

**KNOWLEDGE OF REPRODUCTIVE HEALTH AMONG HIGHER
SECONDARY SCHOOL GIRL STUDENTS
(A Study of Madan Smarak Higher Secondary School, Lalitpur)**

By
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RECOMMENDATION

This dissertation entitled “**Knowledge of Reproductive Health among Higher Secondary School Girl Students: A Study of Madan Smarak Higher Secondary School, Lalitpur**” by Sarita Bajracharya is prepared under my supervision for partial fulfillment of the requirement for the Degree of Master of Arts in Population Studies. To the best of my knowledge, the study is original and carries out useful information. Therefore, I would recommend it for evaluation to the Dissertation Committee.

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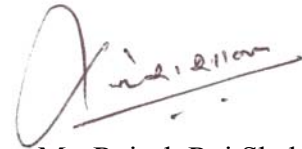
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The dissertation entitled “Knowledge of Reproductive Health among Higher Secondary School Girl Studints: A Study of Madan Smarak Higher Secondary School, Lalitpur” by Ms. Sarita Bajracharya has been accepted as partial fulfillment of the requirements for the Degree of Master of Arts in Population Studies.

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LIST OF ACRONYMS

AIDS	Acquire Immune Deficiency syndrome
CBS	Central Bureau of Statistics
HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
MDGs	Millennium Development Goals
PAN	Population Association of Nepal
PSSN	Population Students Society of Nepal
RH	Reproductive Health
RTI	Reproductive Tract Infection
SLC	School Living Certificate
STD	Sexually Transmitted Disease
TU	Trubhuvan University
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
WHO	World Health Organization

TABLE OF CONTENT

	Page No
LIST OF ACRONYMS	
TABLE OF CONTENTS	
LIST OF TABLE	
ABSTRACT	
CHAPTER- I INTRODUCTION	1
1.1 Background of the study	1
1.2 Statement of the problem	3
1.3 Objectives of the study	4
1.4 Significant of the study	4
1.5 Limitation of the study	5
1.6 Organization of the study	5
CHAPTER-II LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK	6
2.1 Theoretical literature	6
2.2 Empirical literature	8
2.3 Conceptual framework	12
CHAPTER-III METHODOLOGY	13
3.1 Sample design	13
3.2 Questionnaire design	13
3.3 Field operation	13
3.4 Data processing	14

3.5 Data analysis technique	14
CHAPTER-IV BASIC CHARACTERISTICS OF SAMPLE POPULATION	15
4.1 Social characteristics of the sample population	15
4.1.1 Caste/ethnicity	15
4.1.2 Religion	15
4.1.3 Parent's education	16
4.2 Economic characteristics of the sample population	17
4.2.1 Main income sources of family	17
4.2.2 Parent's occupation	17
4.2.3 Household facilities	18
4.3 Demographic characteristics of the sample ample population	19
4.3.1 Age	19
4.3.2 Place of living	19
4.3.3 Family size	20
CHAPTER-V KNOWLEDGE ON REPRODUCTIVE HEALTH	21
5.1 Nominal knowledge of reproductive health	21
5.1.1 Knowledge of components of reproductive health	21
5.1.2 Knowledge of physical changes in adolescent	22
5.1.3 Knowledge, attitude and experienced age of menstrual Period	22
5.1.4 Knowledge about appropriate age to get marriage	23
5.1.5 Knowledge about being pregnant	24
5.1.6 Knowledge of age of first sexual intercourse and premarital sex	25
5.1.7 Knowledge on effects of early pregnancy	25
5.1.8 Knowledge about family planning methods	26

5.1.9 Sources of knowledge of family planning methods and reproductive health	27
5.1.10 Knowledge of appropriate age of birth spacing	28
5.1.11 Knowledge about abortion	28
5.1.12 Knowledge about safe motherhood	29
5.1.13 Knowledge about infertility	29
5.1.14 Knowledge about STIs and HIV/AIDS	30
5.1.14. 1 Nominal knowledge of STIs and HIV/AIDS	30
5.1.14. 2 Knowledge of route of HIV transmission	31
5.1.14. 3 Knowledge of preventive measure of HIV transmission	32
5.1.15 Attitudes towards knowledge of reproductive health	32
CHAPTER-VI SUMMARY CONCLUSION AND RECOMMENDATION	34
6.1 Summary of the findings	34
6.1.1 Basic characteristics of the respondents	34
6.1.2 Knowledge of reproductive health	35
6.2 Conclusion	39
6.3 Recommendations	40
Appendix	
Reference	

LIST OF TABLES

Table: 1 Distribution of respondents by caste.

Table: 2 Distribution of respondents by religion.

Table: 3 Percentage distributions of respondents by parent's education.

Table: 4 Distribution of respondents by main income sources of family.

Table: 5 Percentage distributions of respondents by parent's occupations.

Table: 6 Distribution of respondents by household facilities.

Table 7 Distribution of respondents by age group

Table: 8 Distribution of respondents by living places.

Table: 9 Distribution of respondents by family size.

Table: 10 Distribution of respondents by knowledge on components of
reproductive health

Table: 11 Distribution of respondents by physical changes of girls in adolescent
period

Table: 12 Percentage distributions of Respondents by knowledge, attitude and
experienced age of menstrual period.

Table: 13 Distribution of respondents by opinion on appropriate age to get marriage

Table: 14 Distribution of respondents by opinion on getting pregnant

Table: 15 Distribution of respondents by knowledge about the appropriate age of
first sexual intercourse and premarital sex

Table: 16 Distribution of respondents by knowledge on effects of early pregnancy

Table: 17 Distribution of respondents by knowledge on means of family planning

Table: 18 Distribution of respondents by sources of knowledge of means of family
planning

Table: 19 Distribution of respondents by knowledge on appropriate birth spacing period

Table: 20 Distribution of respondents by Knowledge about abortion

Table: 21 Distribution of respondents by knowledge of safe motherhood

Table: 22 Distribution of respondents by knowledge about infertility.

Table: 23 Distribution of respondents by knowledge of STIs

Table: 24 Distribution of respondents by knowledge of route of HIV transmission

Table: 25 Distribution of respondents by knowledge of preventive measures of HIV transmission

Table: 26 Distribution of respondents by needs of RH knowledge in adolescent period

ABSTRACT

It is a study of “**Knowledge and Awareness of Reproductive Health among Higher Secondary School Girls Students.**” This study covers 110 respondents who were studying in **Madhan Smarak Higher Secondary School, Lalitpur** in grade 9 and 10. Total students were covered who were present in the class at the time of taking data. An overall objective of the study is to access the knowledge of Reproductive Health of girl’s adolescents. The available literatures had been reviewed and developed a conceptual framework.

The study shows that Brahmin, Chhetri, Newar, and Tamang with the percent of population 27.7, 25.5, 36.4, 10.9 respectively were the major ethnic group with the majority of Hindu religious people. The literacy status of respondents’ parents, 72.7 percent of their mother’s and 78.2 percents of their father’s were literate. Majority of the respondents’ main sources of family income were non agriculture sector. Various respondents were living together in small family size. Among 47.3 percent respondents lived in their own house. 96.4 percent had radio, 97.3 percent had television, 33.6 had computer availability, and 93.6 percent had phone as there household facilities.

A finding shows that, above than 90 percent respondents had knowledge about means of family planning and 77.3 percent of the total respondents were reported five years interval is an appropriate birth spacing period between two children. About 96 percent perceived about the menstruation is a periodic discharge of blood and mucus and 82.7 percent respondents said “When the menstruation girls has been capable to be pregnant”. Among them, 66.4 percent respondents were reported 20 years is an appropriate marriage age for female and 25 years is for male. Half of the total population said that sexual intercourse between male and female is a way of getting pregnant and about three in fourth respondents were reported the appropriate age of sexual intercourse is twenty years and above. Overall, above than 80 respondents were reported the consequences of early pregnancy is infant mortality, maternal mortality, and low weight birth. Among 92.7 percent had knowledge about abortion is termination of pregnancy before 28 weeks. In the case of safe motherhood, care of those three components (ANC, delivery, and PNC) of the safe motherhood had reported by 92.7 percent of respondents as the safe motherhoods components. Above than 90 percent respondents had knowledge about infertility. The result of specific knowledge on STIs and HIV/AIDS 97.3 percent had knowledge about HIV/AIDS as well as 89.1 percent and 82.7 percent respondents were reported Gonorrhoea and syphilis are the types of STIs respectively. 91.8 percent of the respondents were known about the need of RH knowledge in the adolescent period.

CHAPTER- I

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Adolescence is the period of transition from childhood to adulthood. During this period there are so many changes such as; physical, mental, psychological, behavioral etc. the period of adolescence encompasses the transition from childhood to adulthood during second decade of life. It is one of the most crucial periods of life in which many key socio-economic, biological and demographic events occur and that set the stage of adult life.

The term “Adolescents” “youth” and “young people” are used differently in various societies. These categories are associated- where they are recognized at all- with different roles, responsibilities and ages that depend on the local context (UNFPA, 2003:3).

The term adolescence comes from the Latin word *adolescere*, meaning “to grow” or “to grow to maturity”. Primitive Peoples- as was true also in earlier civilizations- do not consider puberty and adolescence to be distinct periods in the life span; the child is regarded as an adult when capable of reproduction(Hurlock, 2005: 222). A young person who is developing from a child into an adult: adolescents between the ages of 13 and 18 (Oxford, 2006). Adolescence has been defined by the World Health Organization as the period of life spanning the ages between 10-19 years, and youth as between 15-24 years. At last, UNFPA, UNICEF and WHO define “Young People” as between the ages of 10 and 24, “Youth” as those aged 15-24, and “Adolescent” as the population aged 10-19. Adolescents aged 10-14 is known as early adolescents and 15-19 as late adolescents (Pathak, 2006: 19). This dissertation uses this definition in the case of adolescent.

Reproductive health is 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 function and processes (ICPD, 1994: 45). Reproductive health therefore,

implies that people are able to have a satisfying and safe sex life, and they have the capability to reproduce; and the freedom to decide it, when and how often to do so. Men and women have the right to be informed of; and to have access to safe, effective, affordable and acceptable methods of family planning of their choice for regulation of fertility which are not against the law, as well as the right of access to appropriate health care services for safe pregnancy and childbirth. Reproductive health care is defined as the constellation of methods, techniques and services that contribute to reproductive health and well being by preventing and solving the problems (PAN, 2005: 22).

The government of Nepal has recognized Integrated Reproductive Health Package, which includes:

- Family Planning
- Safe motherhood including child health (New born care)
- Prevention and management of complications of abortion
- RTI/STD/HIV/AIDS
- Prevention and management of sub-infertility
- Adolescent reproductive health
- Problems of elderly women i. e. uterine, cervical and breast cancer treatment at tertiary level/private sector.

So, Adolescent and reproductive health is correlated. Effects of those components of RH depends upon different cohort. Strongly, an adolescent is a risk period in the case of worse reproductive health status while, adolescents are involved on the uses of those components unsafely.

1.2 STATEMENT OF THE PROBLEM

As of 2000, adolescents (10-19 years age group) comprised more than 1.1 billion of the world's population – that is one in every five people our planet. The Asian region comprises 712 million people in this age group. The largest number of adolescents reside in south and south-west Asia (45 per cent) followed by east and north East Asia (33.6%). The proportion of adolescents in the age group 10-19 years will continue to grow to reaching 1253 million by the year 2025 while in Asia number will decline to 698 million by the year 2025 (MOH, 2005: 3-4). In Nepal, adolescent population is approximately 5.4 million as per 2001 census. This population is nearly one fourth (23.6%) of the total population of the country (CBS, 2001). Adolescent boys and girls, particularly those who are unmarried are lacking information on reproductive health. Existing reproductive health care facilities are unfriendly with adolescent. Parents play a major role in educating children on reproductive health and sexuality, but cultural factor interfere discussion on private matters with their children. Parents may also lack knowledge on reproductive health. Adolescent also lack accurate information about their physiology, sexuality and reproductive health, only three percent and twenty five percent of late adolescent girl in Pakistan and Sri Lanka respectively could correctly mention the number of fertile days in the menstrual cycle. In Bangladesh, only 39 percent of unmarried adolescent girls are reported to have prior knowledge on menstrual before they experienced it (Acharya, 2007: 79).

The huge figure of the total population of Nepal has been up on adolescents' period. They should be aware about the changes of adolescents and their reproductive Health effects. The sex ratio of Nepal, female is higher than male, so among adolescent females or girls has lower knowledge than among males. But female has been at more risk in the problem of RH. Therefore Female also should be aware about the adolescent's changes and challenges of reproductive health. Among the adolescent girls, we have no particular research on their knowledge of RH at the period of adolescent period. The causes have been proved that RH knowledge should be taken by the adolescents' girl's. Indeed the research fulfill the gap of particular research output of adolescent girl and their RH knowledge at the adolescent period.

1.3 OBJECTIVES OF THE STUDY

Main objective of the study is to assess the knowledge of Reproductive Health of girl's adolescents of Madan Smarak Higher Secondary School, Lalitpur.

The specific objectives are:

- To assess the knowledge on component of Reproductive Health among girls student's.
- To examine the knowledge on the physical changes in adolescents period.
- To assess the knowledge of adolescents and reproductive health with interrelated relations.

1.4 SIGNIFICANCE OF THE STUDY

Available knowledge on adolescents' period and changes of it, is a positive matter within the secondary level students because of the high proportion of students has been fall down upon the adolescent period in school age. In another way, those adolescents will have been parents in future. To be a good parent, to maintain their present life, to be safe from various dangerous communicable diseases, become mature for future life, to avoid teen age pregnancy and other worse matter of RH, a adolescent should be aware about the reproductive health and adolescent period at the schooling period. In the case of girl students, nearly cent percent girls will become mother. So, no one-girl students avoid getting the knowledge of RH. Particularly, the girl has been at more risk than boy to get sexual violence, become pregnant, communication on physical changes, menstruation period, and others because accessing on the knowledge of adolescent girl's in particular girl's school. In the case of this school, there has been only female students so how much they have knowledge about the opposite sex can be examined. Thus, the study is important to assess the knowledge of reproductive health in the adolescent period.

1.5 LIMITATION OF THE STUDY

Almost all the studies have some of limitations and this study is not an exception on this fact. So this study has some limitations which are as follows:

At first, this study is being academic and limited to both time and resources does not cover on deep knowledge of Reproductive health of the adolescent students. However, it focuses on the nominal knowledge of the students.

Another aspect, only one school has been taken in the study and it doesn't cover any rural area's school. Only structure questionnaire has been used to take the primary data. Qualitative tools have not been included at the time of gathering the data. The sample size and school is too small so it doesn't represent the overall national condition but this research gives the sample finding about the matter.

1.6 ORGANIZATION OF THE STUDY

The first chapter of the study covers general background, statement of the problems, objectives of the study, signification, limitation and organization of the study. It followed by the second chapter, which covers review of literature and conceptual frame work.

The Third chapter deals on methodology in which sample design, questionnaire design, field operation, data processing and technique of data analysis are discussed. The socio-economic and demographic characteristics of the respondents are cover in the chapter four. Where chapter five is used for findings of the knowledge of reproductive health and their each component's knowledge descriptions. Chapter six shows the summary, conclusions and recommendations of the study.

CHAPTER-II

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 THEORETICAL LITERATURE

Adolescence has been defined by the World Health Organization as the period of life spanning the ages between 10-19 years, and youth as between 15-24 years. Young people are those between 10-24 years of age. Adolescent is the second decade of life and it is a period of rapid development. Moreover, it is a time when growth is accelerated, major physical changes take place and differences between boys and girls are accentuated (CBS, 2003: 325). Defining the young - the term “Adolescents”, “Youth”, and “Young people” are used differently in various societies. These categories are used differently in various societies. These categories are associated - where they are recognized at all - with different roles, responsibilities and ages that depend on the local context. As this report details, key life events marriage, sexual debut (first sexual intercourse), employment, childbearing, acceptance into adult organizations, political participation - occurs at differing times between and with in societies (UNFPA, 2003: 3). Actually, adolescence is a modern concept. Though it is now established the idea of a period of adolescence – a period between sexually maturity and the assumption of adult role and responsibilities – a recent cultural innovation. In many developing countries, the concept of adolescent arose as recently as 20 years ago, and in some regions the idea is new today (Rai, 2004: 23).

In same case, Reproductive Health differ from Adolescent but it is too related for better management of adolescent stage of each person, without knowledge of adolescent changes everybody takes those changes as a problem. So everybody knows that about the Reproductive health and Adolescent relations.

Reproductive Health is a human right in 1994, the International Conference on Population and Development (ICPD) stressed the importance of adolescence to sexual and reproductive health throughout the life cycle. It also – for the first time in an international agreement – recognized that adolescents have particular health needs that differ in important ways from those of adults, and stressed that gender equity is an essential component of efforts to meet those needs. The ICPD programme of action urges governments and health systems to establish, expand or adjust programme to meet

adolescents and health systems to establish, expand or adjust programmes to meet adolescent' reproductive and sexual health needs, to respect rights to privacy and confidentiality, and to ensure attitudes of health care providers do not restrict adolescent's access to information and services. It further urges governments to remove any barriers (laws, regulations or social customs) between adolescents and reproductive health information, education, and services (UNFPA, 2003: 4).

The reproductive health needs of adolescents as a group have been largely ignored to date by existing reproductive health services. The response of societies to the reproductive health needs of adolescents should be based on information that helps them. The response of societies to the reproductive health needs of adolescents should be based on information that helps them attain a level of maturity required to make responsible decisions. In particular, information and services should be made available to adolescents to help them understand their sexuality and protect them from unwanted pregnancies, sexually transmitted diseases and subsequent risk of infertility. This should be combined with the education of young men to respect women's self determination and to share responsibility with women in matters of sexuality and reproduction. This effort is uniquely important for the health of young women and their children. Women's self-determination and, in many countries, for efforts to slow the momentum of population growth. Motherhood at a vary young age entails a risk of maternal health that is much greater than average, and the children of young mother have higher level of morbidity and mortality. Early child-bearing continues to be an impediment to improvements in the educational, economic and social status of women in all parts of the world. Overall for young women, early marriage and early motherhood can severely curtail educational and employment opportunities and are likely to have a long-term, adverse impact on them and their children's quality of life (ICPD, 1994: 58).

Millennium Development Goals in 2000, 189 Development Goals (MDGs), most to be achieved by 2015, outlining progress from 1990 levels.

- Eradicate extreme poverty and hunger.
- Achieve universal primary education,
- Promote gender equality and empower women,
- Reduce child mortality,

- Improve maternal health,
- Combat HIV/AIDS, malaria and other diseases,
- Ensure environmental sustainability
- Develop a global partnership for development.

As UN Secretary-General Kofi Annan stated in 2002, “The Millennium Development Goals, particularly the eradication of poverty and hunger, cannot be achieved if questions of population and reproductive health are not squarely addressed. And that means stronger efforts to promote women’s rights, and greater investment in education and health, including reproductive health and family planning” (UNFPA, 2003: 53).

All the above-mentioned literature shows that adolescent and reproductive healths are interrelated. Absent of one another should not be full. So that, those international conference – ICPD, MDGs and others - have also mentioned those matters of adolescent and reproductive health.

2.2 EMPIRICAL LITERATURE

Marriage marks the point in a woman’s life when childbearing becomes socially acceptable. Age at first marriage has a major effect on childbearing because women who marry early have, on average, a longer period of exposure to the risk of becoming pregnant and a greater number of lifetime births (USAID, New ERA, Ministry of Health and Population, 2007). Widespread adolescent pregnancy and childbearing, with their accompanying risks, pose a serious public health concern, and also contribute to rapid population growth in many countries. Young people additionally face high rates of sexually transmitted infections and HIV/AIDS. This underscores the need for far greater access to youth- friendly reproductive and sexual health services. Service should be provided in a gender sensitive, youth appropriate way, as part of coordinated development efforts (UNFPA, 2003: 39).

A research finding of south Asia, emphasize the considerable risk that adolescents continue to face extending from unsafe or unwanted sexual activities to such consequence as unwanted pregnancy, abortion and infection and from misperceptions to a lack of life skill and wide gender power imbalances. They also underscore the vast obstacles that must be overcome in order to access contraceptives and other reproductive health

information and services (WHO, 2003:27). In one study in India exploring pregnancy outcomes, foetal loss experienced by adolescent mothers aged 12 to 19 years was significantly higher than experienced by older women age 20 to 24 years (Gao, Sha, Chaohua, and Xiaowen, 2003: 8).

Over 14 million adolescents give birth each year and about 85 percent of those births occur in developing countries. Adolescent pregnancies and births carry higher risk- for both the mother and new born- than births and pregnancies among older women. The maternal mortality rate among this age group is twice as high as for women in their 20s and more adolescents girls age 15-19 die from pregnancy related causes than from any other cause (WHO, 2003:37). Consequences of risky sex in terms of unwanted pregnancy and induced abortion are reported in several studies. One study reports that 11.7 percent of the unmarried female adolescents had experienced one or more induced abortion (Gao, Sha, Chaohua, and Xiaowen, 2003: 7).

Prevention and management of reproductive Tract Infections, STDs, HIV/AIDS and other reproductive health conditions are important consequences of unprotected intercourse. Here again, from biological and social reasons, adolescents are at a high risk. Out of an estimated 340 million cause of curable STIs in the world at least one third occurs in young people under age 25. This means that more than one out of 20 adolescents contract a curable STIs, many cause of STIs occur for which no cure exist- fore most among them HIV infection (WHO, 2003: 38). A survey of 1310 students in 5 university in Beijing reports that 15.2 percent of male and 13.3 percent of female students had engaged in sexual relations, of these fewer than half (42.2%) had used any contraception (Gao, Sha, Chaohua, and Xiaowen, 2003: 5). Physiology is the first factor that makes adolescents- particularly girls- more vulnerable than adult to STIs. Because girls have a large mucosal surface area expose to infection and have not developed mature mucosal defense systems, the cells that line the opening of the cervix are more susceptible to Chlamydia, gonorrhea and HIV than those of adult women (WHO, 2003: 81). Although STIs and HIV/AIDS pose a growing threat in China, Young people are not well informed about them, their modes of transmission and means of protection. One study of China, showed that no more than 50 percent of students in colleges and middle schools were aware that AIDS, 35.6 were poorly informed (Gao, Sha, Chaohua, and Xiaowen, 2003: 8).

The experience of adolescence is diverse and depends on many factors including one's sex, place of residence, socio-cultural context, economic circumstances and marital status. A major determinant is whether an adolescent is protected and harbored by a nurturing family, or trying to survive with little or no help, like many AIDS orphans. This generation is also growing up in an increasingly globalized world, which poses a new set of challenges and possibilities. While millions of adolescents enjoy living and supportive environments and benefit from expanding opportunities and freedom, millions of others face threats to their safe and healthy passage into adulthood. Poverty compounds the challenges and risks of adolescence and obliges many parents to put their children to work, often in harm's way many girls and boys do not get the chance to obtain an education. In urban areas, boys may be forced by poverty to survive on the streets (UNFPA, 2005: 45).

A study in China, among senior high school students reported that 3.9 percent of these students had sexual experience. (Gao, Sha, Chaohua, and Xiaowen, 2003: 3). Fifteen percent of women age 20-49 had sexual intercourse by age 15, about 60 percent by age 18, and 77 percent by age 20. (USAID, New ERA, Ministry of Health and Population, 2007: 105). In conflict situations, adolescent boys and girls are often recruited as soldiers or domestic and sexual slaves by armed rebel forces. Adolescent girls also face risks of exploitation and abuse and are being trafficked into sexual slavery on an unprecedented scale (UNFPA, 2005: 46).

Adolescent pregnancy and motherhood is a major social and health issue in Nepal. Early teenage pregnancy can cause severe health problems for both the mother and child. Moreover, an early start to childbearing greatly reduces the educational and employment opportunities of women and is associated with higher levels of fertility. Nineteen percent of women age 15-19 have already had a birth or are pregnant with their first child (USAID, New ERA, Ministry of Health and Population, 2007: 73-74). In Nepal, 50 percent of girls marry before age 18, and early child bearing follows early marriage usually within 18 months (WHO, 2003: 81).

Substantial proportion of the total population in Nepal falls under adolescent and youth classification. Most of the births in the country since occur within marital union: number

of children born to adolescent and youth refers the fertility rates to these groups, which is quite high. The evident rapid succession of birth before 20 years of age further aggravates after 19 years of age. In addition to all these, analysis of early marriage, successive birth, lower age at first child birth, short birth interval, and pregnancy termination show the situation of the adolescents and youths alarming and vulnerable (Panta, 2001 : 25).

According to the both Nepali women and men in Nepal prefer a small family size with only marginal differences between them in the ideal number of children. Three out of five women and men preferred an ideal family size of two children with only 8 percent of women and 6 percent of men favoring less than two children. One-fourth of women and men express a preference for a three-child family. Seven percent of women and men express an ideal family size of four children. A small proportion of women and men expressed an ideal family size of five or more (1 %). The mean ideal number of children is 2.3 among all women and 2.4 among currently married women. Similarly, the mean ideal number of children is 2.4 among all men and 2.5 among currently married men age 15-49. There has been a steady decline in the mean ideal number of children among currently married women over the last ten years, from 2.9 children in 1996 to 2.6 children in 2001 and to 2.4 children in 2006. (USAID, New ERA, Ministry of Health and Population, 2007: 118). So in the context of Nepal above than 2 children has been being the ideal number of children according to the NDHS 2006 report. The knowledge of ideal number of child is another indicator of RH knowledge.

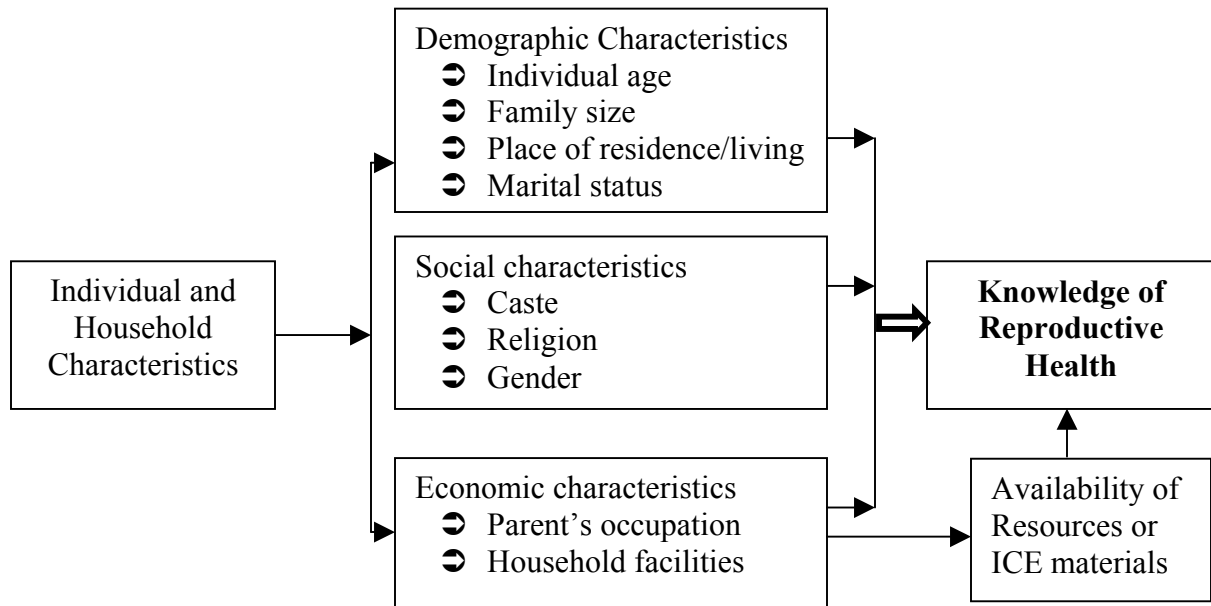
Among the adolescents should be aware about RH. So, Sources of information has been playing vital role to be aware all adolescents. For the information of adolescent's physical change, radio and television were found appropriate source of information. Similarly, for healthy sexual behaviour and unsafe sex relationship, print materials and television were found more appropriate sources of information. For the ejaculation process, menstrual process and information of opposite sex organs, social activities or live media (inter personal communication, peer information, etc.) were found appropriate sources of information. Finally, radio, television, and print materials were found more appropriate sources of information for adolescents (Acharya, 2007: 86-87).

2.3 CONCEPTUAL FRAMEWORK

The conceptual framework assumes to explain the knowledge on reproductive health of adolescent girls as mainly influenced by their individual and household characteristics. The knowledge influenced by their social status- caste, religion, gender discrimination in the society-, economic status of their family-sources of income of their parent's and availability of household facilities-, and some demographic variables-age, family size, place of residence/living and marital status of the adolescent-and also the economic characteristics influenced on availability of the sources and ICE materials. The accessibility of the resources and ICE materials is another part of the knowledge.

Based on the objectives of the study and available literature, this study has proposed the following conceptual framework.

Figure: 1



CHAPTER-III

METHODOLOGY

3.1 SAMPLE DESIGN

The study was conducted in Madan Smarak Higher Secondary School, Lalitpur, which represents the girls' school of Kathmandu valley. The school was purposively selected because, the school is a girls school and it has more adolescent girls can be easily communicate about RH. It is a government school. More information can be taken in the government school because of various economic groups of students admitted in the school and multi caste and multiple background status of students.

The students who were present at the time of taking information in the class had been involved as respondents. In this research, who participated to answer the structured questionnaire were studing at grades 9 and 10. The total number of students of grades 9 and 10 of the school was the sample frame and out of that 110 students were selected purposively as the sample size.

3.2 QUESTIONNAIRE DESIGN

A structured questionnaire was developed on the basis of knowledge of reproductive health among adolescents. The first part of the questionnaire covers individual information of respondents. The second part includes the household information, similarly the third part includes the knowledge of reproductive heath and the fourth or last part includes attitudes on reproductive health. Various questions had been close ended type and some questions were semi-structured and open-ended types. Pre code had been done in close ended questions.

3.3 FIELD OPERATION

Field work was conducted in a single day. For the quality, all the students were placed at some distance from each other at the time of questionnaire filling an individual information collection.

3.4 DATA PROCESSING

The filled-up complete questionnaires were entered into the computer immediately after editing and coding. Computer software SPSS was used for data entry. After cleaning data it was transferred into SPSS for further processing and analysis. Frequency distribution tables were main outputs of the data analysis.

3.5 DATA ANALYSIS TECHNIQUE

A display of the frequencies of scale is known as frequency distribution. Frequency distribution of data can be presented in tabular form. The table of frequency distribution is known as frequency table. Information related to background characteristics and knowledge of reproductive health was presented in frequency tables.

CHAPTER-IV

BASIC CHARACTERISTICS OF SAMPLE POPULATION

The basic characteristics of the respondents and their household's basic information are represented in this chapter. They help to understand the background characteristics of the sample population.

4.1 SOCIAL CHARACTERISTICS OF THE SAMPLE POPULATION

In this section social characteristic, especially, caste/ethnicity and religion of the respondents are included and discussed about them. They help to understand the individual and household characteristics of respondents.

4.1.1 Caste/ethnicity

Sample population represents the multi-cultural society. There has been various castes of respondents. They have been represented in Table 1.

Table 1: Distribution of respondents by caste.

Caste	Number	Percent
Brahmine	14	12.7
Chhetri	27	24.5
Newar	40	36.4
Tamang	12	10.9
Others**	17	15.5
Total	110	100.0

Sources: Field survey, 2008 (**Rai, Limbu, Magar, and Gurung).

The respondent in the sample represents different castes such as Brahmin, Chhetri, Newar, Tamang, and others, which were major caste. They represents 12.7, 25.5, 36.4, 10.9, and 15.5 percent Brahmin, Chhetri, Newar, Tamang, and others respectively. Rai, Limbu, Magar and Gurung were included in others category.

4.1.2 Religion

In recent years, particularly after the onset of multi-party democracy in Nepal in 1990, religion has become a sensitive topic in ethnically diverse Nepalisociety. A lot of people of different ethnic backgrounds claim that they are simply written as Hindu. This study

shows that 81.8 percent respondents were Hindu, 10.0 percent Buddhist, and 8.2 percent Christian. Table 2 shows the data in detail.

Table 2: Distribution of respondents by religion.

Religion	Number	Percent
Hindu	90	81.8
Buddhism	11	10.0
Christian	9	8.2
Total	110	100.0

Sources: Field survey, 2008.

4.1.3 Parent's education

In common interpretation, literacy is the knowledge of reading and writing. Those who can read and write are called literates. A literate person is expected to be conversant with the three R's reading, writing and arithmetic. Literate persons may have different levels of education. The level of education represents the educational status of the respondents. Table 3 shows the data about educational status of the parents of respondents.

Table: 3 Percentage distributions of respondents by parent's education.

Literacy status	Father's	Mother's
Illiterate	21.8	27.3
Literate	78.2	72.7
N= 110		
Level of education		
Non formal education	9.3	41.3
Primary level	20.9	25.0
Secondary level	32.6	15.0
SLC passed	22.1	12.5
Intermediate and above	15.1	6.3
	N= 86	N= 80

Sources: Field survey, 2008 (N = Total Number).

Among the total 110 respondents, 72.7 percents of their mothers and 78.2 percents of their fathers were literate. Both parents of all the respondents are still alive. Among the literate fathers 9.3 percent have non-formal education, and 20.9, 32.6, 22.1, and 15.1 percent have passed primary level, secondary level, SLC, and intermediate and above level of education respectively. Similarly, among the respondent's literate mothers, 41.3 percent have non-formal education, 25.0 percent have primary level of education, and 15.2, 12.5 and 6.3 percent have secondary level, SLC, and intermediate and above level

of education. The educational status of the respondent's parents shows that many parents were literate but they have low educational level in majority.

4.2 ECONOMIC CHARACTERISTICS OF THE SAMPLE POPULATION

Main occupation or income sources of family, parent's occupation, and household facilities were the main variable to take the economic status of the sample population in this research.

4.2.1 Main income source of family

The income status of the family represents the economic status of the family. The main sources of income lead the status. High-income generating occupation represents the high-income status. So, in this research a question was put about the main occupation of the family. The results of main income source of family are shown in Table 4.

Table 4: Distribution of respondents by main income sources of family.

Main income source of family	Number	Percent
Agriculture	23	20.9
Service	62	56.4
Business	17	15.5
Daily wage	8	7.3
Total	110	100.0

Sources: Field survey, 2008.

Among the total respondents, 20.9 percents family's major income source was agriculture and all the rest had been involved in non-agricultural sector. The non-agricultural sector includes service, business and daily wages work slightly more than 56 percent and these families were dependent upon business as a main income source of the family, 15.5 percent on business and 7.3 percent were daily wageworker. The situation represents that majority of the respondents had reported non-agricultural income sources as the main source of their family.

4.2.2 Parent's occupation

Parent's occupation is another variable to lead the economic status of the family. The respondent's parent's occupational status is presented in Table 5. The table shows that 17.3 percent respondents' fathers were involved in agriculture and 17.4 percents of their

mothers were involved in agriculture. Majority of the respondents' fathers were involved in service (60.9%) and majority of their mothers were housewives (60.9%). The situation shows that the involvement of respondents' father is higher to the income generating work than their mothers.

Table 5: Percentage distributions of respondents by parent's occupations.

Occupations of father	Percentage	Occupation of mother	Percentage
Agriculture	17.3	Agriculture	14.5
Service	60.9	Service	17.3
Business	16.4	Business	6.4
Daily wage	3.6	Daily wage	0.9
Foreign employ	1.8	House wife	60.9
N= 110		N= 110	

Sources: Field survey, 2008(N = Total Number).

4.2.3 Household facilities

Household facilities of the respondents show the economic management of the family. It shows the economic status of the family and the availability of the facility in their family help to develop the respondent's individual and social development. Available facilities in the household were shown in Table 6.

Table 6: Distribution of respondents by household facilities.

Facilities	Number	Percent
Electricity	110	100.0
Radio	106	96.4
Television	107	97.3
Computer	37	33.6
Phone	103	93.6
N= 110		

Sources: Field survey, 2008 (Multiple responses table) (N = Total Number).

The above table shows that, the cent percent of the respondents had electricity facility in their households. Among the 110 respondents, 96.4 percent had radio, 97.3 percent had television, 33.6 had computer, and 93.6 percent had phone in their households. The higher accessibility of these facilities shows the accessible condition of the respondents to get any information through electronic media.

4.3 DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE POPULATION

This section focuses to reflect the demographic characteristics of the sample population. In the demographic characteristics, age, place of living, and family size are included in this study.

4.3.1 Age

Age factor is important determinant of adolescent behaviour. The respondents were classified in different three categories according to their age and presented in Table 7. Among the 110 respondents, 41.8 percent were aged 14-15, 38.2 percent were aged 16 and 20.0 percent were in age group 17-19. The table shows that majority of the respondents were 16 and below 16.

Table 7 Distribution of respondents by age group

Age group	Number	Percent
14-15	46	41.8
16	42	38.2
17-19	22	20.0
Total	110	100.0

Sources: Field survey, 2008.

4.3.2 Place of living

Place of living leads to achieve better education and other development. Table 8 shows the place of living of the respondents at the time of data collection.

Table 8: Distribution of respondents by living place.

Place of living	Number	Percent
Own house	52	47.3
Hostel	3	2.7
Rented house	43	39.1
Relatives house	12	10.9
Total	110	100.0

Sources: Field survey, 2008.

Among the respondents 47.3 percent lived in their own house. And the rest lived in hostel (2.7%), rented house (39.1%), and relative's house (10.9%). Majority of the respondents lived in their own house.

4.3.3 Family size

Size of family represents the demographic status of the study population. And it also represents one of the important development index of the respondents. The family size distribution is shown in Table 9.

Table 9: Distribution of respondents by family size.

Family size	Number	Percent
Below Five**	29	26.4
Five	41	37.3
Above Five**	40	36.4
Total	110	100.0

Sources: Field survey, 2008 (** <5=3-4, >5=6-13).

Table 10 shows that 26.4 percent respondents have 3-4 family members. Similarly, 37.3 percent have 5 family members and 36.4 percent have 6-13 family members.

CHAPTER-V

KNOWLEDGE ON REPRODUCTIVE HEALTH

This chapter deals with the knowledge of reproductive health of the respondents. All the RH components have been discussed in the chapter specifically.

5.1 NOMINAL KNOWLEDGE OF REPRODUCTIVE HEALTH

In this section the knowledge of reproductive health and its components are included and discussed. These factors reflect the knowledge of reproductive health of adolescent girls.

5.1.1 Knowledge of components of reproductive health

Reproductive health is core health conduction. Various components have been included in its elements. Mainly eight elements are universal components of reproductive health. Table 10 deals with the knowledge about components of reproductive health.

Table 10: Distribution of respondents by knowledge on components of reproductive health

Components of RH	Number	Percent
Family planning	107	97.3
Safe motherhood	105	95.5
Care of new born	106	96.4
Abortion	104	94.5
STIs\HIV/AIDS	104	94.5
Infertility	102	92.7
Adolescent and youths RH	108	98.2
Problems of elderly women	101	91.8
N= 110		

Sources: Field survey, 2008 (Multiple responses table) (N = Total Number).

Table 10 shows that most of respondents have knowledge about reproductive health's components. More than 91 percent respondents know about all the eight components of reproductive health. Out of the 110 respondents, 97.3 percent know about family planning, and 95.5, 96.4, 94.5, 94.5, 92.7, 98.2, and 91.8 percent respondents have knowledge about safe motherhood, care of new born, abortion, STIs and HIV/AIDS, infertility, adolescent and youth's RH, and problems of elderly women respectively. The finding shows that, most of respondents have nominal knowledge of reproductive health.

The out standing of the students on the topic matter could be contains of their population course book, various publications and medias. It is a positive aspect of health status.

5.1.2 Knowledge of physical changes during adolescence

In adolescence period, a boy/girl get various physical changes. And he/she will feel a new matter or a problem. So that all adolescents should know about the physical change in the period.

Table 11: Distribution of respondents by physical changes of girls in adolescence period

Physical changes of girls	Number	Percent
Physical development	107	97.3
Hair begins to grow in the arm pits	102	92.7
Hair grow around the genitals	103	93.6
Voice becomes sharp	107	97.3
Growth in the size of breast	99	90.0
Change in the size of genital	103	93.6
Menstrual cycle begins	103	93.6
Pimples begin to appear	99	90.0
N= 110		

Sources: Field survey, 2008 (Multiple responses table) (N = Total Number).

More than 90 percent respondents were known about the physical change in the adolescence period. From Table 11 it can be seen that out of the 110 respondents, 97.3 percent know about physical development in girls, 92.7 percent know about hair beginning to grow in the arm pits, 93.6 percent know about growth of hair around the genitals, 97.3 percent know about the change in voice, 90.0 percent know about growth in the size of breast, 93.6 percent know the change in the size of genital and the same percent knew about the pimple beginning to appear respectively. The data represents the higher knowledge of respondents about the knowledge of physical changes of girls in the adolescence period.

5.1.3 Knowledge, attitude and experience of age at menstrual period

Menstruation cycle is a biological reproductive process of girls. Almost all girls experience the cycle. Who are unable to reproduce they would not get that period. In the Nepali culture, various names have been used for menstruation period, such as: *Nachunehunu*, *Parasarnu*, *Chhuiiaunu*, *Chhaupadi* etc. At the present day, a practice has

been accepting through harmful way of the women health in some backward community of the nation. Traditional practices of menstruation period have been alive in our society. The practice has been harmful to the women reproductive health and overall health status. So the knowledge about the menstruation period should be universe to all adolescent girls. Knowledge, attitude, and experience of age at menstruation are mentioned in Table 12.

Table 12: Percentage distributions of respondents by knowledge, attitude and experience of age at menstrual period.

Knowledge on Menstruation period	Percent
Periodic discharge of blood and mucus	96.4
Bleeding from uterus due to diseases or injury	1.8
Do not know	1.8
Opinion on first menarche	
To capable to be Pregnant	82.7
Be capable to get married	3.6
Physical development	13.6
N = 110	

Sources: Field survey, 2008 (N = Total Number).

Table 12 shows that out of the total 110 respondents, 96 percent perceived about the menstruation as a periodic discharge of blood and mucus. And 50 percent of girls experienced menstruation in age group 10-12 years. 40 percent were get 13-14 years and all the rest were getting above than 15 and above age. Out of the total respondents, 82.7 percent respondents said “when girl have first menarche they would be capable to be pregnant”, 13.6 percent reported menstruation period is a normal stage of physical development and 3.6 percent said, “ first menstruation period is a sign of capability to be married”. The table concludes that most of respondents have good knowledge about the menstruation period.

5.1.4 Knowledge about appropriate age at marriage

Early marriage is a harmful practice in women life. In the earlier age, women couldn't be capable to get pregnant. Table 20 presents the opinion of the respondents upon appropriate age at marriage.

Table 13: Distribution of respondents by opinion on appropriate age at marriage

Age group	Number	Percent
15-20	6	5.5
18-22	11	10.0
20-25	17	15.5
25-30	3	2.7
20 for female/25 for male	73	66.4
Total	110	100.0

Sources: Field survey, 2008.

Table 13 shows that 66.4 percent respondents reported 20 years is a appropriate age at marriage for female and 25 years for male. And the rest reported without categories between sexes. About 16 percent said the ages 20-25 years as appropriate to get married, and ten percent reported 18-22 years. Most of respondents have been in favour of late marriage.

5.1.5 Knowledge about being pregnant

Knowledge about pregnant is an essential part of reproductive health. So, all women/girl should have knowledge about pregnancy and getting pregnant. Table 14 presents the knowledge of getting pregnant.

Table 14: Distribution of respondents by opinion on getting pregnant

Way of getting pregnant	Number	Percent
Sexual intercourse between male and female	55	50.0
Sexual intercourse without contraceptive devices	2	1.8
Sexual intercourse during unsafe period without contraceptive	53	48.2
Total	110	100.0

Sources: Field survey, 2008.

The table shows that half of the respondents saying that sexual intercourse between male and female is a way of getting pregnant and the rest said sexual intercourse during unsafe period without FP means. The result presents that most of respondents have right knowledge of getting pregnant.

5.1.6 Knowledge of age at first sexual intercourse and premarital sex

Getting sexual intercourse at the early years of reproductive life is not a well aspect as well as premarital sex. The respondents, knowledge at appropriate age of first sexual intercourse and premarital sex is shown in Table 15.

Table 15: Distribution of respondents by knowledge about the appropriate age at first sexual intercourse and premarital sex

Age	Number	Percent
Below 20 years	29	26.4
20-25	59	53.6
Above than 25 years	22	20.0
Knowledge about premarital sex		
Not good	10	9.1
Very bad	89	80.9
Depends upon situation	11	10.0
N = 110		

Sources: Field survey, 2008 (N = Total Number).

Table 15 shows that about three-fourths respondents reporting the appropriate age of sexual intercourse as twenty years and above. Only 29 percent respondents reported the appropriate age at first sexual intercourse below 20 years. The result represents the large percentage of respondents having correct knowledge about the appropriate age at first sexual intercourse. More than 80 percent of respondents disagreed in the issue of premarital sex. And one-tenth reported the issue of premarital sex as depending upon the situation. If unavoidable circumstances is created then one need to take precaution of safe sex.

5.1.7 Knowledge on effects of early pregnancy

Physically immature women body could not get a healthy baby and they could not get their well health status. So that the early pregnancy is a risk factor for damaging women's reproductive health. The knowledge of school girls on effects of early pregnancy is shown in Table 16.

Table 16: Distribution of respondents by knowledge on effects of early pregnancy

Effects of early pregnancy	Number	Percent
Maternal morbidity	79	71.8
Maternal mortality	98	89.1
Infant mortality	99	90.0
Low weight birth	97	88.2
N= 110		

Sources: Field survey, 2008 (Multiple responses table) (N = Total Number).

Out of the total 110 respondents, 90 percent reported the consequences of early pregnancy as infant mortality and, 71.8, 89.1, and 88.2 percent reported the effects of early pregnancy as maternal morbidity, maternal mortality, and low weight birth respectively.

5.1.8 Knowledge about family planning methods

Family planning methods help to prevent the transmitting sexually transmitted disease and avoid unwanted pregnancy. Various methods were used to avoid unwanted pregnancy and to birth spacing. Almost all respondents have nominal knowledge about the means of family planning. The specific knowledge of family planning methods are presented in Table 17.

Table 17: Distribution of respondents by knowledge on means of family planning

Means of Family Planning	Number	Percent
Condom	109	99.1
Pills	108	98.2
IUD	97	88.2
Norplant	106	96.4
Inject able	93	84.5
Foam tablets	101	91.8
Male sterilization	94	85.5
Female sterilization	88	80.0
With drawl	80	72.7
Calendar method	81	73.6
Breast feeding method	59	53.6
N = 110		

Sources: Field survey, 2008 (Multiple responses table) (N = Total Number).

Table 17 shows that, 99.1 percent of the respondents have knowledge about condom, and 98.2, 88.2, 96.4, 84.5, and 91.8 percent have knowledge about pills, IUD, Norplant, and injectable respectively. Eighty percent have knowledge about the permanent method of

female sterilization and 85.5 percent have knowledge of male sterilization. Comparatively lower proportions of respondents have knowledge about natural method of family planning than modern methods. Out of the total 110, 72.7 percent have knowledge about withdrawal, 73.6 percent have knowledge about calendar method and 53.6 percent have knowledge about breast-feeding method. Overall lower proportion of respondents has knowledge about breast-feeding method and higher proportion has knowledge of condom. It seems that popularity on use of condom is wider than the natural family planning process. So, the knowledge about natural family planning in society should also be promoted.

5.1.9 Sources of knowledge of family planning methods and reproductive health

The knowledge about FP means may be gained by various sources. The sources of knowledge for respondents are presented in Table 18.

Table 18: Distribution of respondents by sources of knowledge of means of family planning

Sources	Number	Percent
Radio	44	40.0
Television	44	40.0
Newspaper	22	20.0
Teachers	47	42.7
Doctors	24	21.8
Friends	31	28.2
Parents	23	20.9
Health person	14	12.7
Text book	20	18.2
Poster/ Pamphlet	5	4.5
No responses about sources	48	43.6
N = 110		

Sources: Field survey, 2008 (Multiple responses table) (N = Total Number).

Table 18 shows that out of total respondents, 40 percent of respondents each reported the sources of knowledge of FP means as radio, television, and 42.7 percent said teachers. The others sources of knowledge are newspapers, doctors, friends, parents, health workers, text books, and poster/pamphlets. About 44 percent of the respondents couldn't identify the sources of knowledge.

5.1.10 Knowledge of appropriate age for birth spacing

To maintain the women's and child's health and to form well family, couple should manage right birth spacing. The knowledge of appropriate birth spacing period is given below in table 19.

Table 19: Distribution of respondents by knowledge on appropriate birth spacing period

Interval years	Number	Percent
Below 5 years	12	10.9
Five years	85	77.3
Above than 5 years	13	11.8
Total	110	100.0

Sources: Field survey, 2008.

The table shows that 77.3 percent of the total respondents reporting five years interval as an appropriate birth spacing period between two children. And 10.9 percent reported below 5 years and 11.8 percent reported more than 5 years. Most of the respondents have correct knowledge about appropriate years for birth spacing.

5.1.11 Knowledge about abortion

Spontaneously or induced termination of product of conception is called abortion. Unsafe abortions may cause maternal death. So, all women should have knowledge about safe abortion. The respondents' knowledge about abortion is presented in Table 20.

Table 20: Distribution of respondents by knowledge about abortion

Knowledge about abortion	Number	Percent
Termination of pregnancy before 28 weeks	102	92.7
Still birth	4	3.6
Dead birth after 28 weeks of pregnancy	1	.9
Difficult labour	3	2.7
Total	110	100.0

Sources: Field survey, 2008.

Out of the total 110 respondents, 92.7 percent perceived abortion as termination of pregnancy before 28 weeks. And the rest have not correct knowledge about abortion.

5.1.12 Knowledge about safe motherhood

Maternal health is an important part of the health care system aimed at reducing morbidity and mortality related to pregnancy. The health cares that a woman receives during pregnancy, at the time of delivery, and soon after delivery are important for the survival and well being of both mother and child (NDHS, 2006). Therefore all the adolescent girls should be aware about the maternal health as well as safe motherhood. Table 21 presents the knowledge of respondents about the safe motherhood.

Table 21: Distribution of respondents by knowledge of safe motherhood

Knowledge about safe motherhood	Number	Percent
Taking regular ANC	69	62.7
Labor period care	60	54.5
Post natal care	59	53.6
Care of these three components	102	92.7
N = 110		

Sources: Field survey, 2008 (Multiple responses table) (N = Total Number).

Care of three components (ANC, delivery, and PNC) of the safe motherhood was reported by 92.7 percent of respondents as the safe motherhoods components. In separate, out of the total respondents, 62.7 percent have well knowledge about taking regular ANC during pregnancy, 54.5 percent have knowledge about care of labor period, and 53.6 percent have knowledge about PNC respectively. The result shows that most of respondents know about safe motherhood as care of three components of safe motherhood.

5.1.13 Knowledge about Infertility

Biologically unable to give birth is a condition of infertility. Some women will not be able to reproduce biologically or by the cause of various health problems. The knowledge of respondent about infertility is presented in Table 22.

Table: 22 Distribution of respondents by knowledge about infertility.

Knowledge about infertility	Percent
Yes	90.9
No	9.1
N =110	
Knowledge about infertility**	
Infecund status of men and women	31.0
Biologically unable to give birth	38.0
Not having ability to give birth	12.0
Unable to product ova and sperm	9.0
A reproductive problem	24.0
N=100	

Sources: Field survey, 2008 (**Multiple responses table) (N = Total Number).

Table 22 shows that 90.9 percent of the total respondents have knowledge about infertility. Out of the total who have knowledge about infertility, 31.0 percent reported infecund status of men and women is a condition of infertility. Similarly, 38.0 percent said that biologically unable to give birth is a condition of infertility. And 12.0 and 12.9 percent reported about infertility, as the condition of not having ability to give birth and unable to produce ova and sperm respectively. Out of the knowledgeable respondents on infertility, 24.0 percent said that infertility is a reproductive problem.

5.1.14 Knowledge about STIs and HIV/AIDS

5.1.14. 1 Nominal knowledge of STIs and HIV/AIDS

Acquired Immune Deficiency Syndrome (AIDS) was first recognized internationally in 1981. As of 2006, an estimated 40 million adults and children around the world were living with human immunodeficiency virus (HIV) and AIDS. AIDS is caused by HIV and once infected with the virus, a large proportion of those infected die within 5-10 years (NDHS, 2006). STIs can play a role in facilitating the spread of HIV. In fact the probability of transmission is largely indicated by the incidence of STIs. Therefore, high incidence of STIs means a high probability of HIV transmission from one person to another (Dulal, 2006). So that all the adolescent should have knowledge of STIs and HIV/AIDS. The respondents' knowledge of STIs and HIV/AIDS are presented in Table 23.

Table 23: Distribution of respondents by knowledge of STIs

STIs	Number	Percent
Gonorrhoea	98	89.1
Syphilis	91	82.7
HIV/AIDS	107	97.3
N = 110		

Sources: Field survey, 2008 (Multiple responses table) (N = Total Number).

Table 23 shows that 97.3 percent of the total respondents have knowledge about HIV/AIDS and 89.1 and 82.7 percent respondents reported gonorrhoea and syphilis as the types of STIs respectively. The responses show that most of respondents have knowledge about HIV/AIDS than any types of STIs.

5.1.14. 2 Knowledge of route of HIV transmission

Table 24 presents the knowledge of respondents about route of HIV transmission. From the knowledge of route of HIV transmission one can be safe from transmission of HIV.

Table 24: Distribution of respondents by knowledge of route of HIV transmission

Routes of HIV transmission	Number	Percent
Unsafe sexual contact	107	97.3
Transfusion of infected blood	109	99.1
Birth from HIV infected mother	106	96.4
Use of un-sterilized syringe	109	99.1
Sharing combs clothes and towels	7	6.4
Shaking hands and kissing	5	4.5
Mosquito bite	18	16.4
Living together	4	3.6
N = 110		

Sources: Field survey, 2008 (Multiple responses table) (N = Total Number).

Table 24 shows that 97.3 percent respondents have knowledge about the route of HIV transmission as unsafe sexual contact and 99.1 percent said transfusion of infected blood is another way of HIV transmission. Birth from HIV infected mother is also a way of HIV transmission as reported by 96.4 percent of the respondents. And 99.1 percent of respondents said use of un-sterilized syringe is another way of HIV transmission. Most of respondents have correct knowledge about route of HIV transmission but a few reported the route of HIV transmission as: sharing combs/cloths/towels (6.4%), shaking hands and kissing (4.5%), mosquito bite (16.4 %), and living together (3.6%).

5.1.14. 3 Knowledge of preventive measure of HIV transmission

Knowledge of preventive measure of HIV transmission is important to prevent the transmission of HIV/AIDS. The respondents knowledge on preventive measure of HIV transmission is presented in Table 25.

Table 25: Distribution of respondents by knowledge on preventive measures of HIV transmission

Preventive measures	Number	Percent
Abstain for sex	100	90.9
Be mutually faithful	102	92.7
Consistent use of condom	107	97.3
Check blood before transfusion	109	99.1
Avoid sharing injection	110	100.0
No birth from infected mother	108	98.2
Avoid sharing blades	11	10.0
N = 110		

Sources: Field survey, 2008 (Multiple responses table) (N = Total Number). Abstain

Table 25 shows that 90.9 percent of respondents reported the preventive measures of HIV transmission as avoiding sexual relation. The respondents also reported that being mutually faithful (92.7%), consistent use of condom (97.3%), checking blood before transfusion (99.1%), avoiding sharing injection (100.0), no birth from infected mother (98.2%), and avoiding sharing blades (10.0%) are the preventive measures of HIV transmission.

5.1.15 Attitudes towards need of reproductive health knowledge

Attitude of the respondents reflects the interest to gain further knowledge on the matter. Attitude of the respondents on knowledge of RH that should be given or not in adolescence period is presented in Table 26.

Table 26: Distribution of respondents by needs of RH knowledge in adolescent period

Responses	Number	Percent
Yes	101	91.8
No	9	8.2
Total	110	100.0
Reasons for needs of RH knowledge**		
To be aware for the further RH problems	25	24.8
To maintain the quality of life	38	37.6
To know the physical changes	5	5.0
To be safe STIs and HIV/AIDS	55	54.5
Total	101	100.0

Sources: Field survey, 2008 (**Multiple responses table)

The table shows that 91.8 percent of the respondents favoured for the need of RH knowledge in the adolescence period. They support for the needs of RH knowledge at the time of adolescence. Among the respondents who favoured for need of RH knowledge, 24.8 percent gave the reason for needs of RH knowledge as to be aware for the further RH problems. Similarly, some of them gave the reasons as: to maintain the quality of life (37.6%), to know the physical changes (5.0%) and to be safe from STIs and HIV/AIDS (54.5%).

CHAPTER-VI

SUMMARY CONCLUSION AND RECOMMENDATION

The study analyzed the knowledge of reproductive health of schools girls. Data for the study were collected from the field survey. Total 110 respondents were involved in the research and they were selected from students of class nine and ten. The main findings of the study are presented in this section.

6.1 SUMMARY OF THE FINDINGS

The students came from different ethnic group and religious groups with their parent's different educational and occupational status. Their knowledge of reproductive health is slightly different.

6.1.1 Basic characteristics of the respondents

- The study shows those major ethnic groups are Brahmin, Chhetri, Newar, and Tamang with the percent of population 27.7, 25.5, 36.4, 10.9 respectively. Rai Limbu Magar and Gurung are included in others categories with the percentage 15.5 percent.
- In this study most of respondents participated 81.8 percent Hindu, 10.0 percent Buddhist, and 8.2 percent Christian.
- Among the total 110 respondents, 72.7 percents of their mother's and 78.2 percents of their father's were literate. But most of respondents parent's have low educational level.
- Among the total respondents, 20.9 percents family's major income sources were agriculture and the rest were non agricultural sector with different occupations as: service (56.4%), business (15.5%) and daily wage (7.3%).

- Out of total 110 respondents, 17.3 percent of among fathers involved in agriculture and 17.4 percents of mother also involved in agriculture. Most of respondents' fathers involved in service (60.9%) and mother were house wife (60.9%).
- Among the 110 respondents, 96.4 percent had radio, 97.3 percent television, 33.6 percent had computer availability, and 93.6 percent had phone as there household facilities.
- Out of the 110 adolescents, 41.8 percent were of age 14-15, 38.2 percent were age 16 and 20.0 percent were age of group 17-19. The table shows majority of the respondents had 16 and below age.
- Among 47.3 percent respondents were living in their own house. And the rest were in hostel (2.7%), rented house (39.1%), and relative's house (10.9%). Most of the respondents were living in their own house.
- 26.4 percent respondents were living together with 3-4 family members. Similarly, 37.3 percent were living together with 5 family member and 36.4 percent were living together with 6-13 family members respectively.

6.1.2 Knowledge of reproductive health

- Out of the 110 respondents, 97.3 percent know about family planning, 95.5, 96.4, 94.5, 94.5, 92.7, 98.2, and 91.8 percent respondents have knowledge about safe motherhood components as: care of new born, abortion, STIs and HIV/AIDS, Infertility, adolescent and youths RH, and problems of elderly women respectively.
- Out of the 110 respondents, 97.3 percent know about physical development in girls, 92.7 percent know about hair begining to grow in the arm pits, 93.6 percent know about growth of hair around the genitals, 97.3 percent know about the change in voice, 90.0 percent know about growth in the size of breast, 93.6 percent know the change in the size of

genital and the same percent knew about the pimple beginning to appear respectively.

- As per knowledge of menstruation period, out of the total 110 respondents, 96 percent perceive about the menstruation as a periodic discharge of blood and mucus. And 50 percent of girls experienced menstruation in age group 10-12 years. 40 percent were get 13-14 years and all the rest were getting above than 15 and above age.
- Out of the total respondents, 82.7 percent respondents were said “When the menstruation girls has been capable to be pregnant”, 13.6 percent were reported menstruation period is a normal stage of physical development and 3.6 percent were said, “Menstruation period gives a capability to be married”.
- On the basis of there knowledge among the total 110 respondents that 66.4 percent respondents reported 20 years is a appropriate age at marriage for female and 25 years for male. And the rest reported without categories between sexes. About 16 percent said the ages 20-25 years as appropriate to get married, and ten percent reported 18-22 years.
- Half of the total population said that sexual intercourse between male and female is a way of getting pregnant and rest respondents said sexual intercourse with in unsafe period without FP means.
- About three in fourth respondents were reported the appropriate age of sexual intercourse is twenty years and above. Only 29 percent respondents reported the appropriate age at first sexual intercourse below 20 years. The result represents the large percentage of respondents having correct knowledge about the appropriate age at first sexual intercourse. More than 80 percent of respondents disagreed in the issue of premarital sex. And one-tenth reported the issue of premarital sex as depending upon the situation.

- Out of the total 110 respondents, 90 percent reported the consequences of early pregnancy as infant mortality and, 71.8, 89.1, and 88.2 percent reported the effects of early pregnancy as maternal morbidity, maternal mortality, and low weight birth respectively.
- As per knowledge of family planning methods, among the 110 respondents, 99.1 percent of the respondents have knowledge about condom, and 98.2, 88.2, 96.4, 84.5, and 91.8 percent have knowledge about pills, IUD, Norplant, and injectable respectively. Eighty percent have knowledge about the permanent method of female sterilization and 85.5 percent have knowledge male sterilization. Comparatively lower proportion of respondents have knowledge about natural method of family planning than modern methods. Out of the total 110, 72.7 percent have knowledge about withdrawal, 73.6 percent have knowledge about calendar method and 53.6 percent have knowledge about breast feeding method. Lower knowledge have about breast feeding method and higher knowledge have condom.
- Out of the total respondents, various respondents had reported the sources of knowledge of FP means is radio (40.0%), Television (40.0%), and teachers (42.7%). The others sources of knowledge are newspaper, teachers, doctors, friends, parents, health person, text book, and poster/pumplet. 43.6 percent of the total population were couldn't identify the sources of knowledge
- Among the total 110 respondents, 77.3 percent of the total respondents reporting five years interval as an appropriate birth spacing period between two children. And 10.9 percent reported below 5 years and 11.8 percent reported more than 5 years.
- Out of the total 110 respondents, 92.7 percent perceived abortion as termination of pregnancy before 28 weeks. And the rest have not correct knowledge about abortion.

- In the case of safe motherhood, Care of three components (ANC, delivery, and PNC) of the safe motherhood was reported by 92.7 percent of respondents as the safe motherhoods components. In separate, out of the total respondents, 62.7 percent have well knowledge about taking regular ANC during pregnancy, 54.5 percent have knowledge about care of labour period, and 53.6 percent have knowledge about PNC respectively.
- Among the total 110 respondents, 90.9 percent of the total respondents were had knowledge about infertility. Out of the total that had knowledge about infertility, 31.0 percent reported infecund status of men and women is a condition of infertility. Similarly, 38.0 percent said that biologically unable to give birth is a condition of infertility. And 12.0 and 12.9 percent reported about infertility, as the condition of not having ability to give birth and unable to product ova and sperm respectively. Out of the knowledgeable respondents on infertility, 24.0 percent said that infertility is a reproductive problem.
- The result of specific knowledge on STIs and HIV/AIDS, among the total 110 respondents 97.3 percent of the total respondents have knowledge about HIV/AIDS and 89.1 and 82.7 percent respondents reported gonorrhoea and syphilis as the types of STIs respectively. And 97.3 percent have knowledge about the rout of HIV transmission is unsafe sexual contact. As well as, 99.1 percent have known that transfusion of infected blood is another way of HIV transmission. Birth form HIV infected mother is a way of HIV transmission was reported by 96.4 percent of the total respondents. And 99.1 percent of total respondents have knowledge use of un-sterilized syringe is another way of HIV transmission. Most of respondents have right knowledge about rout of HIV transmission but a few percent respondents have about the rout of HIV transmission are: Sharing comps/cloths/towels (6.4%), shaking hands and kissing (4.5%), mosquito bite (16.4 %), and living together (3.6%).

- As pre knowledge of preventive measure of transmission of HIV 90.9 percent of respondents reported the preventive measures of HIV transmission is avoid sexual relation. The respondents also reported that be mutually faithful(92.7%),consistent use of condom (97.3%), check blood before transfusion (99.1%), avoid sharing injection (100.0%), no birth from infected mother (98.2%), and avoid sharing bleeds (10.0%) were the preventive measure of HIV transmission.
- Among the total 110 respondents, 91.8 percent of the respondents knew about the need of RH knowledge in the adolescent period. They were raising the needs of RH knowledge at the time of adolescent. The respondents who were responses yes, 24.8 percent were given the reason for needs of RH knowledge is to be aware for the further RH problems. Similarly, some of them gave the reasons as: to maintain the quality of life (37.6%), to know the physical changes (5.0%) and to be safe from STIs and HIV/AIDS (54.5%).

6.2 CONCLUSION

There was positive signal in the case of knowledge of reproductive health. The background characteristics are not found effecting the knowledge of reproductive health because almost all respondents have knowledge about the matter. All caste all caste and ethnic groups and religious groups have equal knowledge and age and household facilities have no effects in respondents' knowledge of RH. Knowledge on family planning methods, birth spacing, appropriate age at marriage, and HIV/AIDS were found well. Similarly, respondents have also better knowledge about other components of RH such as infertility, safe motherhood, transmission and prevention of STIs and HIV, physical change, and menstruation cycle. However, few percent of respondents have no knowledge about the RH matter. And some of them did not feel the needs of RH knowledge in the adolescence period. So the study conclude that higher secondary school girl students have some nominal knowledge of RH components but the depth knowledge of RH is essential to them.

6.2 RECOMMENDATIONS

The study is based on small sample size of girl students from the only one school. Thus, further study should be conducted in the other areas and remote area's adolescents who are school going or not. Similarly, the research is depended upon only quantitative tools so that it did not cover qualitative aspects in depth. Thus, further research should be conducted with indirect approach through using qualitative tools accordingly to explore the depths knowledge.

APPENDIX

KNOWLEDGE OF REPRODUCTIVE HEALTH AMONG HIGHER SECONDARY SCHOOL GIRL STUDENTS

(A study of Madan Smarak Higher Secondary School, Lalitpur)

Tribhuvan University
Central Department of Population Studies
Kirtipur, Kathmandu
2008

Name of the student:

Grade:

Section: A Individual Information

Q.N	Questions	Responses	Go to
A1	Complete age	.....
A2	Sex	1. Boy 2. Girl	
A3	Caste	1. Brahmine 2. Chhetri 3. Newar 4. Tamang 5. Rai 6. Limbu 7. Magar Others (Specify).....	
A4	Religion	1. Hindu 2. Buddhism 3. Islam 4. Christian Others (Specify).....	
A5	Marital Status	1. Unmarried 2. Married	
A6	Permanent residence	.....
A7	Where do you live/stay at present?	1. Own house 2. Hostel 3. Rented house 4. Relative's house Others (Specify).....	

Section: B Household information

B1	How many members are there in your family?	.....
B2	What is your father education level?	1. Illiterate 2. Non formal education 3. Primary	

		<ul style="list-style-type: none"> 4. Secondary 5. SLC 6. Intermediate and above 	
B3	What is your mother's education?	<ul style="list-style-type: none"> 1. Illiterate 2. Non formal education 3. Primary 4. Secondary 5. SLC 6. Intermediate and above 	
B4	What is the main occupation of your family?	<ul style="list-style-type: none"> 1. Agriculture 2. Service 3. Business 4. Daily wage Others (Specify) 	
B5	What is your father occupation?	<ul style="list-style-type: none"> 1. Agriculture 2. Service 3. Business 4. Daily wage Others (Specify) 	
B6	What is your mother's occupation?	<ul style="list-style-type: none"> 1. Agriculture 2. Service 3. Business 4. Daily wage 5. House wife Others (Specify) 	
B7	Which of the following facilities are there at your home?	<ul style="list-style-type: none"> 1. Electricity 2. Radio 3. Television 4. Computer 5. Phone 	

Section: C Knowledge and Attitude on Reproductive Health

C1	Do you know about Reproductive health?	<ul style="list-style-type: none"> 1. Yes 2. No 	C3
C2	Among the following are the component of reproductive health? <i>(Multiple responses possible)</i>	<ul style="list-style-type: none"> 1. Family planning 2. Safe motherhood 3. Care of new born 4. Abortion 5. STIs\HIV\AIDS 6. Infertility 7. Adolescent and youth's RH 8. Problem of elderly women 	
C3	What is adolescent in your view?	<p>.....</p> <p>.....</p> <p>.....</p>	
C4	What physical changes are observed when the boys enter the adolescent? <i>(Multiple responses possible)</i>	<ul style="list-style-type: none"> 1. Physical development 2. Hair begins to grow in the arm pits 3. Hair grow around the genitals 4. Voice becomes shrill 5. Growth in the size of genital 6. Wet dreams started 	

		7.Pimples begin to appear 8.Beard begins to grow Others (Specify).....	
C5	What physical changes are observed when the girls enter the adolescent? (Multiple responses possible)	1.Physical development 2.Hair begins to grow in the arm pits 3.Hair grow around the genitals 4.Voice becomes sharp 5.Growth in the size of breast 6.Change in the size of genital 7.Menstrual cycle begins 8.Pimples begin to appear Others (Specify).....	
C6	What is menstruation?	1. Periodic discharge of blood and mucus 2. Bleeding form uterus due to diseases or injury 3. Don't know Others (Specify).....	
C7	What is the age of first menstruation?	.....
C8	Why do you think that girls are capable to do after menstruation?	.....
C9	In your view, what is the appropriate age to marry?	For boys For girls.....	
C10	In your opinion, How do you think a woman becomes pregnant?	1.Sexual intercourse between male and female 2.Sexual intercourse with out contraceptive devices 3.Sexual intercourse with in unsafe period with out contraceptives	
C11	Have you heard about Family planning methods	1. Yes 2. No	C13
C12	If yes, what are those? (Multiple responses possible)	1. Condom 2. Pills 3. IUD 4. Norplant 5. Inject able 6. Foam tablets 7. Male sterilization 8. Female sterilization 9. With drawl 10. Calendar method 11. Breast feeding method	
C13	From which sources have you know about those methods? (Multiple responses possible)	1. Radio 2. Television 3. Newspaper 4. Teachers 5. Doctors 6. Friends 7. Parents 8. Health person	

		9. Text book 10. Poster/Pumplet	
C14	Have you had sexual intercourse?	1. Yes 2. No →	C17
C15	If yes, what is your age at first sexual intercourse?	.....
C16	Did you/your partner use any FP method at the time of first intercourse?	1. Yes 2. No →	C17
C17	If yes, What was it? (Single response)	1. Condom 2. Pills 3. IUD 4. Norplant 5. Inject able 6. Foam tablets 7. With drawl method 8. Calendar method	
C18	What is the appropriate age for first sexual relation?	.....
C19	What is premarital sex in your opinion?	1. Doesn't matter 2. Not good 3. Vary bad 4. Depends upon situation	
C20	In your opinion, what is the appropriate birth spacing?	.....
C21	In your opinion, how many years should be difference between two children?	.....
C22	What is the effect of early pregnancy?	1. Maternal morbidity 2. Maternal mortality 3. Infant mortality 4. Low weight birth Others (Specify)	
C23	Do you know about abortion?	1. Yes 2. No →	C24
C24	What do you know about abortion?	1. Termination of pregnancy before 28 weeks 2. Birth after death 3. Dead birth after 28 weeks of pregnancy 4. Difficult labour	
C25	Do you know about STD?	1. Yes 2. No →	C26
C26	If yes, Which are those?	1. Gonorrhoea 2. Syphilis 3. HIV/AIDS Others (Specify).....	
C27	Do you know about HIV/AIDS	1. Yes 2. No →	C30
C28	Which are those routes of HIV transmission you know? (Multiple responses possible)	1. Unsafe sexual contact 2. Transfusion of blood 3. Birth from HIV infected mother	

		4. Use of unspecialized syringe 5. Sharing combs, clothes and towels 6. Shaking hands and kissing 7. Mosquito bite 8. Living together	
C29	Is there any things a person can do to avoid HIV/AIDS? <i>(Multiple responses possible)</i>	1. Abstain for sex 2. Be mutually faithful 3. Consistent use of condom 4. Check blood before transfusion 5. Avoid sharing injection 6. No birth from infected mother 7. Avoid sharing bleeds	
C30	In your opinion, Who are the people at high risk of HIV transmission? <i>(Multiple responses possible)</i>	1. People who have multiple sex partners 2. Injecting drug user 3. Female sex worker 4. Men having sex with men 5. Client's of sex worker 6. People who travel more 7. Adolescents 8. Migrant people	
C31	Do you know about safe motherhood?	1. Yes 2. No \longrightarrow	C32
C32	If yes, What is safe motherhood?	1. Taking regular ANC 2. Labor period care 3. Post natal care 4. Care of those there component	
C33	Do you know about infertility?	1. Yes 2. No \longrightarrow	C34
C34	If yes, what do you know about infertility?	..... .....

Section: D Attitude about reproductive Health

D1	In your opinion, Knowledge of RH should be given in adolescent period?	1. Yes 2. No \longrightarrow	D3
D2	If yes, Why?	..... .....	}D4
D3	If no, Why?	..... .....
D4	The knowledge of RH should be involved in the school level curriculum?	1. Yes 2. No \longrightarrow	D6
D5	If yes, Which component should be involve?	..... .....
D6	The knowledge of RH should be interacted in classroom with in friends and teacher?	1. Yes 2. No	
D7	The subject matter should be interacted among the family member?	1. Yes 2. No	

Thank for providing your valuable time.

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