pregnant before age 15 (UNFPA 2013).

Similarly about one-third of girls in developing world are married. In south Asia only, nearly 50% and in sub-Saharan Africa nearly 40% girls are married before age 18 (UNFPA 2012). Girls with no education are three times likely to marry before age 18 than those with secondary or higher education (UNFPA 2012). In an anonymous survey completed by 264 men aged 18 to 25 in United States found out that 5% to 50 % responded incorrectly to specific question regarding symptoms and risk of acquiring sexually transmitted infection or HIV. The survey revealed that 21.6% of respondents indicated having a sexually transmitted infection in the past year. Approximately 80% perceived their risk of getting an STI/HIV infection as low or very low, including the group that had STI (Charnow 2015).

A systematic review of school based intervention in Thailand showed that, secondary student who were exposed to a comprehensive sex education program had greater knowledge than other students, and were more likely to intend to refuse sex and to decrease frequency of sex, but no change was seen in consistent condom use (Thato et al. 2008). For many young people in Nepal, however, especially those who are unmarried, social and cultural norms impose barriers to the transfer of sexual health information. Thus, countless remain uninformed of even the basic knowledge required for safer sexual behavior. For example, when the comprehensiveness of knowledge was tested during the Nepal Adolescent and Youth Adult (NAYA) survey, among those young people who had ever heard of HIV/AIDS, only 36 per cent were able to cite all three of the following measures to reduce or avoid the possibility of exposure, avoiding sex with a prostitute, using a condom during sex, and having one steady partner (Neupane and Nichols 2002). Further, among young people who were aware of condoms, one in ten did not know they could be used to protect against pregnancy, including one in six married young women.

2.8.2 Accessibility of heath institutions

Many evidences confirm that majority of people in developing world lives without even basic health care services. The poor in developing countries are even less likely than the better off to receive effective health care. For developmental as well as epidemiological reasons, young people and adolescents need youth friendly models of primary care. Worldwide, initiatives are emerging that attempt to remove the barriers and help reach adolescents with the health service they need. The present generation of adolescents faces complex challenges to their health and development than their parents did (Raphael 1996). However, the major health problems of adolescents are largely preventable.

Access to primary health services is seen as an important component of care, including preventive health for adolescents. With the gap between nature of the services adolescents seek from health care professional and the actual disease burden they endure like mental disorder and sexually transmitted disease, much work has been directed to understanding the barriers adolescents and young people face to accessing care (Veit et al. 1996). Studies around the world done in last two decades indicate that young people and adolescents are often unwilling or unable to obtain needed health services due to the barriers related to the availability, acceptability and equity in health services (WHO 2001).

In developing countries, there is still lack of primary health care services. And if even the services are available, variety of reason prevent adolescents to access the services which includes the cost and/or lack of convenience (Society of Adolescent medicine 2004). A study conducted in Nepal in 2012 shows that, the reason for not accessing health care were insufficient drugs (61%), distance to health care center (22%), staff unavailability (19%) and money (7%). Sex, ethnicity and distance were found significantly associated with access to health care services (Paudel et al. 2012).

2.8.3 Health worker's behavior

One of the major reasons behind not accessing the health facilities by young people and adolescents is the fear about lack of confidentiality, for instance, fears about being recognized in a clinic waiting room with the possible stigma attached (Kambikambi 2014). Also adolescents fear that the health care worker will not maintain the confidentiality especially from parents (WHO 2002). The fear of parents or someone from family finding out about the visit to clinic can be a great deal for young people and adolescents. In some societies for example in global south where social norms forbid premarital sex, unmarried young couple with sexual problems like genital ulcer, unplanned pregnancy are more likely to deal with these issue themselves or trusted friends, siblings or visit some clinics far from home. And mostly in these kinds of cases, the service provider acts illegally letting the care seeker into more danger for e.g. unsafe/illegal abortions (WHO 1999).

2.8.4 Stigma related to sexual and reproductive health

Studies show that adolescents are generally been unsure that their confidentiality will be guarded, even when it is guaranteed by law. One study found out that adolescents knew far less about protections than the limits of confidentiality (Ford et al. 2001). Similarly in one study, 88% of teens thought it was extremely important that clinic staff kept their business private from the teen's colleagues. Similarly 60% thought it was extremely important that clinic staff kept their business private from parents and family. And some adolescents especially worried that faculty, staff and other student might learn about it if they pursued STI testing and treatment at school

based health center (Lane et al. 1999). A study to evaluate the factors that discouraged the youth from using the youth friendly services in South Africa revealed that inconvenient hours of locations, unfriendly staffs and lack of privacy were among the reason adolescents and young people not using the services. (FHI, 2006) Majority of the participants in a study conducted in Nepal believed that service providers at health post do not keep information confidential and do not behave nicely if sexual health problems are shared with them. (Regmi et al. 2010)

3. OBJECTIVES OF THE STUDY

3.1 General objective

The general aim of the study was to explore knowledge and perception of late adolescents aged 15 to 19 years towards sexual and reproductive health and services in Kapilvastu and Arghakhanchi districts of Nepal.

3.2 Specific objectives

- To explore the knowledge about sexual and reproductive health
- To report common sexual and reproductive health issues and associated socio-cultural factors faced by the adolescents.
- To understand the perceptions of adolescents regarding existing sexual and reproductive health services and barriers to its utilization.

4. MATERIALS AND METHODS

4.1 Study sites

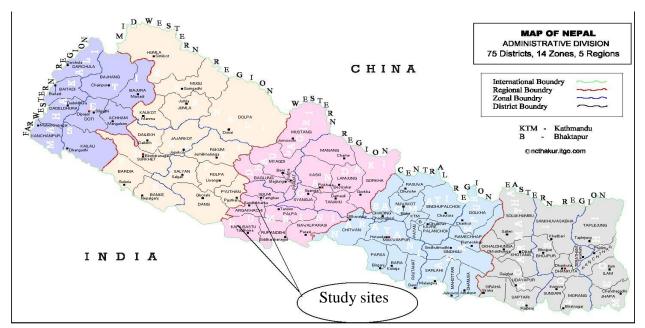


Figure 2: Geographical map of Nepal (Source: Google image)

The study took place in two districts of western development region in Nepal: Arghakhanchi and Kapilvastu. Nepal is divided into three ecological regions as mountains, hills and terrain. Kapilvastu, one of the study sites lies on the terrain region whereas Arghakhanchi lies in hilly region. According to the census of 2011, the total population of Kapilvastu district is 571, 936 and that of Arghakhanchi district is 197,632. Out of total 75 districts in Nepal, Kapilvastu district ranks 54 and Arghakhanchi district ranks 42 in terms of poverty and deprivation index, socioeconomic and infrastructural development index and women empowerment index.

4.2 Study design

This was a qualitative study to gain a deeper understanding of Sexual and Reproductive Health (SRH) problems faced by late adolescents (15-19 years of age) and to document their perceptions concerning available SRH services. Qualitative research is mainly concerned with inductive generation of ideas and providing in- depth and rich explanation of individuals view and experiences (Meyer 2000).

4.3 Selection of study participants

Purposive sampling was used in the selection of the study participants' i.e. late adolescents of age between 15 and 19 seeking SRH services at a health facility. Purposive sampling is a qualitative research technique where researcher chooses specific people within the population to use for particular study or research project (Palys 2008). Unlike random studies, which deliberately include a diverse cross section of ages, background and cultures, the idea behind purposive sampling is to concentrate on people with particular characteristics who will better be able to assist with the relevant research. Study was conducted among both male and female. Total 20 adolescents were selected as study participants, 10 from each district and among them 50% were females. The participants were selected from different community youth networks and youth club at school.

4.4 Data collection methods

Semi-structured in-depth interviews were used as method of data collection. The interview guidelines were translated to Nepali, the national language of Nepal. The in-depth interview took place at community hall, school and home, as per the favorable situation of the study participant. The in-depth interviews were conducted in Nepali language and which took almost 45 to 60 minutes each. In-depth interview were conducted by a two researchers and all the interviews were tape recorded alongside taking short notes as the interview progressed. An experienced female researcher was used in taking interviews with female participants.

4.5 Data management and analysis

Transcription is a process in qualitative research where audible and visual data are characterized into written form (Bailey 2008). In this study data was obtained from the tape recording of the interview as well as from researcher's note which was taken during the interview observing participants verbal and non-verbal interactions. The collected data was then transcribed by the principle researcher himself. Since the researcher was proficient in both languages used in the study, the data was directly translated from Nepali to English during transcription process. Each of the translated documents was labeled in word file showing the study site, sex of interviewee

and code. The transcribed information was grouped under three thematic area based on study objective. And finally data analysis was conducted using the thematic framework approach (Ritchie et al. 2013).

4.6 Ethical consideration

In the beginning of in-depth interview session, informed consent was obtained from each participant. Before signing the consent form, detailed information was given to the participants without showing any partiality. The participants were also given the sheet to study having short information about the importance of their views. They were also assured of privacy and confidentiality and that the information collected would only be accessible to the research team. Since there were no any participants below 15 years, verbal consent from their parents was not needed. The interview took place only after the interviewee signing the consent form. Ethical clearance and approval was obtained from University of Eastern Finland Research Ethics Committee in Kuopio Finland and from health authorities in respective district in Nepal.

5. RESULTS

A total of 20 in-depth interviews were carried on with late adolescents aged 15 to 19 years. Ten of the in-depth interviews were carried with the adolescents in Kapilvastu district and the rest in Arghakhanchi district. Out of total 20 participants, 10 in-depth interviews were held with boys and 10 with girls.

ID	Gender	Age	Home Address	District	Ethnicity	Education
01	Male	17	Motipur VDC	Kapilvastu	Brahmin	Higher
			(semi-urban)			Secondary
02	Male	19	Banganga VDC	Kapilvastu	Bramin	Higher
			(semi-urban)			Secondary
03	Female	18	Motipur VDC	Kapilvastu	Chhetri	Higher
			(Semi-urban)			Secondary
04	Male	18	Gajehada VDC	Kapilvastu	Bramin	Higher
			(semi-urban)			Secondary
05	Female	19	Banganga VDC	Kapilvastu	Chhetri	Higher
			(semi-urban)			Secondary
06	Female	16	Kopawa VDC	Kapilvastu	Chhetri	Secondary
			(rural)			
07	Male	15	Kopawa VDC	Kapilvastu	Bramin	Secondary
			(rural)			
08	Female	17	Gajehada VDC	Kapilvastu	Bramin	Higher
			(semi-urban)			Secondary
09	Male	19	Bhalwad VDC	Kapilvastu	Bramin	Higher
			(rural)			Secondary
10	Female	18	Bhalwad VDC	Kapilvastu	Chhetri	Higher
			(rural)			Secondary
11	Male	16	Thada VDC	Arghakhanchi	Chhetri	Secondary
			(semi-urban)			

 Table 1: Details of respondents participated in the in-depth interview

12	Female	18	Sitapur VDC	Arghakhanchi	Bramin	Higher
			(rural)			Secondary
13	Male	19	Thada VDC	Arghakhanchi	Bramin	Higher
			(semi-urban)			Secondary
14	Male	15	Khanchikot VDC	Arghakhanchi	Bramin	Secondary
				C		
			(rural)			
15	Female	19	Khanchikot VDC	Arghakhanchi	Chhetri	Higher
			(1)	C		Secondary
			(rural)			
16	Female	17	Sandhikharkha VDC	Arghakhanchi	Bramin	Higher
			(semi-urban)			Secondary
17	Male	15	Keemdada VDC	Arghakhanchi	Bramin	Secondary
			(semi-urban)			
18	Female	18	Dhikura VDC	Arghakhanchi	Chhetri	Higher
			(rural)			Secondary
19	Male	19	Dibharna VDC	Arghakhanchi	Chhetri	Higher
			(rural)			Secondary
20	Female	18	Dhakawang VDC	Arghakhanchi	Bramin	Higher
			(rural)			Secondary

All the participant of the study came from rural and semi-urban areas of both districts. Also all of them represents Brahmin/Chhetri ethnic group which is one of the 7 ethnic classification of Nepal according to Nepal Population and Housing Census. Majority of them have higher secondary level of education and their mean age is 17.5 years.

5.1 Knowledge about SRHS

5.1.1 Knowledge on sexual and reproductive health (SRH)

This study aimed to explore the knowledge of participants regarding SRH. Questions were asked to investigate whether they have heard about the term "Sexual and Reproductive Health (SRH)". If they have heard, where did they hear from and what did they know about it? All 20 respondents answered that they were familiar with term SRH and more than 50% of them explained it in terms of sex organs, sexual activities and sexual health problems.

`....sexual and reproductive health is something that is related to infections and disease on our sex organ.' (*Male, 16, Kapilvastu*)

"...SRH is about unsafe sex and about diseases which are caused by unsafe sexual practice. Having more than one sexual partner is not good. If there is more partners to have sex, infection can occur. Using condom during sexual intercourse keeps us safe." (Male, 18, Arghakhanchi)

The most common terms used to define SRH were sexual intercourse, contraceptive use, sexually transmitted infections, HIV/AIDS and other STDs. In addition majority of girls and few boys also mentioned "Menstruation" as part of SRH.

"...keeping ourselves healthy during monthly menstrual period is something related to sexual and reproductive health. And also having sex with husband only and not making more sexual partner is good for health." (Female, 19, Kapilvastu)

Regarding their source of information, all of the participants agreed on school and health teacher as their primary source of information. Besides few of them mentioned Female Community Health Volunteers as the source of such information in their community. Half of them also said information on SRH was broadcasted through health programs on radios, FMs and TV programs.

"....people on radio and FM also talks about SRH. Sometimes in TV there are program on SRH but I am not comfortable to watch those with male members of my family." ((Female, 19, Arghakhanchi)

5.1.2 Knowledge on available sexual and reproductive health services

Though most of the adolescents participated in this study were familiar with SRH and some of its components like STDs, family planning, abortion etc, majority of them were unknown about the services that were available for them in the government health facilities. The government of Nepal had already implemented National Adolescents Sexual and Reproductive Health Program (ASRH) which had launched adolescent friendly services in 1000 health facilities including some of the health facilities from Arghakhanchi and Kapilvastu districts. Besides every local health facilities are assigned to provide antenatal, postnatal and delivery services, family planning services, counseling and conducting health promotion activities including SRH topics. However majority of the participants were not fully aware about different types of SRH services available in the health center.

'...I have been to nearby government health facility before just for normal checkup (fever and cough), but I don't know what kind of services are available concerning sexual health. What I only know is health post sometime distributes free condoms (laughs).' (Male, 17, Kapilvastu)

"...All what I know about sexual health is either from the course book or from health education teacher, and sometime from friends and the advertisement from radio and TV. Besides that I don't know the reproductive health services in health facilities that are available for young people like us. "(Female, 17, Kapilvastu)

When asked about what special services were available for adolescents in the health center, almost 80% of them replied nothing but same as other age groups. While probing more by using terms like sexual and reproductive health services, some of the participants mentioned about availability of condoms. Some of the female participants also said medicine for pain during menstruation. It seemed participants were relating only unmarried adolescents like them while answering the question about available SRH services for adolescents. Therefore on probing further by asking services available for married adolescents, most of the participants added family planning methods like Depo-provera and pills.

`...oh yes I know some of the married girls visit health center or FCHV to bring pills. But I think FCHV can't give injection so they have to go health center only for that.' (*Female, 17, Kapilvastu*)

"...I have heard about **Sangini Sui** (injectable contraceptive) so many times in radio and TV and was not aware of it for long time. Now I know what it is. It is some injection that can control birth for four month and if husband and wife want to control it for longer time, wife has to inject it again." (Male, 17, Kapilvastu)

Besides family planning method, more than 50% also mentioned about health services during pregnancy and child birth.

`...if someone is pregnant, they can go to health post now. They don't have to go to cities in bigger hospital. And I think they do it safely.' (*Female, 17, Arghakhanchi*)

`....I know some pregnant women go to health post. I don't actually know what they do there but yeah pregnant women go there. And also they go health post to deliver child. (Male, 19 Kapilvastu)

And few of them were even aware of abortion and unwanted pregnancy.

'...I have heard that in Nepal people can get the abortion services in some health facilities. Abortion is about removing unwanted baby within some week (don't know exactly how much)'

(Male, 18, Kapilvastu)

'...My sister has done abortion once due to some problem but I don't know what exact was the problem. I also heard that people can die if the abortion is not good and also there are chances of not having baby again' (Female, 19, Arghakhanchi)

Asking on if any health workers have visited to schools to provide information on SRH services available for adolescents in government health facilities, majority of the participants denied,

"...I don't remember any person from health post coming to our school and teaching us. But our health teacher sometimes mention about sexual health. But still, I don't have detail knowledge about it." (Female, 16, Arghakhanchi)

'....Shywmsevika (female community health volunteer) from our village sometime goes door to door, but I don't know exactly for what reason. My mother said, she was talking about polio thopa (polio vaccine). But I never knew some health worker talking or teaching about sexual health in school. (Male, 18, Arghakhanchi)

5.2 Adolescents sexual and reproductive health problems

When asked about the problems faced by adolescents, majority of the participants' response were extensive that includes socio-cultural problems associated with their sexual health for example cultural taboos, gender based discrimination and communication gap with parents ; and actual health problems such as HIV, STIs and unintended pregnancies. Similarly some stated the physical changes and desires of sexual intercourse as their problems. Few participants also mentioned early marriage and love affairs at young age as SRH problems.

5.2.1 Socio-cultural issue

5.2.1.1 Socio-cultural norms and taboos

Socio-cultural norms and taboos are the most significant reason that makes the adolescents reluctant to seek the health services. The community that perceive adolescents as too young and not allowing them to discuss openly about sexual health creates difficultly for young people to access information and services concerning sexual and reproductive health. Majority of the study participants especially female felt that cultural norms of community have suppressed them in terms of various health rights.

"....i cannot openly walk around with a male friend, if I do so I will be called someone with loose character, the next day the people of my own community will start teasing me and start gossiping if I had sexual relationship with him." (Female, 18, Arghakhanchi)

The tradition, customs, values and socio-cultural practices had made a boundary to the adolescents that had contributed to stigma around their sexual behavior, service seeking (such as condom distribution), and also prevented in openly discussing the sexual matters. Mostly girls are branded as 'spoilt' and boys as 'men' if they are sexually active before marriage.

'....as a boy, i am okay to tease girls at schools or at some 'mela' (local festivals) and I will be a kind of 'hero' among my friends if I do so, but if girls do so, every boy will start calling her

'chalu' (loose character)' (Male, 19, Arghakhanchi)

5.2.1.2 Gender inequality

Majority of the study participants said that there is always uneven treatment between male and female in the communities. Boys have more freedom while girls have to live under certain level of restriction which at times severely compromises their sexual and reproductive health.

"...we girls have to face many problems like helping the family in household stuffs in for example cooking, looking after cattle, going to market to buy goods etc., and we have to do these things even when we are menstruating, and that actually hurts, but no one is there to understand us...even when I am on monthly periods I have to do household stuffs and my brother might be somewhere playing with his friends..." (Female, 18, Kapilvastu)

Another respondent said;

'....my brother is two years older than me, but i sometime feel like he is given more importance than me in family. I never see him helping my parents in doing any household stuffs and always I have to help. I am not free to go anywhere I like but he has no any restriction. Even when I am sick I have to be a support to my parents...' (Female, 16, Kapilvastu)

5.2.1.3 Communication gap with guardians and elderly

Most of the respondents feared sharing their sexual and reproductive health related problems with their parents, guardians or other elderly people. It was found that, the adolescents find it easy sharing with their peer group rather than sharing with elderly. However, some female respondents shared that they were most likely to talk to their mother about menstrual cycle and complications that comes along with it. Almost all the respondents shared that they never talk to their parents about HIV/AIDS, STIs and other sexual disease.

`....it's far easier to talk to friends about any complication relating to sexual health, but it is impossible to share the same thing with parents or someone elderly in same community.' (*Male, 17, Kapilvastu*)

".... I do remember one incident when I was around 10 or 12 years old. I went to a local grocery store to buy some household stuff, and there was something new product I saw there for first time and it was written 'Dhaal' (Condom brand), I thought that is some chocolate or something and I asked the shopkeeper if I can get that chocolate. He smiled and replied, that not of your use, and that's not a chocolate. I asked him again, what that actually is...but he didn't reply. And now I know what that was, see communication gap is always there, it was there 6, 7 years ago and it is still there ...' (Male, 19, Arghakhanchi)

Asked about the comfort level of discussing some sex related topics, both female and male respondents indicated that they were more comfortable on discussing these topics with friends. However few female respondents also said they don't have any problem talking about selective reproductive health issues with their mother such issues related to menstruation or any pain in reproductive organs etc but not about sexual intercourse and sex behaviors.

'...I can talk to my mother about menstrual cycle, but cannot talk to her about having or not having sex, sexual pleasure, condoms etc....and if my father knows out that I am thinking about these 'nonsense' he will scold me. He wants me to only concentrate on my studies. (Female, 17, Kapilvastu)

Asking about what might be the reason for not having good communication with parents concerning sexuality, sexual and reproductive health, majority of the respondents blamed the social culture and taboos and also the level of education in community. HIV, STI etc. are not a new topics in community, but still nobody wants to openly discuss about it. Generation barriers and dependence only on school system of education is also something to blame on widening the gap between adolescents and elderly.

'...HIV/AIDS, STIs etc. are in our course book and they are taught in school, though teacher himself feel shy to speak, but still everyone are curious to know about it ...then again when I am

home, I cannot talk to my parents or my brother or someone elder in my society about what I learned regarding HIV and STI. (Male, 18, Kapilvastu)

5.2.2 Health related issues

5.2.2.1 HIV/AIDS and sexually transmitted infections (STIs)

Boys and girls from both Kapilvastu and Arghakhanchi districts mentioned that HIV/AIDS and sexually transmitted infections are major health issues concerning adolescent's sexual and reproductive health. Majority of the participants mentioned syphilis and gonorrhea are the most common problem and HIV/AIDS are a major threat. Having many sexual partners and unprotected sexual activity from younger age is one of the main reason behind STIs, said most of the interview participants.

"....many boys of our age are sexually active, they tend to find some decent girl from anywhere around and fake as if they are in love, they make use of girls and have sex time and again. It not only harms boys but also put girl into risk of different disease." (Female, 18, Arghakhanchi)

'....HIV is one of the major threat these days because so many of people of our age are going abroad for job (in india, and gulf), and we don't know what they exactly do there, they might be involved in some wrong doing ...and come back home with disease like AIDS. I know one lady whose husband was suffering with HIV and now I came to know she is also suffering. Her husband was living in Mumbai, India for job.' (Male, 19, Arghakhanchi)

'...HIV is something that can spread from one person to other if condom is not used (unprotected sex). And we learnt that drug use (IDU) is also a reason of spreading HIV that is probably in cities but here in our village there are no one who use drugs. (Female, 17, Kapilvastu)

Most of the participants of in-depth interview were unknown about the signs and symptoms of STIs like syphilis and gonorrhea.

`...living with STIs might be painful, that is what I know' (*Male, 16, Kapilvastu*)

Asked if they want to know the health status of their sexual partner, majority of the participants didn't show any keenness.

`...it is something difficult to ask. If you are going to have sex, you cannot ask like do you have HIV? Or, do you have any other sexual disease. We will be doing sex on the assumption that we both are fine and don't have any major sexual disease.' (Male, 18, Arghakhanchi)

5.2.2.2 Teenage pregnancy

Most of the study participants mentioned that teenage pregnancy is one of the major problems of sexual and reproductive health among adolescents. Early marriage and lack of proper knowledge leads to teenage pregnancy in households in rural communities of Kapilvastu and Arghakhanchi and also in Nepal as a whole. The school dropout is high among girls of rural communities and chances of getting married at young age are also high which leads to teenage pregnancy.

"....mostly in southern part of Kapilvastu, there are poor and underprivileged communities where early marriage is common. Those girls are already pregnant by the age of 17 or 18. I have seen many young girls carry their children and coming to markets." (Female, 17, Kapilvastu)

Also some of the female participants indicated that early marriage does not only happen because of their parents will, but some young girls goes against their parents and escape from their home itself to get married.

'....one of our friend from same community escaped from home a year ago with a boy of lower caste because they were in love. Now that girl has a baby. She is same like our age. Because of her, sometime our parents too afraid if we also do the same and escape from home. (Female, 18, Arghakhanchi)

Not only the girls but the interview with boys revealed that most of the time boys are responsible for early and unwanted pregnancies. There were cases that boys have sex with teenage girl and when she becomes pregnant, boys refuse to take responsibility.

'....During the festival time like Diwali, we celebrate in groups and there are so many people gathered and playing **deusi bhailo** (singing and dancing), during that time many teenage girls comes from different communities. That's the time when boys make use of that opportunity and tease girls. Eventually it ends with sex and mostly unprotected sex which leads to pregnancy. The

next day when everything ends, they both go their own way and girl is the one to suffer with unwanted pregnancy.' (Male, 19, Arghakhanchi)

Most of the participants said that it's the responsibility of both boys and girls to think before deciding something like having sex or making baby. Both are equally responsible if some teenage girls become pregnant. There are so many problems that come along with pregnancy.

"....in our community there are so many girls who got married in young age and most of them became pregnant within a year of their marriage. Some have already 2, 3 kids. The husband of those girls and the girl herself should think if they are prepared for baby. Mostly at that age no one is prepared. That age is to study." (Male, 19, Arghakhanchi)

5.2.2.3 Menstruation related issues

Physical pain and other issues related to menstruation were identified as one of the common problems of adolescent girls by majority of female respondents and few of the male participants. According to the female respondents, Dysmenorrhea (lower abdominal cramp and pain) was the most commonly experienced menstrual problems by themselves and their sisters and friends.

".....for the first 2 days of my period I just stay on my bed due to extreme lower abdominal pain. I am sad I can't go to school but I can't do anything because the pain is extreme." one respondent shared her experience. (*Female, 16, Arghakhanchi*)

Likewise one of the other participants said excessive bleeding was her bigger concern than pain.

".... I have seen my sister and some of my friends having painful menstruation. One of our classmate even fainted due to pain. I do have painful menstruation, sometime very painful but usually its mild but my problem is heavy bleeding. I need to change every other hours and it is very stressful to do so in school" (Female, 18, Arghakhanchi)

All of the female participants agreed that they had to follow certain restrictions at home during their menstruation period. Almost all of them said that they were not allowed to enter in the kitchen and worshipping room while some of them also told that they were provided separate bed to sleep during the period and they were not allowed to touch male members of the family. Most of the male and female respondents thought such restrictions were inappropriate and should be discouraged. However they also shared that they can't do much because such practices are deeply rooted in the society and can't be easily changed.

"...I know it's not good to restrict girls from entering in kitchen or any other rooms because they are having their period. I have told this to my mother also. But she thinks that's necessary as she fears of religion and also of society. I think this will change slowly with time. Because accordinf to my mother things were more difficult during her time" (Male, 18, Kapilvastu)

5.3 Perception of adolescents regarding existing SRH services

Adolescents from the study sites i.e. Kapilvastu and Arghakhanchi district often visit the health facilities close to them to receive pregnancy related services, general check-up, counseling and services relating to STIs and HIV. Though most of the participants did not mentioned that they ever had above mentioned problems and majority of the participants have not visited the health facilities to access the services relating to sexual and reproductive health, below are the major issues that are perceived by adolescents as a pros and cons of existing health services.

5.3.1 School health program

Though the National Adolescent Health and Development Strategy 2000 emphasized on sexual health at schools, most of the adolescents participated in this study are found not satisfied with the sex and reproductive health education they were given. Lack of knowledge, teacher's embarrassment is associated with unsatisfactory sex education.

"...when teacher start talking about sex and sexual health, or reproductive organs most of the students in class laugh. It is so embarrassing to see the female sexual organs that teacher describes. Most of we boys cannot look at girls face and girls look too shy...even the teacher." (Male, 19, Arghakhanchi)

Some participants blamed the culture that they are grown up and some were not happy with the teaching technique.

'....This is kind of culture we are grown up. Even in schools boys and girls have different rows to sit. If some boy talks to girls, they start teasing him or her. And in this situation it is obvious that there comes some uneasiness during sex education class.' (Female, 18, Kapilvastu)

"...I think it will be better if there are different classrooms for boys and girls during sex and reproductive health education. Because when it is provided in common classroom, nobody can concentrate, there is shyness everywhere." (Male, 15, Kapilvastu)

Asked on if the lessons they are provided are enough to live a healthy sexual and reproductive life, the response varied, however majority of the participants disagreed,

'....In our course book, there is something about sexual disease and HIV and I think that is enough to live a healthy sexual life because HIV is the major sexual health problem.' (Male, 15, Kapilvastu)

'....HIV and STIs are not only sexual health issues of the people of our age. There are unwanted pregnancies and also some psychological problem associate with sexual health like during periods (menstruation) girls have to suffer from pain and also other mental pressure. But in our sex education class when teacher start talking about menstruation, everyone laughs. We cannot concentrate on it and we have to know it ourselves. We don't know enough about the content in our course book but I think there should be more information. (Female, 18, Arghakhanchi)

5.3.2 Adolescent friendly health services

Majority of the participants think that the services that are provided by government health facilities are not friendly; instead, they believe that the service from private clinics are much better and adolescent friendly.

'....Even if I go to the government health post nearby, I know that there will be people from around our own communities. And the doctor (health officer) will ask me what is my problem...and in that situation I cannot talk to him that I have some sex related problem because people I know will be around there. They should do it (checkup) in separate room.' (Male, 17, Kapilvastu)

Most of the participants have rarely visited the government health post or primary health center, even if they have visited that is for other general checkup but not for something relating to sexual health. Some participants reported that they visit to the hospital in cities if something serious happens.

'...Mostly the service providers in our health post are from our own community. They personally know us. In that situation it is difficult to go there and receive any service relating to sexual health. Even I cannot go there if I need a condom (Smiles).' (Male, 18, Arghakhanchi)

Not only the services are inadequate but the adolescents also believe that the information they give to the health providers about their health condition might not be confidential.

'....If I visit the health post with sexual health problem and tell them that I have this and that, the next day my friends will be asking me even though I have not tell my friends about my problem. Because the information comes from health post itself and goes ear to ear and around community.' (Male, 16, Kapilvastu)

'....It is very difficult for the unmarried female to visit health posts with some issue of sexual health, the next day they will start assuming different nonsense things.' (Female, 18, Arghakhanchi)

However, the study participants believe that the service they get in private health institution or some other health centers in cities have much more to offer.

'.....if we pay money for the service in cities, they give us good treatment. Sometime they even irritate you asking more questions (laughs), but at least they give more information. There is also not any chance of being noticed because there are so many people and difficult to know each other. We can put our problem openly.' (Female, 19, Kapilvastu)

But there is also a problem in it, said some participants,

"...if I want to go to city for the treatment of sex related problem, I need money and I ask money with my parents because I have to give them the reason. And I cannot tell them my problem. So lastly I have to go to the government health post where I don't want to visit. At the end, nothing is friendly to us.' (Male, 19, Arghakhanchi)

5.4 Barriers to SRH service utilization

5.4.1 Availability of adolescent sexual and reproductive health services

Since majority of the participants are not aware of the services that are available for them in health facilities, most of perceived it as a fault of government or local stakeholders for not letting them know about it.

"...if there are services available for the people of our age concerning sexual health, at least we should know about it. We were never told in school, nor do we talk to our parents about it. It's only from friends that we know if there is something. But my friends also probably have not visited there so I also don't know about services.' (Male, 19, Arghakhanchi)

"...the government provide services, either it be education or health or another thing, it will never be enough because the quality of the services provided by government are not good. In school, there is no good education and in health post there might not be good service. (Male, 18, Kapilvastu)

Similarly, other respondent said,

"...I have been to health post for general checkup, and I find the place good enough. Health worker was good. But I don't know the kind of services they are there for sexual health. There are some posters about HIV. I don't know any other things." (Female, 18, Arghakhanchi)

"...these days some of the medicines are available for free in government health facility, and also

I heard some small treatment is also free there. About sexual health, I think they give away the free condoms. I have seen once in government hospital that there was a box full of condoms, and written outside Chaiye jasti laijanuhos (take as much as you need). (Male, 19, Arghakhanchi)

5.4.2 Accessibility to health facilities

Most of the participants from both study sites mentioned that one of the reasons behind not accessing the service at governmental health facilities is its inaccessibility. Though most of the sub-health post, health post and primary health care centers are built in such a way that they can be accessible to all the population of their coverage area, majority of the adolescents still find it inaccessible. Since the private health clinics are found almost in every towns and village, most of the participants finds it easy to visit private health clinics close to them.

"...though we have to pay more fees to visit private clinics, it is easy to go there because they are almost everywhere. One who have done some certificate course (CMA) in medicine and is not employed by any institution, finds some location and start a medical center. So it is easy to go there and receive service." (Male, 19, Kapilvastu)

Even though the private health clinics and there services are easily accessible, they cannot provide integrated health services. The services they provide are limited and sometime illegal, for example abortion facilities.

"... yes it is easier to go to private clinics but most of the small clinics do not have enough services to offer. It is only to go there and buy some medicines; otherwise there are not all the services that we need." (Female, 18, Kapilvastu)

And some participants usually visit the government health facilities even though it is not easily accessible,

"...the service in health post is not so good because most of the services are for free but still we have to trust the service in there because it is provided by government. That's why though it's little bit far from my place, my family usually visits there." (Male, 17, Arghakhanchi)

Asked, if somebody of your age have some problem with sexual and/or reproductive health, where do they normally visit, most of the participants are unknown about what kind of sexual and reproductive health services does the governmental health facilities provides.

"....most of the people of my age would probably go to health institutions or nursing home in cities if some sex related problem comes. Because the first things is that everybody does not know what the services are available here, and second is that in villages almost everyone know everyone, so we cannot just go there and treat some problem relating to sexual health.' (Male, 19, Arghakhanchi)

Mostly in Arghakhanchi district, due to the difficult landscape, people living in rural places find it challenging to reach to health facilities.

"....It takes almost 2 hours of walk for the people in our community to reach the nearest government health post. And the nearby city is almost 3 hours of bus drive. So within 5 hours anyone can reach to the city. That's why rather visiting the health post, it is wise to go directly to the city and get treatment. But for some poor people who don't have enough money to travel, there is no other option then to visit health post itself." (Female, 17, Arghakhanchi)

5.4.3 Health workers behavior

It is also health workers' behavior that determines the willingness of people in seeking health care service. Majority of the study participants are not satisfied on what they perceive about the available health care institutions in their communities. The attitude of health workers towards the patients sometime seems not so friendly in various health institutions around Nepal.

'....even a peon in health post sometime behaves as if he is a doctor.' (Male, 15, Kapilvastu)

"....it was few month ago that I went to health post to buy some medicine for my mother, the nurse there was so rude to me. She said my mom should visit herself. That was okay but she was not so friendly enough on saying that." (Female, 16, Arghakhanchi)

But it is not the case in every health facilities. Some of the participants also have nice experiences.

"... My sister was suffering with cough and cold and visited the health post. Later it was found out to be pneumonia. According to my parents, the doctor there was so nice. Though he referred to hospital in city, I still hear praise about him from my mother. In fact that doctor was quite famous in our village." (Female, 18, Arghakhanchi)

6. DISCUSSION

6.1 Discussion of the findings

This study provided information on late adolescents' level of SRH knowledge, common SRH issues prevalent in the community and adolescents' perception towards existing sexual and reproductive health services. While majority of respondents claimed that they had not have sex yet but confirmed the practice of premarital sex among young people in their community.

Similar to prior studies (Simkhada et al. 2012, Paudel and Paudel 2014), this study represented moderate level of knowledge on sexual and reproductive health among late adolescents. Consistent with Khatiwada et al. (2013), this study also showed no huge difference in the knowledge level among respondents based on their place of resident and sex. Even though male participants were more outspoken compared to female, sex of the participants didn't make any difference in the overall level of SRH knowledge. Neither place of residence that is hill and plain or rural and semi-urban made any notable differences.

Majority of the participants identified ASRH with sexually transmitted diseases. The participants were aware about SRH problems like HIV/AIDS, Syphilis and Gonorrhea. Similar findings on HIV/AIDS knowledge among young and adolescents were found in previous studies (Simkhada et al. 2012, Teijlingen et al. 2012, Paudel and Paudel 2014). In contrast to adolescents from Ghana who expressed the threat of getting HIV infection themselves (Asare et al. 2006), this study participants unanimously answered that people having multiple love affairs and sex partners are at risk of HIV infection and STDS. Comparatively people are less aware about other STDs than HIV/AIDS (Temin et al. 1999, Therese 2012). However this study's participants were also aware about other STDs such as Syphilis and Gonorrhea. This could be because all the participants were school going where these diseases are taught comprehensively.

There has been mixed findings regarding the common source of SRH information among adolescents in Nepal. Radio, television, school books and friends were listed as the common source of sexual health information in this study. Similar finding was reflected in some previous studies (Simkhada et al. 2012, Bam et al. 2015). Parents and internet sources were reported least

common source of SRH information in this study unlike previous studies (Simkhada et al. 2012, Paudel and Paudel 2014).

The findings of the study revealed that almost all participants were aware about some of the common sexual and reproductive health problems such as HIV/AIDS, gonorrhea and syphilis. Other ASRH issues identified by participants were teenage pregnancy, abortion, menstruation related issues, gender inequality, communication gap with parents, social stigma and taboos associated with sexuality. Early marriage, teenage pregnancy, abortion and Dysmenorrhea (lower abdominal cramp and pain during menstruation) were also noted as common ASRH issues of Nepal by other studies as well (Pradhan and Strachan 2003, Tamang et al. 2006, Regmi et al. 2008, Puri M 2011, Shrestha A 2012, Khatiwada et al. 2013).

The coverage of ASRH program was found unsatisfactory in this study, as none of the participants has ever visited health center to seek services. However they said that they know some married adolescents from their community who have visited health center for family planning services. Similar finding was derived in the study by Agampodi et al. (2008) conducted in Sri Lanka where respondents were totally unaware about the youth health services provided through public health system. Lower ASRH service utilization rate in different parts of Nepal has also been noted in prior studies as well (Baral et al. 2013, Bam et al. 2015).

According to health workers, normally married adolescents and sometime male adolescents visit health center for SRH services, mostly for family planning services (Baral et al. 2013). Comparatively male adolescents are more likely to seek ASRH services than female (Bam et al. 2015). Conversely, in this study participants reported mostly married female adolescents from their community visit health center. However they agreed that family planning services are the most commonly used SRH services.

Nepal government had already introduced intervention targeting youth and adolescent such as adolescent friendly health services as part of its national adolescent sexual and reproductive health program (FHD/NG 2000) and school health program as the component of its primary health care program (DHS/MOE/NG 2006). However participants being unaware about these

services raised a critical question towards program implementation. This finding also signified the need of further research in the area.

Not different than prior studies, (Lindberg et al. 2009, Colombini et al. 2011, Kennedy et al. 2013, Baral et al. 2013, Paudel and Paudel 2014, Bam et al. 2015) social taboos and stigma linked with sexual practices were pointed as the most prominent barriers for the utilization of ASRH services among adolescents in this study.

Traditional norms and value are deeply rooted in Nepalese society. The practice of sexuality is highly determined by these norms and values. Talking about sexual and reproductive health is considered unethical and shameful act in most of the communities in Nepal (Smith-Estelle and Gruskin 2003, Regmi et al. 2010, Tamang 2015).

Social stigma linked with sexuality is not only prevalent in the developing countries like Nepal but also in much developed country like United States. This fear of stigma and loss of social status, shame, disrespectful service provider, lack of privacy were discovered as the barriers to SRH service seeking behavior in different studies conducted in the United States, Eastern Europe and Central Asia (Lindberg et al. 2009, Colombini et al. 2011).

Service and service provider related factors were other barriers identified in the study. Lack of information about available ASRH services, inadequate services, service accessibility, lack of confidentiality, absenteeism of service providers, their behavior and sex are some of the restricting factors in the utilization of ASRH services, recognized in this study as well as in previous studies (Teijlingen 2012, Baral et al. 2013, Paudel and Paudel 2014, Bam et al. 2015).

Gender and marital status are other factors that determine the utilization of SRH services (Baral et al. 2013, Paudel and Paudel 2014, Bam et al. 2015, Tamang 2015). Married people were recognized as the ones mostly using SRH services by this study's participants, which reciprocates previous studies findings (Baral et al. 2013, Khatiwada et al. 2013 Bam et al. 2015). However unlike other studies findings (Baral et al. 2013, Bam et al. 2015, Tamang 2015), participants of this study reported that women seek SRH services more compare to male.

6.2 Strength and limitation of the study

Nepalese society is built on strong cultural values, norms and traditional beliefs (Regmi et al. 2010). Sexual and reproduction related issues are considered as private matter and sensitive. Hence use of qualitative approach with in-depth interview as a method of data collection was found to be effective. This method has been widely used in research related to sensitive issues (Price and Hawkins 2002, Regmi et al. 2010).

In addition, involving female interviewer was a thoughtful idea as participants were more comfortable and open to discuss sensitive issues with same sex interviewer. The primary researcher being Nepali with proficiency in local dialect was an advantage to the study. This made communication with participants easy and reliable.

In past few years, some studies have been conducted on related topic in other parts of Nepal (Regmi et al. 2010, Jha et al. 2010, Adhikari and Tamang 2009, Mahat and Scoloveno 2001) but no previous study was carried out in this particular study area. Therefore, this study could provide insights into adolescents knowledge and perception towards their sexual and reproductive health in Aarghakhanchi and Kapilvastu districts of Nepal.

The sample size of the study could be considered as one of the limitations, as it is difficult to represent people of diverse ethnicity, religion and socio-cultural status within this sample frame. However, unlike quantitative methods, the right sample size in qualitative research means acquiring number which fulfilled the purpose of the study (Sandelowksi 2000, Bernard 2012). In this study also, the information solicited from both male and female participants accomplished the study purpose.

Secondly, this study was not able to analyze the findings based on socio-economic status and ethnicity. Different ethnic groups perceived sexual and reproductive issues differently based on their traditional values and norms. Also socio-economic status might influence people access to information and services. Hence not being able to include these factors can be taken as study limitation.

6.3 Validity and reliability

Validity and reliability has crucial role in ensuring credibility and quality of research findings. In qualitative research, validity generally implies to the use of suitable tools, process and data. Reliability refers to consistency in the process (Leung 2015).

This study used semi-structured interview guideline, based on study objectives. To improve the validity of data collection, the interview guideline was pre-tested in a pilot interview with a female and a male adolescent who fulfilled the inclusion criteria of the study but were not the participant in the final data collection. The practical problems identified during pilot study were addressed and a revised version of interview guideline was finalized. In order to maintain the consistency in all interviews, the interviewers discussed each question and the possible probing questions prior to actual interviews.

All the interviews were conducted smoothly in Nepali language using locally spoken terminology. The participants were treated in similar manner and any possible biases were avoided to the best of researcher's knowledge.

6.4 Implication and further research

This study will be an addition to the public health research particularly in Nepal where scientific research in general, is relatively new. The findings of the study reflected moderate knowledge of SRH issues among adolescents and almost non-existing ASRH service seeking practices. Thus, local stakeholders such as village development committee, district development office, local health centers, district health office, local schools and district education office can use the information to design evidence based interventions for adolescents in their service areas.

Similarly, this study brought forth the common barriers to SRH information sharing and service utilization among adolescents. It identified social stigma and taboos associated with sexuality, as one of the important barriers. Addressing such stigma and taboos through community and cultural events could be useful in promoting ASRH. This information could motivate international and national organization, community based organization and Nepal government to design and implement program which could address such issues.

Furthermore the study highlighted almost non existing ASRH services utilization, which explained the need of evaluating existing ASRH program. Further research is recommended to identify the weaknesses in structure and efficacy of the on-going ASRH program.

7. CONCLUSION

The present study explored adolescent's perspective on the sexual and reproductive health and services. It revealed that the adolescents in both Aagrakhanchi and Kapilvastu disctricts have moderate level of knowledge about sexual and reproductive health. In general adolescents from both districts were aware about some of the common SRH problems like HIV/AIDS, Syphilis and Gonorrhea. Underlying issues like early marriage, teenage pregnancy and gender inequality were also mentioned. The commonly reported sources of SRH information were course book, mass media (TV, radio and FMs) and peers. The culture of communicating SRH problems with parents was almost non-existing except girls getting information from mothers regarding menstruation. This study identified the gap in the implementation of government ASRH programs. The most important reasons noted for not utilizing the services were social stigma, lack of information, service quality, confidentiality and service provider's behavior. Having known that adolescents moderate knowledge and awareness about SRH and its services, this study emphasized the need of promotional activities at the community level, mostly involving peer groups and youth members.

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9. ANNEXES

9.1 Annex I: In-depth interview guidelines

In-depth interview with adolescent

Background information:

- 1. Serial Number:
- 2. Age:
- 3. Sex:
- 4. Current relationship status:
- 5. Ethnicity:
- 6. Religion:
- 7. Education:
- 8. Occupation:
- 9. With whom he/she live:
- 10. In school/ out of school:

Guiding questions:

- Have you heard the term "Sexual and Reproductive Health"? What does it mean? Where did you hear it from?
- 2. In your opinion, what are the common sexual & reproductive health problems of adolescents?
- 3. What are the causes behind these health problems?
- 4. Who are most likely to suffer from these health problems?
- 5. Do you think you know enough about these health issues?
- 6. Do you want to know more about these issues? What will you like to know more about?

- 7. What types of S&RH services are available in your area?
- 8. How did you come to know of these services?
- 9. What do you think about these services?
- 10. Is it easy to go there? How about the costs? Can you afford going there?
- 11. If you suffer from any sexual & reproductive health problem, who do you talk to? Anyone in your family? Why? Do you think it is easy or difficult to talk to your family about these issues?
- 12. And where will you go for treatment? How do you feel going for treatment for such health issues? Who do you feel comfortable talking to about such issues? How is the environment at these health centers? How do you feel there?
- 13. Do you trust the doctors and people working there?
- 14. Where do other young people go to if they have any sexual or reproductive health issue? Why there?
- 15. Have you ever received any S&RH services?
 - a. If yes, how was your experience
 - b. If no, why
- 16. In your opinion what should be added to the existing S&RH services to encourage more youth to utilize them?

9.2 Annex II: Informed consent

Good morning (Good afternoon/evening)

My name is **Prakash Khanal.** I am a student from University of Eastern Finland, Finland.

Purpose of the Study

I am doing a study on the Adolescents perception toward Sexual and reproductive health care services in Nepal. I also want to collect information about your knowledge, health service seeking behavior, health service needs and barriers to access the available resources regarding sexual and reproductive health services in Nepal.

Procedures

As a part of this study, I am going to have a short interview with you to discuss in the above explained themes. You are among the other similar participant who have volunteered and been chosen for this purpose. I have chosen you because I think you would discuss these matters with me and describe the relevant attitudes and perceptions within your community.

Along with the notes that I make during our discussion, I will also be recording the proceedings on an audio tape. The audio tapes will be kept until they have been transcribed onto paper and then will be destroyed. In the time that it takes to transcribe them they will only be accessible by the researchers (principle researcher and research supervisors) involved in this study and will be treated as strictly confidential. Each interview session may take about one hours of your time, and may include issues that you find sensitive.

Risks and Benefits of the Study

By participating in this study and answering your questions, you will not receive any direct benefit. However, you will help to increase our understanding of the needs of the community in terms of adolescent sexual and reproductive health. I hope that the results of the study will improve the quality and utilization of the services currently available for you. Your participation in this study will not involve any risks to you.

Rights

You are completely free to take part in this study or to refuse to do so. Even after you agree to participate in the study, you will be free to leave the discussion any time you wish and/or to refuse to participate on any topic that you are uncomfortable with. The decision to not to participate or to withdraw will not affect any future aspects of yours.

Do you have any questions about what I have just told you?

YES (Interviewer please answer any questions to the best of your ability)

NO (Interviewer, go to the next question)

Now, please tell me, do you clearly understand the purpose of the interview session I have just described?

YES (Interviewer, go to the next question)

NO (Interviewer, repeat the section on the purpose of the study and make sure that the interviewee has understood it)

Do you agree to take part in the interview session and share your views with me?

YES (Interviewer, ask the respondent to sign the form)

NO (Interviewer, thank the interviewee and leave him/her)

Declaration of the Volunteer

I have understood that the purpose of the study is to collect information about the Adolescents perception towards sexual and reproductive health care services in Nepal.

I have read the above information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate as a subject in this study and understand that I have the right to withdraw from the study at any time without in any way affecting my further life.

Signature of Volunteer	Signature of Investigator:		
Date:	Date		