KNOWLEDGE, ATTITUDES AND PRACTICES OF SECONDARY AND HIGHER SECONDARY STUDENTS TOWARDS SEXUALITY AND REPRODUCTIVE HEALTH BEHAVIOURS

Submitted to:
NEPAL HEALTH RESEARCH COUNCIL
Ranishahpath, KTM., Nepal

Submitted by:
SATISH BISTA

December, 2001
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Satish Bista
December, 2001
Abstract

Despite the fact that adolescents constitute a sizeable proportion of the total population of the country, their sexual and reproductive health are poorly understood and their needs are undeserved. There is very little information on the reproductive health status of adolescents in Nepal. Therefore, with the objective of assessing the knowledge, attitudes and practices of adolescents of age group 14-19 in the field of sexuality and reproductive health behavior, a non-experimental, cross-sectional descriptive study was conducted.

A total of 500 adolescents (345 males and 155 females) from three secondary and two higher secondary school of Kathmandu metropolitan city of Kathmandu district were interviewed using self-administered questionnaire. Similarly 4 single sexed Focus Group Discussions (2 in males and 2 in females) were conducted to explore the inner feeling and viewpoints of adolescents.

Of the total, 60% of the students were from secondary schools and more than a half of (55.6%) were of Brahmin/Chhetri. Majority (93.2%) students knew about the sexually transmitted diseases. 75.4% of respondents knew about use of condom, 70.4% about using single sex partner as the preventive measures of STDs. Nearly 2/3rd of (63.76%) males and 70% of female students could said foul smelling discharge from genital as the major symptoms of STDs. More than nine out of ten respondents (94%) stated that they go to health system if get STD.

Majority of students knew about the mode of transmission of HIV/AIDS. Multiple sexual partner (87.6%), infected blood product (88.4%), non-sterile needles and syringe (86.8%) and infected mother to child (69.8) are the major mode of transmission of HIV/AIDS as reported by students. Books/Newspaper (80.4%), Radio/T.V (68%), Teachers (40.4%) and friends (35.4%) were the major sources of information regarding STDs including HIV/AIDS and reproductive health.

Although 89% students claimed that they knew safer sex; 78.8% understand it as sex with single partner and 66.6% as condom use during intercourse. More than a half of both sexes, 51.88% males and 55.48% females didn't know that abortion is illegal in Nepal.

About 4/5th of males (79.4%) and all female students stressed that sexual relation should be established after marriage only. The mean age at menarche was 13.2 and the mean age of first sexual contact was found to be 14.97. Experience of
sex was found only in male students. 22.31% of boys had had first sexual relation with lover(57.14%), intimate person(25.97%), commercial sex workers and unknown persons(5.19%). 57.14% of them had used condoms during the first sexual contact and 58.44% of them had sexual contact within last one year. Except very few, almost all(96.4%) of respondents said that they need reproductive health education and services. School(88.8%), Governmental hospital (37.8), local clubs (35.2%) and Private clinic/hospital(34.8) were identified as appropriate places for providing education to adolescents. 95.2% of students felt that marriage counseling is necessary for them which result into the better life after marriage.

The statistical analysis shows that there are no significance difference in the knowledge on various aspects of sexuality but male of higher secondary level were active in sexual activity. The students stressed for the practical approach of education on reproductive health such as demonstration on FP methods. They identified school and mass media as the best places to disseminate information regarding sexuality and reproductive health.

Thus the students need more knowledge than they possessed and they should be provided with adequate and correct information which help them to adopt positive sexual and reproductive health behavior.
ACRONYMS

ADH : Adolescent Health
AIDS : Acquired Immuno-Deficiency Syndrome
CBS : Central Bureau of Statistics
DoHS : Department of Health Services
FHD : Family Health Division
HIV : Human Immuno-Deficiency Virus
HMG : His Majesty's Government
ICPD : International Conference on Population and Development
INGO : International Non-Governmental Organization
NCASC : National Center for AIDS and STD Control
NFHS : Nepal Family Health Survey
NGO : Non-Governmental Organization
RH : Reproductive Health
RTI : Reproductive Tract Infection
STD : Sexually Transmitted Diseases
UNFPA : United Nations Population Fund
UNICEF : United Nations Children's Fund
VaRG : Valley Research Group
WHO : World Health Organization
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CHAPTER ONE
1.1 **BACKGROUND OF THE STUDY**

Situated in the lap of Himalayas, Nepal is a small mountainous country with a population of 23.4 million in 2001. The annual population growth rate is 2.27\%\textsuperscript{6}. This is among the highest growth rates in Asia, making Nepal one of the fastest growing countries in the region.

The unequal pace of population growth and economic development in Nepal over the past 5 decades has led to widespread poverty, unemployment and illiteracy. The per capita income of Nepalese people is $240 with Human development index 0.480 which are among the lowest in the south Asian Region\textsuperscript{27}. Various social as well as health indicators also indicate that much needs to be done to improve the quality of life in Nepal.

The second decade of life is a period of rapid growth and development especially in terms of physical, mental and social change. It is a period that will shape the future of individuals, communities, societies and countries. Adolescence is a crucial phase of life. It is the period of physical, psychological and social maturity from childhood to adulthood. Generally the term adolescent refers to the individuals between the age of 10 to 19 years.

It is growing recognition that because of a combination of biological, psychological and social factors adolescent face many different health risk and problems such as sexually transmitted infection including HIV/AIDS, early and frequent pregnancy, substance abuse, accidents and violence. On the other hand with their energies, ideas and enthusiasm adolescents are a key resources for the promoting their own health and development and also contributing to the health of their families and communities.

The health of the adolescents is profoundly linked to their development since their physical, psychological and social abilities help to determine their behavior. The adolescents of today are tomorrow’s adult. The health and development of adolescents are of great concern for the country, because of not only they are the future human resources but also their fertility behavior is a potential determining factor for future population growth in a country.

Thus it is of paramount importance that an environment be created and adequate support provided to enable adolescents to develop their full potential and to enjoy a healthy responsible adulthood.
1.2 STATEMENT OF PROBLEM

Adolescence, a crucial period is also a stressful period in which the adolescent tries to adjust to his/her varied physical, emotional and psychological changes. Trying out new things and making first time choices are part of growing up. They are curious to ask many questions but the problems is whom to address these questions? Since talking about sex is taboo in the Nepalese society, the adolescent can't freely approach his/her parents for guidance. Many of them try to gather information through books, films or from friends but a majority don't have access to such correct information. Many times, the adolescent receive wrong information and these myths and misconception are carried throughout their life time.

Adolescent people are highly vulnerable to the profound changes in the social environment that have occurred recently and which can have considerable effect on their health. Changes in social and sexual mores have increased the risk of STDs including the threat of HIV/AIDS.

In Nepal, adolescents comprise more than one fifth[22%]of the total population, a proportion which is expected to grow during the years to come due high fertility rate, a high proportional of under 15 years old[population momentum].

Nearly 40% of the adolescents between 10-19 years of the age are illiterate. The gross enrollment rate decreases from 86% at a primary education level to 39% and 11% at lower secondary and secondary levels respectively⁴.

The nutritional status of adolescents is also of concern. NFHS revealed that 30.6% of girls had a low Body Mass Index (BMI<18.5), which is indicative of a high prevalence of chronic energy deficiency among adolescent girls⁹.

A majority of adolescents (64%) had their first sexual intercourse when they were between 15.17 years of age. The mean age of first sexual intercourse among male was 16.4 years while female was 16 years²⁶.

Despite Laws has stipulating the legal age at marriage as 18 for female and 21 for males, early marriage continues to be the norm in Nepal even in today. Existing studies show that nearly half of 15-19 years old adolescent girls & one fifth (20.6%) of adolescent males married⁹. Similarly, one fourth(24%) of adolescents are already pregnant or mother with their first child and CPR is reported only 6.5% among them⁹.

It is estimated that, the number of female commercial sex workers to be 25,000 in Nepal. Of them 20% are estimated to be under the age of 16 (UNICEF,1998). 72% of CSW in Kathmandu Valley were with STDs. Of all HIV cases, 13% were found in the 14-19 year age group and 70% of them were female⁶. It was found that 22.5% of the total drugs abusers were of aged 16-19²¹.

Despite the fact that as many as one fifth(22%) of the total population of Nepal are adolescent aged 10-19, their reproductive health need are poorly understood and ill served. They often encounter with many problems such as lack of awareness & knowledge about sexual and reproductive health, early marriage with early & frequent child bearing, unsafe abortion, STDs including HIV/AIDS and substance abuse. These problems are often exacerbated by social problems such as poverty, illiteracy, gender discrimination, girl trafficking and prostitution. These problems are further aggravated by poor health seeking behaviour and inadequate access to information and services.
1.3 **RATIONALE OF THE STUDY**

This study is a small attempt to overview the adolescent knowledge on sexuality and reproductive health behavior. We know that period of adolescents encompasses the transition from childhood to adulthood during the second decade of life. It is the cone of the most crucial period in an individual’s life, because during adolescent many key social, economic, biological and demographic events occur that set the stage for adult life.

In Kathmandu most of adolescents are engaged in study. However, the physiological changes that takes place in this period bring tremendous curiosity about sex and sexuality on both sexes. Kathmandu, being a capital city is entraped into modernization people are more liberal about sex and sexuality than a decade before. The rapid urbanization, advanced mass media changing cultural values and norms are the predisposing factors which make the health scenario of adolescents quite complex.

It is revealed from the various reports that the adolescents of the kathmandu are involved in various sexual activities due to which sexually transmitted diseases (STDs) including HIV/AIDS and other reproductive health related morbidity are on rise. Schools are the place where adolescents interact with each other and gain the knowledge about health. In school setting the may be little informed or they may be denied from the provision of information, services and supports to make responsibility about their sexual behavior.

This small scale project has analyzed the prevailing level of knowledge of secondary and higher secondary students on sexuality and reproductive behavior. This work is in line with national health priority because HMG/N has committed itself to improve the reproductive health status of adolescents.

1.4 **UTILIZATION OF RESULTS**

It has limited but important utilization. This study result could be utilized in the following setting.

1. The result may be used in planning of school health program regarding adolescent’s reproductive health.
2. Local NGOs like clubs may use the result while planning and implementing adolescent health program.
3. Kathmandu Metro City may use the result to develop the IEC materials, program about reproductive health.
4. Many other agencies may use it as a pilot study for the future research.
1.5 **OBJECTIVES OF THE STUDY**

1.5.1 **GENERAL**

General objective of the project is to assess the knowledge, attitude and practice of secondary and higher secondary students towards sexual and reproductive health behavior.

1.5.2 **SPECIFIC**

1. To assess the Knowledge about sexuality and safer sex.

2. To assess the pattern of sexual experiences & behavior and compare between boys and girls.

3. To assess the attitude towards sexual health education.

4. To identify health seeking behavior concerning sexual health.

1.5.3 **RESEARCH QUESTIONS**

- What is the degree of Knowledge, attitude & practice regarding safer sex?
- What is the prevalence of pre-marital sex among students?
- What type of health seeking behaviors are prevalent among students?
- What are the programs they recommend to address their sexual & reproductive health need.
1.6 Conceptual Framework

Pre-disposing Factors
- Beliefs
- Values
- Perceptions

Enabling Factors
- Urbanisation
- Family Environment
- School Environment
- Social Organisation

Knowledge Attitudes and Practices on Sexuality & Reproductive Health

Reinforcing Factors
- Age
- Sex
- Education
- Marital Status
- Peers Influences

Access to Health Services
1.6.1 STUDY VARIABLES

DEPENDENT VARIABLES
- Knowledge
- Attitude
- Practices
- Health seeking behavior

INDEPENDENT VARIABLES
- Sex
- Age
- education
- Perception
- Beliefs

1.6.2 OPERATIONAL DEFINITIONS

Knowledge
The number of correct answers a respondent gives to question on sexuality & safer sex.

Attitude
The opinions or perceptions of respondents regarding sexuality, sex education & pre-marital sex.

Behavior
The practices of respondents on sexual activities.

Pre-marital sexual behavior
Any respondent who gives the history of having sexual relationship before marriage.

Safer sex
It refers to sexual relationship only with single partner & use of condom.

Health seeking behavior
Perception or set of activities carried out for the purpose of diagnosis & treatment of STDs.
CHAPTER - TWO
2. LITERATURE REVIEW

To familiarize with the various aspect of sexuality & adolescent reproductive behavior, in-depth literature review was done.

The 1994 Cairo International Conference on Population Development (ICPD) drew special attention to the health & well being of adolescents which had been largely ignored up until the present.

ADOLESCENCE is a period of transition from childhood to adulthood. These are formative years when the maximum physical, psychological & behavioral changes take place. Generally, the term "adolescent" refers to individuals between the ages of 10-19 years (WHO/UNFPA/UNICEF,1999). These are also a time of preparation for undertaking greater responsibilities, a time of exploration & widening horizons, & a time to ensure health and all round development.

National Initiatives for adolescents health

Nepal, as a co-signatory in 1994 to Plan of Action of the ICPD, has committed itself to improving the reproductive health status of adolescent. In this regard, HMG/N has taken some steps to recognize and address adolescent issues. The Ninth Five Year Plan & the Second Long Term Health Plan (1997-2017) have emphasized developing special programs for both population control & reproductive health including adolescent health. This was followed by development of the National Reproductive Health Strategy in 1998, in which adolescent reproduction health was identified as a critical component of the integrated reproductive health package.

A comprehensive National Adolescent Health And Development Strategy was developed in 2000 in order to address adolescent health and development issues and provide standard information & services.

A study conducted among 373 commercial sex workers (CSWs) in Kathmandu valley in 1993 reported the mean age at the first sexual contact was 16 years with the standard deviation 1.93. Almost two third of the women had their first sexual contact with a boyfriend. Over the three fourths (77%) of the CSWs reported that they were aware of condoms to some extent. Only a small proportion (2%) were found totally unaware of condoms. The vast majority (82%) of the CSWs had some knowledge about STDs. About 59% of the CSWs had some knowledge about AIDS can be transmitted through multiple sex partners, by kissing (20%), by sex without condoms (13%), by blood transfusion (9%) and sex with an AIDS infected person (5%)².

Nepal presumably till has a low prevalence of HIV/AIDS (reported) but possibly already a high prevalence of STDs in at risk group of the urban & industrial area¹⁷.

The major mode of HIV transmission in Nepal is heterosexual and it is estimated that 85% of HIV infections in Nepal resulted from heterosexual transmission. These means women are increasingly being infected from their partners, husbands who may be engaged in high risk sexual encounter with commercial sex workers or who may be intravenous drug users³³.
Per-marital and extra marital sex is not uncommon in Nepal and the high prevalence of sexually transmitted diseases in general population further facilitates HIV transmission in the country. Several studies have found that 1% or more of the general adult population in some part of Nepal have histories of STD infection\(^1\).

The mean age preferred by boys and girls for first sexual experience were 21.5 and 19.4, respectively. However the mean age at which both boys and girls had their first sexual intercourse was 16.4 and 16.0 years, respectively\(^2\).

One of the attributes of male domination in Nepalese society is that it culturally condones and encourages the overt expression of masculinity. This is more pronounced in rural communities where such an ethos has been part of the cultural tradition for many generation. Male sexuality expresses itself in such behaviors as ingratiating with girlish a manner that carries sexual overtones, pre-marital sex, multiple sexual relationship, extra-marital sex and polygamy\(^3\).

Among 2460 secondary school students surveyed in two Southern Nigerian States, 40% had had intercourse, the proportion who were sexually experienced climbed from 26% of 14-years old to 54-55% of 18-19 years olds. Only 17% of sexually active students had ever used a contraceptive method other than abstinence. In focus group & in-depth discussions, students expressed a strong desire for better education about contraceptives and the consequences of sexual intercourse, and recommend that both schools & parents participate in educating young people about reproductive health\(^2\).

Percent use of contraceptive by currently married women of age group 15-19 is 6.5%(any method). This indicates the low use of contraceptive by adolescent mother. 93.5% of currently married of age 15-19 are not currently using any method\(^9\).

A study conducted by Dr. V.L Gurubacharya on "Rapid Needs Assessment for Reproductive Health & Sex education in three districts in which students, family planning service users, laborers & general public were included. 16.5% respondents know that disease could be transmitted through sex. The pre-marital sex was accepted in the society as of the opinion of 19% students\(^4\).

The result of young adult reproductive health survey in mexico city indicates that 64% of the young people who had sexual relation didn’t use any contraceptive methods during their first encounter. Several reasons were given. They didn’t have information on contraceptive methods & they had not planned to sexual relations. The male partners would not uses contraception and they didn’t think of it. These responses show a high degree of ignorance among the young people in the largest city of the world\(^7\).

Twenty four single sex focus group discussion were conducted among adolescent aged 15-20 attending secondary school in Benin city. The discussion explored that the adolescent perceived that sexual activity is common among the peers. They noted that although physical attraction is the main reason for romantic relationship (including sex), the desire for materials or financial gain is the primary motivation for sexual relationship. The young people had some knowledge about STDs, especially HIV & AIDS, but many believed infection were
inevitable. When they had a STD, most went to traditional healers, they were unlikely to seek treatment from doctors because of high cost, slow service, negative provider attitudes towards young people and a perceived lack of confidentiality. The participants considered media campaign as the best way to educate young people about STDs and condom use.²⁰

Result of a 1997 survey conducted among 966 low income college in metropolitan Mumbai showed that some 45% of male participants and 13% of female respondents had had any sexual experience with a member of the opposite sex; 26% & 3% respectively, had had intercourse. Individual level characteristic such as age & personal income had modest effect on significant effects. The strongest predictors of sexual behavior were students’ knowledge about sexuality related issues, attitudes towards sex, and levels of social interaction and exposure to erotic materials.¹⁶

Results of survey of Jamaican students aged 11-14 & information form a set of focus group discussion showed 64% of boys said that they had experienced sexual intercourse, compared to 6% of girls. Both boys & girls had inaccurate knowledge about reproductive health & behaviour. Clearly defined gender norms regarding sexual behavior were perceived by 12-years old in the FGD & suggested that boys perceived social encouragement & pressure to be sexually active. In contrast, girls who have sex particularly if a pregnancy reveal their sexual activity, are branded as having inferior moral standards. These social norms probably influenced the dramatic difference between boys & girls in reported sexual experience.¹¹
CHAPTER—THREE
3. **METHODOLOGY**

3.1 **Study Design**

This was the institutional based knowledge, attitude and practice (KAP) survey which was descriptive in nature.

3.2 **Study Area**

The study was conducted at Secondary and higher secondary schools of Kathmandu Metropolitan city of Kathmandu. For the administrative purpose Kathmandu metro city is divided into 35 wards. Of the total 803 schools in Kathmandu 426, 41, 338 are primary, lower secondary and secondary schools respectively. 199 secondary schools are located within metropolitan city. Of the total 85 higher secondary schools, 69 are situated in Kathmandu metropolitan city.

3.3 **Justification of selecting study area**

Being capital city of the kingdom, Kathmandu is also the most populated city. Again Kathmandu metro city is a place where there are combination of commerce & trade, various organisations, educational institutes which enhance rapid urbanization and immigration. Urbanization, migration and modernization create multi-factorial problems like increased sex trade, drug abuse and ultimately, it provides fertile ground for spreading STDs including HIV/AIDS.

Due to mass media and modernization, adolescents of Kathmandu especially of Kathmandu metro city are at more risk of STDs AIDS. They should be well equipped with knowledge regarding sexuality and reproductive health which fulfill their needs and ensure positive attitude and behavior.

The study results of such place and group explore gap on knowledge, attitude and behavior regarding sexuality & RH. The recommendation made by this study may help in tailoring various program to address the gap in metro city and other relevant areas as well.

3.4 **Study Population**

The unmarried boys and girls of adolescent age group (14-19) studying at secondary (9&10) and higher secondary school (11&12).

3.5 **Sample Size**

A total of 500 adolescent students were taken under study. The sample size was determined by considering following points.
1) 500 sampling units can be taken as desirable sample size for descriptive study.
2) Feasible in term of available resources.
3) 300 from secondary & 200 from higher secondary school.
3.6 Sampling technique

First of all full list of secondary and higher secondary schools of Kathmandu Metropolitan city was taken. Those secondary & higher secondary schools which had at least 100 students at 9&10 and 11&12 were listed out. Then 3 secondary and 2 higher secondary schools were taken by lottery method. 100 students from each level i.e (from 9&10 and 11,12) were taken.

3.7 Sampling Unit

Individual

3.8 Data collection technique

3.8.1 Interview

Reproductive health issue is quite sensitive, the information taken should be kept confidential. So to get information confidentially and respondent being literate, self-administered questionnaire interview technique was adopted. Students were requested to sit 2 student per bench & questionnaire forms were distributed. After the completing the form, student were requested to put it on the box. This was done to ensure the suitable environment to explore sexual behavior of the respondents and to maintain confidentiality.

3.8.2 Focus Group Discussion

The questionnaire alone cannot explore the in-depth ideas, opinions & beliefs about the topics. So to make the research more valid and to understand the adolescent's perspective in-depth, Focus Group Discussions (FGDs) were conducted. 4 FGDs were conducted. Of them 2 at Sec. school & 2 at H.sec.school. Of 4 FGDs, 2 were conducted in boys and 2 in girls. A team of containing 3 members (Facilitator & 2 Reporters) was mobilized to conduct each FGD. A team comprising females & males were employed to conduct FGDs for females & males respectively.
3.9 Data collection tool

Semi structure questionnaire which consists of both open & closed questions and Focus group discussion guidelines were used as data collection tools.

3.10 Inclusion and Exclusion Criteria

Reponses of students aged under the 14 and over 19 years old of classes ix, x, xi, & xii were excluded and all other students between 14-19 were included in analysis. The reason for excluding the under 14 was regarded as immature & over 19 was non adolescent group.

3.11 Management of Field Survey

3.11.1 Recruitment and Orientation of survey team

Four students were involved in the field survey. They were given one day orientation on the purpose methodology, study and area etc.

3.11.2 Pre-testing of informational tools

The survey tools were pre-tested at secondary and higher secondary schools of Kirtipur Municipality. After pre-testing, relevant modifications were made.

3.11.3 Field survey

The data was collected that took 2 weeks. Before conducting interview & FGD, informed consent was taken from respective school principal.

3.11.4 Monitoring & Supervising of the study

As investigator himself was involved in data collection. Necessary monitoring & supervision was done during field survey by PI.

3.12 Validity And Reliability

For the validity & Reliability of the study, strong emphasis was given to make questionnaire & guidelines standard. Consultation with campus teachers and review of literatures were done. One-day comprehensive orientation was given to interviewer and necessary support was provided as researcher himself was fully involved in field survey.

3.13 Ethical Consideration

As reproductive health issue is sensitive, written informed consent was taken from school principals. Verbal informed consent was taken from each class prior to interview by explaining clearly the purpose of the study and confidentiality of information & privacy of interviewees were also assured.
3.14 Limitation of the Study

There is probably no such thing as a prefect study, so there are few limitations of the study. Due to the budgetary and time constraints only 5 schools with 500 students were taken. Thus the result can not be generalized as large scale survey.

3.15 Data Management and Analysis

3.15.1 Data Cleaning

First of all, each filled questionnaire form was cleaned for consistency prior to data analysis.

3.15.2 Data Processing

The cleaned data were categorized according to the variables and data were organized & summarized in dummy tables. Finally Data Master Sheet was made to facilitate data analysis.

3.15.3 Data Analysis

Data analysis was done using percentage, rate, ratio, proportion and frequency tables, graphs & charts as per need. Chi-square test was used to compare the knowledge level between secondary and higher secondary students.
CHAPTER FOUR
4. **FINDINGS AND DISCUSSION**

4.1 Profile of Respondents

Respondents characteristics which may influence their ability to accurately give the answer and also the factors that influence the sexuality and reproductive behavior.

Table 1 represents the distribution of respondents by gender and education level. 69% of the adolescents were male. It is due to the low school enrollment rate and shows the discriminatory pattern on education against female in Nepal.

The mean age of the students was 16.16 years with 16.78 years and 15.54 years for male and female respectively. 60% of students (300) were from secondary and rest from higher secondary schools.

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<th>Female</th>
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<td>90</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>345 (69%)</strong></td>
<td><strong>155 (31%)</strong></td>
<td><strong>500 (100%)</strong></td>
</tr>
</tbody>
</table>

The ethnic composition of respondents shows that Brahmins\Chhetri are the dominant ethnic group in sample study which constitute nearly (55.6%). They are followed by Newar(24%), Gurung\Magar(15%) and others(5.4%).

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Secondary level</th>
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<th>Total</th>
<th>Percentage</th>
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<tr>
<td>Chhetri</td>
<td>70</td>
<td>50</td>
<td>120</td>
<td>24%</td>
</tr>
<tr>
<td>Newer</td>
<td>75</td>
<td>45</td>
<td>120</td>
<td>24%</td>
</tr>
<tr>
<td>Gurung\Magar</td>
<td>50</td>
<td>25</td>
<td>75</td>
<td>15%</td>
</tr>
<tr>
<td>Others</td>
<td>17</td>
<td>10</td>
<td>27</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

4.2 Menstruation

The questions regarding menstruation were asked only to females. The age at menarche ranged from 10 years to 16 years. The mean age of menarche was found to be 13.2 years. Of 155 female respondents, 70.32% reported that they had suffered from some kind of problems in menstruation. More than 2/3rd of (68.80%) them reported that they had been irregularities during menstruation. It was followed by pain(46.78%) and bleeding(15.59%).
4.3 Sexual Behavior

Various variables related to sexual behaviors like masturbation, age at first sex, sexual partners, use of condom were discussed. Evidence suggests that pre-marital sex appears to be increasing among adolescents.

4.3.1 Masturbation

The practice of masturbation was found to be high in male adolescents. About two third (65.5%) of students reported the practice of masturbation in some frequency. Among them, half of (50.8%) students practiced masturbation sometimes while as 16.8% practiced it daily. In contrast, the practice of masturbation was not found in females.

4.3.2 Sexual Experience

Given the highly conservative attitude towards sexual behavior in Nepal, the onset of sexual activity occurs largely within the context of marriage. But pre-marital sex is in increasing trends especially in urban areas.

More than one fifth (22.31%) of male respondents stated that they had had sexual experience before the survey. Students of higher sec.sch. school are found to be more sexually
active. One fourth (26.26%) and 18.97% of male respondents of sec. and higher sec. school respectively had sexual experience. No female was found with sexual experience. It may be due to strong cultural belief and female are reluctant to disclose their sexual experience as virginity is highly valued in Nepalese society.

<table>
<thead>
<tr>
<th>Experience of Sex</th>
<th>Secondary level(300)</th>
<th>H. sec. level(200)</th>
<th>Male(345)</th>
<th>Female(155)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>37 (12.3%)</td>
<td>40 (20%)</td>
<td>77 (22.31%)</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>263 (87.7%)</td>
<td>160 (80%)</td>
<td>268 (77.69%)</td>
<td>155 (100%)</td>
</tr>
</tbody>
</table>

4.2.3 Age at first sexual contact

Age at first sexual contact is very important while discussing the sexual behavior. Students started to have sex as they reached 10 years of old. The mean age of first sexual contact was reported 14.97 years old.

4.2.4 Type of sexual partner

Regarding the type of sexual partners, more than a half(57.14%) stated to have had sex with girlfriend/lover. One fourth (25.97%) had had sex with intimate person. Only 11.68% reported to have had sex with commercial sex workers.

4.2.5 Practice of condom

Use of condom is vital component of safer sex and essential to prevent STDs. More than a half(57.14%) had used condom during sexual contact. Of total students who had sexual experience in there life, 58.44% had also established sexual relationship within last year.
Table 4: Distribution of respondents by gender & experience of sex.

<table>
<thead>
<tr>
<th>Experience of Sex</th>
<th>Male (345)</th>
<th>Female (155)</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>77</td>
<td>0</td>
<td>77</td>
</tr>
<tr>
<td>No</td>
<td>268</td>
<td>155</td>
<td>423</td>
</tr>
<tr>
<td>Use of condom during sexual intercourse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>44</td>
<td>-</td>
<td>44</td>
</tr>
<tr>
<td>No</td>
<td>33</td>
<td>-</td>
<td>33</td>
</tr>
<tr>
<td>Sexual relationship within last one year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>45</td>
<td>-</td>
<td>45</td>
</tr>
<tr>
<td>No</td>
<td>32</td>
<td>-</td>
<td>32</td>
</tr>
</tbody>
</table>

4.3 Appropriate time to have sexual relation

Two third of respondents (66.4%) stated that appropriate time to have sexual relation only after the marriage. However, rest of other assumed that it may be started before marriage or during love. Male respondents are seen to be more liberal towards sex.

4.4 Attitude towards Pre-marital sex

Inhibited by strong social & cultural norms against pre-marital sexual activity in Nepal among females, almost all females respondents perceived that pre-marital sexual activity very bad. However, nearly one third (30.43%) of male respondents put positive attitude towards it.

Table 5: Distribution of Respondent by gender & attitude of pre-marital sex.

<table>
<thead>
<tr>
<th>Appropriate to have Pre-marital sex</th>
<th>Male (345)</th>
<th>Female (155)</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>105 (30.43%)</td>
<td>0</td>
<td>105 (21%)</td>
</tr>
<tr>
<td>No</td>
<td>247 (69.6%)</td>
<td>155 (100%)</td>
<td>402 (79%)</td>
</tr>
</tbody>
</table>

4.5 Knowledge on safe sex

Adopting safer sex behavior is the best way of avoiding contact with STDs. About 9/10th of secondary level students (89%) stated that they knew about safer sex where as 3/4th of H.sec. students (78%) reported that knew about safer sex. But, 56.33% of sec. students only could give one element of safer sex where as 72% of H.sec. gave at least one component of safer sex.

Table 6: Distribution of respondents by knowledge on safer sex & education level & sex.

<table>
<thead>
<tr>
<th>Knowledge on safer sex</th>
<th>Sec. level</th>
<th>H. S. level</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>271</td>
<td>174</td>
<td>309</td>
<td>136</td>
</tr>
<tr>
<td>No</td>
<td>28</td>
<td>16</td>
<td>26</td>
<td>18</td>
</tr>
<tr>
<td>If yes what it refers to?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex with single partner only</td>
<td>233</td>
<td>161</td>
<td>276</td>
<td>118</td>
</tr>
<tr>
<td>Condom use</td>
<td>169</td>
<td>144</td>
<td>243</td>
<td>90</td>
</tr>
</tbody>
</table>

86% of sec. students and 77.5% of H.sec. students stated that safer sex behavior prevents acquiring STDs as its advantage. But only 42.4% of all respondents mentioned that safer sex practice avoids unwanted pregnancy.
4.6 Knowledge on Sexually Transmitted Diseases

It is estimated that in Nepal, there are some 200,000 STD infections occurring each year. Therefore knowledge is very essential to prevent from STDs. The survey included a series of questions on STDs with respect to knowledge (Name, mode of transmission), signs & symptoms, preventive measure and treatment seeking practice.

Table 7: Knowledge of adolescent on STDs

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>SECONDARY LEVEL STUDENTS (300)</th>
<th>HIGHER SECONDARY LEVEL STUDENT (200)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male (195)</td>
<td>Female (105)</td>
</tr>
<tr>
<td>Sexual relation can cause diseases</td>
<td>Yes</td>
<td>183</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Don't know</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 8 indicates that knowledge level of adolescents on STD is quite high on secondary school.

![Comparison of knowledge on name of STDs](image)

Vast majority of both males and females (92.6%) have known about HIV/AIDS. In contrast with it, two third of students have heard of Syphilis and a half of (51.01%) male & female (47.09%) respondents had knowledge about gonorrhea. Only one fourth of students stated that Hepatitis B can be transmitted through sex. No respondents stated genital wart as STD.

Table 8: Comparison between male and female on Knowledge about STDs

<table>
<thead>
<tr>
<th>Name of STDs</th>
<th>Male(345)</th>
<th>Female(155)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>320</td>
<td>145</td>
</tr>
<tr>
<td>Syphilis</td>
<td>233</td>
<td>105</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>176</td>
<td>73</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>99</td>
<td>55</td>
</tr>
</tbody>
</table>

Nearly two in third students stated that foul discharge from genital is one the major symptoms of STDs. Knowledge on symptoms regarding STDs as blisters & wounds around genitals and pain & discomfort during urination were lower 59.8% and 45.2% respectively. More than nine in ten of respondents mentioned that one should immediately go to health center for treatment if contact with STD.
Regarding knowledge level of students on mode of transmission of HIV/AIDS, four in five students stated that HIV/AIDS is transmitted through sexual intercourse. Similarly, vast majority of students had knowledge on blood transmission (88.4%) & non-sterilized needles (88.8%) as major modes of HIV/AIDS transmission.

Nearly almost all (97.6%) of respondent reported that STDs including HIV/AIDS could be prevented. Although 3/4th of students stated that by practicing single sex partner and by using condom as the best ways of avoiding STDs, few proportion of students also mentioned that by using FP methods (16%) and maintaining genital hygiene as method of avoiding STDs including HIV/AIDS.

4.7 Sources of Information

Book and Newspaper (80.4%) are the major source of information about sex and diseases. Two in three students received information through radio and TV. Similarly 2/5th and 1/3rd of students mentioned that they also received information from teacher and peer respectively.

4.8 Attitude towards sex education and RH service

Although cultivated in strong social & cultural norms in Nepalese environment which limited the discussion of sexual matter in public places, students showed positive attitude towards sex education. More than nine in ten students (94.6%) argued that sex education & pre-marriage counseling is needed to adolescents.

Nine of ten (92.2%) of students stated that sex education & RH services should provided in school setting and half of students (49%) also raised voice that sex education should be given at home.

4.9 Statistical Findings

The statistical analysis of different variables were done to compare statistically the knowledge level of male & female and secondary & higher secondary level students. $\chi^2$ test was done at 95% confidence interval.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Knowledge of STDs</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Yes</td>
<td>No</td>
<td>Total</td>
<td>P value</td>
</tr>
<tr>
<td>Secondary level</td>
<td>274</td>
<td>26</td>
<td>300</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td>Higher sec. level</td>
<td>192</td>
<td>8</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td>Male</td>
<td>322</td>
<td>23</td>
<td>345</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>145</td>
<td>9</td>
<td>155</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Knowledge of Safer Sex</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Yes</td>
<td>No</td>
<td>Total</td>
<td>P value</td>
</tr>
<tr>
<td>Secondary level</td>
<td>271</td>
<td>30</td>
<td>300</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td>Higher sec. level</td>
<td>174</td>
<td>26</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td>Male</td>
<td>302</td>
<td>36</td>
<td>338</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>150</td>
<td>19</td>
<td>155</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Knowledge of legal aspect of Abortion.</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Correct</td>
<td>wrong</td>
<td>Total</td>
<td>P value</td>
</tr>
<tr>
<td>Secondary level</td>
<td>139</td>
<td>161</td>
<td>300</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td>Higher sec. level</td>
<td>79</td>
<td>120</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td>Male</td>
<td>169</td>
<td>186</td>
<td>355</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>61</td>
<td>94</td>
<td>155</td>
<td></td>
</tr>
</tbody>
</table>
Statistical analysis shows that there is no significant difference in knowledge between sec. and higher sec. level (p > 0.05). Similarly, no significant difference is seen between male & female in knowledge on STDs.

The above table shows that there is no significant difference on knowledge of safer sex in between secondary & higher secondary school students. No significant difference on knowledge regarding abortion in between secondary & higher sec. level students.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Sexual relationship</th>
<th></th>
<th></th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Before Marriage</td>
<td>After Marriage</td>
<td>Total</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Secondary level</td>
<td>18</td>
<td>282</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Higher sec. level</td>
<td>53</td>
<td>47</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Male</td>
<td>71</td>
<td>274</td>
<td>345</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0</td>
<td>155</td>
<td>155</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Experience Of Pre-Marital Sex</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Yes</td>
<td>No</td>
<td>Total</td>
<td>P value</td>
</tr>
<tr>
<td>Secondary level</td>
<td>37</td>
<td>263</td>
<td>300</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Higher sec. level</td>
<td>40</td>
<td>160</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Condom use during intercourse</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Yes</td>
<td>No</td>
<td>Total</td>
<td>P value</td>
</tr>
<tr>
<td>Secondary level</td>
<td>21</td>
<td>16</td>
<td>37</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td>Higher sec. level</td>
<td>23</td>
<td>17</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

Significant difference is seen on the attitude towards premarital sex between secondary & higher sec. level students and between male and female.

Significant difference is seen on the experience of premarital sex between secondary & higher sec. level students. It means that higher sec. level students were highly involved in sexual activities.

No significant difference is seen in using condoms during sexual intercourse between secondary & higher sec. level males students.

4.10 Qualitative Findings

The Focus Group Discussions (FGDs) were conducted to enrich the understanding of how adolescents perceive the sexuality and sex education. It also assist to verify the quantitative information. Altogether four single sex FGDs were conducted. Two FGDs were conducted in each level i.e. secondary & higher secondary level. Two FGDs were conducted to each sex. Participants were selected randomly from the classes IX & X and XI & XII for secondary and higher secondary level respectively.

The FGDs included the following topics.
1. Exposure to and Attitudes towards Sex Education.
2. Perception, Causes and Consequences of Pre-marital Sex and Abortion.
3. Knowledge and Attitudes regarding Family Planning.
4. Knowledge and Attitudes towards STDs including HIV/AIDS.
5. Program Recommendation from Adolescents.
1. Exposure to and attitude towards Sexuality & Sex Education.

Students of secondary level said they had received some information on reproduction in Science & Health classes, but they had been taught nothing about sexuality and reproductive health.

Teachers are reluctant to discuss about sex in classroom setting because of strong social norms which limited free discussion of sex & reproduction in the classes that consist of both sexes.

Though students are taught about human reproductive in health classes, the information was not practical such as sex and safe period. Most of the female students reported that they didn't feel comfortable asking questions to a male teacher and teacher themselves feel shy to teach about reproduction although it has been included in course. One of the students of Management made a expression like this

"Science student are lucky enough in the sense that they get opportunity to learn about human biology but we miss it ever."

Most of the participants expressed that it was impossible or uncomfortable for them to talk about sexuality with their parents or elder member of the family. One of female respondent in exciting tone made the following remark" घरमा यस्तो खुरा सबै भने त सामूह हारियाल हुन्छ नी।

Therefore, for the majority, the sources of information were peer, movies, radios, TV and various kinds of magazines regarding sexuality & RH. Most of the participants said that they got information about sexuality from popular fortnightly the 'Saptahik', sex educating programs broadcasted by various FM channels such as "Mana Ka Kura Saathi Sanga", text book and love novels. However majority of females said that they received information about menstruation from their mother, grandmother ,elder sister and peers. They felt most comfortable discussing matter relating to sexuality with their friends.

All of the both male and female students expressed the great importance of sex education to the teens. According to them sex education is indispensable to adolescents as it leads to development of positive knowledge, attitude & behavior regarding sexuality and reproductive health.

2. Perception, Causes & Consequences of Premarital Sex & Abortion

Given the highly conservative attitudes towards sexual behavior in Nepalese society, premarital sex is taken as sin. Majority of the males & females perceived it as illegal and disapproved by our culture. But few of them advocated for its essence. They said, premarital relation could be established in safe way.

One of female participant remarked like as  Foreign country यस्तो खुरा लिसल हुन्छ। हाम्रो समाजले पीनलाई युवकहरू छैन। हाम्रोलाई पनि समाजको छाप छाप्नुहोस्।

Majority of female blamed that although females are vulnerable & affected adversely, boys are more responsible for premarital sexual relationship. But boys believed that both are equally responsible it. Age, curiosity to gain new experience, attraction between opposite
sex, movies and pressure of friends etc. were some factors that lead to premarital sexual relationship as identified by students.

Although they laid stress on the use of condom and self discipline for the safer sex, most of them had some misconception regarding it. They said that the sexual activities could be made safe by adopting temporary contraceptive methods such as pills and copper T. Most of respondents disapproved the legalization of abortion. They perceived that legalization of abortion may increase the and distort the harmony of society.

3. Knowledge & Attitude regarding Family Planning

High level of knowledge was found regarding family planning. In nearly all of the FGDs, participants knew various modern temporary & permanent methods of family planning. According to them family planning methods are used to improve the quality of life and it also helps in avoiding STDs and controlling population growth. They mentioned the following methods of contraceptives; Pills, Sangini, Nilokan white, Norplant, condom etc. Only few of the participants had seen these methods.

But they had no knowledge on emergency contraceptives.

4. Knowledge & Attitudes Regarding STDs Including AIDS

Students of all FGDs were aware of a variety of sexually transmitted diseases, its mode of transmission, preventive measures, but students of higher secondary level were found less aware of STDs.

They named AIDS, Gonorrhea and Syphilis as STDs. They mentioned that these STDs can be spread by having sexual relation with infected person, non-sterile syringe, mother to child. To avoid such diseases, they said, one should practice safe sex between spouse only, use of condom, blood tested before use and sterilization of syringe & needle.

Generally, adolescents don't disclose the fact when they got STDs because of fear and negative attitude of society. The cases become severe especially in females. As it has negative consequences in individual & family, it should be treated as soon as possible. This is why we need sex education, said most of the students.

The participant also reported that many students has been involved in prostitution at lodge, Disco, Hotel. They had been involved in prostitution is due to economic hardship.

5. Program Recommendation From Adolescents

Students from FGDs reported that besides friends, other don't understand their problems. They feel comfortable discussing sexual issues with friends. Therefore, they suggested for such a effective and informative program which fully participate them in planning & implementation.

They identified FM program like “सांविदेशिक मलको चूरा” that address the adolescents needs and curiosity. They also stressed for special RH school health program with the support of health professionals through discussions, seminar, role-play.
Due to generation gap and traditional Nepalese society, parents don't communicate with growing girls about the menstruation and other physical & psychological changes. One of the female participants remarked like this

हामो अभिमावकहरु
“आफ्नो उमेरमा भोगेको कुरा विसिन्च्छन्। छोरीको कुरालाई पनि सुन्दैन।”

This leads to increase tendency to acquire the knowledge from classmates resulting in inappropriate and unwanted practices.

Thus, mother could play an important role in communicating & informing girls about menstruation besides friends. For this students stressed for educating mother about responsible parenthood so that they can educate their children and give necessary psychological support & help to their teenage daughter.

4.11 Discussion

The present study among 155 adolescent girls in the age group 14-19 recorded a age of menarche of 13.2 years. One of the earliest studies reported 13.5 years among English girls\textsuperscript{15} and a recent study as12.9 years in USA\textsuperscript{18}.Thus urban Nepalese girls have the similar mean age at menarche as in English and American girls.

A very recent UNFPA funded study found that the mean age at which both boys and girls had their first sexual intercourse was 16.4 and 16.0 years respectively\textsuperscript{24} and a study conducted in Kathmandu valley in1993 also showed that the mean age at first sexual contact was 16 years and almost two third of the women had their first sexual contact with boyfriends\textsuperscript{2}.

This study showed that the mean age at first sexual contact among boys was 14.97 years which was nearer to the earlier study results. Similarly this study also showed that more than a half had their first sexual contact with girlfriends.

This study showed that adolescents had good knowledge on STDs including HIV/AIDS and FP. The main source of information was books/Newspaper followed by radio/TV. This study also identified schools, government health system and local clubs as an appropriate places for RH and sex education. These result is compatible to other studies\textsuperscript{24}. 
CHAPTER FIVE
5. CONCLUSION AND RECOMMENDATION

5.1 Conclusion

The sexual and reproductive health behavior formed in adolescents have far reaching consequences for the lives of young people both as they develop and later in life as well. So, with the objective to explore the existing gap of adolescent of age group (14-19) the study was conducted. On the basis of above findings and discussion, it could be concluded that the mean age at menarche is decreasing and as the mean age of first sexual contact is also in decreasing trends.

Majority of the students of both Sec. and Higher Sec. level had good level of knowledge and attitude regarding STDs including AIDS and family planning. Misconceptions regarding safer sex and abortion were found on both males and females students. Boys are mainly involved in sexual activity. The mass media was identified as the most important sources of information.

Focus group concluded that although they possessed good knowledge in sexuality & reproductive health, they lacked practical knowledge.

They knew most of the contraceptives methods but most of them confessed that they haven’t seen Condom, pill, copper-T and other contraceptive methods.

They stressed that parents, society, & teachers should communicate with growing adolescents about the sexuality and reproductive health so that they acquire the appropriate information and do not develop wrong concepts.

Reproductive health including sexuality is an important component of overall Health status of an individual. So, their is an urgent need to strengthen the reproductive health program for the adolescents by involving parents, teacher, health professional and adolescents themselves with the support of mass media.

5.2 Recommendations

Based on the above finding and discussions, the following recommendations are made.

1) As the rapid growth and development, especially in term of physical and mental changes take place as soon as a child completed his first decade, the sex education should be started in the school curriculum immediately after the primary level and should be gradually increased the information in higher classes that meet the needs of adolescents.

2) As most of the respondents stressed for the practical knowledge, it is suggested to the teacher to adopt skill oriented approaches of teaching such as demonstration, role play with the support of audio visual aid.

3) School health education program on reproductive health should be conducted in secondary and higher secondary schools with the support of health professional in sound environment.
4) As mass media was identified as powerful tool for disseminating the information, it is suggested to make effective & need responsive FM program on reproductive health in local & national language with active participation of adolescents.

5) As parents can play important role in educating their children, it is suggested to design effective television program targeted to adults about the need and approaches to educate their children about RH.

6) Local NGOs and clubs are suggested to launch awareness raising program on RH through cultural programs with active participation of adolescents.

7) It is suggested to band or take legal action on TV programs, books and films that promote the negative attitudes & behaviors such as pornography, blue films, and obscene cinema advertisement.
REFERENCES


Annex-I

Questionnaire for interview

This questionnaire seeks the answer on knowledge, attitude and practices towards Sexuality & Reproductive behavior of adolescents. It is used for the purpose of research only. The respondents are requested to give √ mark on right answers or fill in the blanks with right answers.

General Information:

- Age of respondent--------years
- Class------
- Sex: Male/Female
- Married/Unmarried
- Ethnicity: a) Brahmin b) Chhetri c) Newar d) Gurung/Magar e) Others------(specify)

1) Do you think that the diseases can occur as a result of sexual intercourse?
   a) Yes          b) No                   c) Don't Know

2) If yes, can you name some.
   a) ------       b) ------       c) ------
   d) ------       e) ------

3) What are the signs the symptoms of STDs? (MR)
   a) Foul smelling discharge.
   b) Ulcer or Blister/wounds around the genitals.
   c) Other (specify)

4) Do you think that sexually transmitted diseases can be prevented?
   a) Yes          b) No                   c) Don't know

5) If yes, how it can be prevented? (MR)
   a) By keeping to a single sex partner.
   b) By using condom during sexual relation.
   c) By using FP methods.
   d) By maintaining hygiene.

6) What should be done if one gets STD?
   a) Refer to hospital.                   b) Faith healers
   c) Refer to friends.                   d) Don't know.
7) How do you think HIV/AIDS can be transmitted?(MR)
   a) Sexual intercourse with infected person.  b) Infected blood.
   c) Contaminated needles & syringes.  d) Infected mother to child.
   e) The bite of the mosquitoes.

8) What are your sources of information of STDs including HIV/AIDS?
   a) Books/newspaper  b) Radio, TV
   c) Friends  d) Teachers

9) Do you know about safer sex?
   a) Yes  b) No  c) Don't know

10) If yes, what it refers to?
    a) Keeping a single sex partner.
    b) Using condoms during sexual intercourse with other

11) In your opinion, what are the advantages of safer sex?
    a) Prevention from STDs.  b) Prevention from unwanted pregnancy
    c) Prevention of mental anxiety.  d) Don't know.

12) In your opinion, is abortion legal in Nepal?
    a) Yes  b) No
    c) Legal in special condition  d) Don't know.

13) In your opinion, when sexual relationship should be established?
    a) Before marriage  b) After marriage  c) During love.

14) In your opinion, is it good to have premarital sex?
    a) Yes  b) No

15) Do you practice masturbation?
    a) Yes  b) No

16) If yes, how frequent do you practice it?
    a) 1-2 per week  b) Daily  c) Sometimes

17) Do you have the experience of sex before to the date?
    (It is only for research purpose and confidentiality is assured so please do not give false answer)
    a) Yes  b) No (If no, skip to question no 21)

18) If yes, how old were you during the first sexual intercourse?
    Age ----------

19) Who was the partner of first sexual intercourse?
    a) Lover  b) Commercial sex worker
    c) Unknown person  d) Intimate person.
20) Did you use condom during that intercourse?
   a) Yes  b) No

21) Did you have sexual intercourse within last one year?
   a) Yes  b) No

22) Do you think that teens / Adolescents need reproductive health education?
   a) Yes  b) No  c) Don't know

23) In your opinion, where should the RH education and services be made available?(MR)
   a) In school  b) Private hospital/ clinic
c) Public hospital  d) Other(specify)------

24) In your opinion, do adolescents need counseling regarding life, before marriage, marriage and after marriage?
   a) Yes  b) No  c) Don't Know.

WISHES YOUR BRIGHT FUTURE
THANKS FOR YOUR KIND CO-OPERATION
प्रश्न नं. 1 र 2 महिलाहरूको लागि मात्र ।
1. परिहारको महिलाहरू बुझे तपाईंलाई कै दिन सृजिमा कर्ने हुनुहोस् गर्दछ । यदि हो ।
2. तपाईंलाई कृपया राखिने गर्दछ । यदि हो ।
3. तपाईंलाई कृपया राखिने गर्दछ । यदि हो ।
4. तपाईंलाई कृपया राखिने गर्दछ । यदि हो ।
5. तपाईंलाई कृपया राखिने गर्दछ । यदि हो ।
6. तपाईंलाई कृपया राखिने गर्दछ । यदि हो ।
7. तपाईंलाई कृपया राखिने गर्दछ । यदि हो ।
8. तपाईंलाई कृपया राखिने गर्दछ । यदि हो ।
16. तपाईको विचारमा विवाह अगाडि यीनमध्ये राखछ ठिक हो?
क) हो ख) होइन

17. तपाईले आज भन्दा अगाडि कसैगरी यीनमध्ये राख्नु भएको थियो ? (यो अध्ययनको लागि मात्र भएको र सम्पूर्ण तथ्य गोपय राखिएर भएकोले कृपया नसलिद लेखिएसको)
क) थियो ख) थिएर (यदि थिएर भने प्रश्न मा. २२ मा जाने)

18. यदि थिएर भने पहिलो पटक कल्पित वर्षलाई उमेरमा यीन सम्पर्क राख्नु भएको थियो?
उमेर .................

19. पहिलो यीनसम्पर्क को संग भएको थियो?
क) प्रेमी/प्रेमीको सङ्ग ख) Commercial Sex Worker सङ्ग ग) अपरिचित व्यक्तिसङ्ग घ) परिचित व्यक्ति सङ्ग

20. उक्त यीनसम्पर्क गरिएको कण्डम प्रयोग गर्नु भएको थियो?
क) थियो ख) थिएर

21. गएको एक वर्ष भन्दा अगाडि यीनसम्पर्क गर्नु भएको थियो?
क) थियो ख) थिएर

22. तपाईको विचारमा किशोर/किशोरी (Teen ager) लाई प्रजनन स्वास्थ्य, यीन गरावाबाट स्वास्थ्य शिखा दिनु पर्ला?
क) पछिखो ख) पदोल ग) झाँसिए झैन

23. तपाईको विचारमा किशोर/किशोरी (Teen ager) हरुलाई लागि प्रजनन स्वास्थ्य शिखा तथा सेवा कै उपलब्ध हुनेला?
क) विश्लेषण ख) निजी किनिनक /अस्पतालमा ग) सरकारी अस्पतालमा घ) अन्य ................. (उल्लेख गनेको)

24. तपाईको विचारमा किशोर/किशोरीहरुलाई लागि विवाह अधि, विवाह र विवाह पछिको जिन्तिगिएको बारेमा परामर्श (Counseling) दिनु आवश्यक छ?
क) छ ख) हुने ग) झाँसिए झैन

25. तपाई हस्तमैयसक (Masturbation) गरेका हुन्छ?
क) गाछु ख) गाँदि

26. यदि गाँदि गरेका हुन्छ भने कहिले कहिले गाँदि हुन्छ?
क) हस्ताक्षर १/२ पटक ख) दिनहु ग) कहिलेकाही

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Annex 2

Focus Group Discussion Guideline

The FGDs include the following topics:

1) Sexuality and Sex Education
   a) What are the sources of information regarding sexuality?
      Probe- If magazines – Name of few magazines.
              If T.V – name of programs
              If not home, why?
   b) At what age should sex education be started?
      Probe- Why?
   c) Who should be the educator?
      Probe- Why (role of media, parents, teachers & society)
              What about peers, why?
   d) Importance of sex education
   e) Knowledge about menstruation;
   f) Perception about masturbation.

2) Perceptions, Causes and Danger of Pre-marital Sex & Abortion.
   a) Perception about premarital sex.
   b) Role of boy/girl in premarital sex.
   c) Factors affecting premarital sex.
   d) Knowledge about safer sex.
   e) Knowledge and attitude about Abortion and its consequences.

3) Knowledge and Attitude Regarding Family Planning
   a) Knowledge about current spacing methods.
   b) Knowledge about emergency contraceptive.
   c) Attitude regarding use of FP methods.

4) Knowledge and Attitudes Regarding STDs/HIV/AIDS
   a) Name of STDs.
   b) Mode of Transmission.
   c) Prevention & treatment.
   d) Health seeking behaviour.
   e) Consequences of STDs/AIDs
   f) Prevalence of prostitution in Kathmandu.
   g) Involvement of students in prostitution.

5) Program Recommendation from Adolescent
   a) What type of program.
   b) Place, person & method